

-----Original Message-----

From: Martha McOuat
Sent: February 4, 2011 9:41 AM
To: Michael Lyle; Susan Kennedy; Michael Killeavy
Cc: JoAnne Butler; Karen Frecker
Subject: RE: BOARD STAFF IR I-1-21

So I'll go with MK's original response?

-----Original Message-----

From: Michael Lyle
Sent: February 4, 2011 9:38 AM
To: Susan Kennedy; Michael Killeavy; Martha McOuat
Cc: JoAnne Butler
Subject: RE: BOARD STAFF IR I-1-21

I would prefer to avoid answering the question directly. There is also an argument that the directive was spent once we executed the original contract with TCE.

Michael Lyle
General Counsel and Vice President
Legal, Aboriginal & Regulatory Affairs
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-----Original Message-----

From: Susan Kennedy
Sent: February 4, 2011 8:41 AM
To: Michael Killeavy; Martha McOuat
Cc: JoAnne Butler; Michael Lyle
Subject: RE: BOARD STAFF IR I-1-21

I concur with Michael's proposed response.

The only thing we should probably try to address is the following part of the question:

"What is the status of the August 18, 2008 directive?"

I would suggest modifying Michael's proposed response to (a), as follows:

(a) The August 18, 2008 directive remains in force. The OPA has not yet finalized its plans for procuring supply in the SWGTA in the absence of the OGS contract. The Electricity

Resources and Power System Planning divisions will be working on a plan to procure whatever supply is required in 2011;

Michael Lyle should check as to whether we are comfortable saying that. I considered, "The August 18, 2008 directive remains in force; however, the OPA anticipates that the directive will be rescinded by the Minister of Energy". I'm uncomfortable going there at this point but I, in turn, defer to Mike Lyle on this one.

Susan H. Kennedy
Director, Corporate/Commercial Law Group

-----Original Message-----

From: Michael Killeavy
Sent: February 4, 2011 8:30 AM
To: Martha McOuat; Susan Kennedy
Cc: JoAnne Butler
Subject: RE: BOARD STAFF IR I-1-21
Importance: High

Martha,

I can answer most of questions, but not all. I defer to Susan or one of her colleagues to comment on the current status of the Oakville directive in answer to (a) I presume it still exists but is unfulfilled or frustrated as a result of the government's decision).

(a) The OPA has not yet finalized its plans for procuring supply in the SWGTA in the absence of the OGS contract. The Electricity Resources and Power System Planning divisions will be working on a plan to procure whatever supply is required in 2011;

(b) The OPA has entered into negotiations with TransCanada Energy to terminate the OGS contract on mutually satisfactory terms. Three staff have been deployed to negotiate the termination of the OGS contract. Performance will be measured in terms of limiting the cost to the ratepayer.

I hope this is alright. I recognize that it's not terribly detailed, but at this point in time we don't have a lot of detail and as the negotiations with TransCanada are ongoing, we need to be very mindful of what we say.

Thank you,
Michael

Michael Killeavy, LL.B., MBA, P.Eng.
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416-520-9788 (cell)
Michael.killeavy@powerauthority.on.ca

-----Original Message-----

From: Martha McOuat
Sent: Thu 03-Feb-11 5:04 PM
To: Susan Kennedy

Cc: Michael Killeavy
Subject: FW: BOARD STAFF IR I-1-21

Are you able to help out with this?

From: Michael Killeavy
Sent: February 2, 2011 4:51 PM
To: Anna LeBourdais
Cc: Martha McOuat; Miriam Heinz
Subject: Re: BOARD STAFF IR I-1-21

This is going to take a while to answer. I don't think I can answer (a) and I can't say much about (b) either.

Michael Killeavy, LL.B., MBA, P.Eng.
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416-520-9788 (cell)
Michael.killeavy@powerauthority.on.ca

From: Anna LeBourdais
Sent: Wednesday, February 02, 2011 04:44 PM
To: Michael Killeavy
Cc: Martha McOuat; Miriam Heinz
Subject: BOARD STAFF IR I-1-21

Michael,

Martha McOuat has asked me to forward this Interrogatory to you to complete. I've attached the template for that purpose.

Thank you,

Anna LeBourdais

From: Kevin Dick
Sent: January 25, 2011 6:31 PM
To: Martha McOuat; Michael Killeavy

Cc: Michael Lyle; Anna LeBourdais
Subject: RE:

Martha,

Interrogatory #21 (SWGTA questions) are best addressed by Michael Killeavy. I am unaware of the specific details of the current status of the SWGTA Contract and Oakville Generating Station.

Regards,

Kevin

From: Martha McOuat
Sent: January 25, 2011 2:08 PM
To: Beverly Nollert; Karen Frecker; Raegan Bond; Bryan Young; Sean Brady; Guy Raffaele; Marc Collins; Richard Duffy; Shawn Cronkwright; Kevin Dick; Michael Killeavy; Ruth Covich; Miriam Heinz; Ed Nelimarkka
Cc: Michael Lyle; Anna LeBourdais
Subject: FW:

Today is the deadline for intervenors to submit their interrogatories. I am attaching my handwritten triage sheet for Board Staff's IRs so you can see how they have been assigned. If your name is in the "Sent To" category, at least one of the 30 IRs contained has been assigned to you. Anna will send you templates to use for your responses shortly.

Please call me as soon as possible if you have concerns with the questions that have been assigned to you. If there are some in particular that you feel require legal input we have arranged a meeting with our legal counsel for the 26th to advise us early in the process so you can incorporate this into your draft.

As you can see below, we are working on very tight timelines. I will forward others as soon as they are received.

Our time lines are as follows:

January 25:
authors immediately

Interrogatories received from Intervenors, distributed to

February 1: Your responses due to Regulatory Affairs

February 2-3: Regulatory and Legal review, some further edits by authors
may be required

February 4: Mike Lyle review; some further edits may be required.
Submit full package to Colin for review

February 7: Colin's comments received, some further edits may be
required

February 8: Responses filed with OEB

Please feel free to submit your responses to Regulatory Affairs as they are completed, rather than holding the whole package to the deadline date.

Your assistance with these is greatly appreciated.

From: Anna LeBourdais
Sent: January 25, 2011 1:53 PM
To: Martha McOuat
Subject:

Attached is the scanned version of the BOARD STAFF's interrogatories.

Cheers,

Anna

Aleksandar Kojic

From: Susan Kennedy
Sent: February 8, 2011 9:31 AM
To: JoAnne Butler; Michael Killeavy; Michael Lyle; Deborah Langelaan; "; "
Subject: RE: Latest Attempt at Directive
Attachments: KWC TransCanada Direction 26 01 2011 cln - OPA Comments_110204v2.docx

Privileged and Confidential (Solicitor and Client Privilege)

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Further to the below, attached is my "later [and greater, hopefully] attempt at a KWC Directive that might meet MEI and OPA needs if not wants).

Susan H. Kennedy
Director, Corporate/Commercial Law Group

-----Original Message-----

From: JoAnne Butler
Sent: February 4, 2011 1:59 PM
To: Michael Killeavy; Michael Lyle; Deborah Langelaan; Susan Kennedy; "; "
Subject: RE: Latest Attempt at Directive

Yes, that could work - it would need to be changed in both background and directive paragraph. I am comfortable with the other red lines that Susan made....

JoAnne C. Butler
Vice President, Electricity Resources
Ontario Power Authority

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joanne.butler@powerauthority.on.ca

-----Original Message-----

From: Michael Killeavy
Sent: Viernes, 04 de Febrero de 2011 01:34 p.m.
To: Michael Lyle; Deborah Langelaan; Susan Kennedy; JoAnne Butler; "; "
Subject: RE: Latest Attempt at Directive

Sure, up to 500 MW is good.

Michael Killeavy, LL.B., MBA, P.Eng.
Director, Contract Management
Ontario Power Authority
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Michael.killeavy@powerauthority.on.ca

-----Original Message-----

From: Michael Lyle
Sent: Fri 04-Feb-11 1:28 PM
To: Deborah Langelaan; Michael Killeavy; Susan Kennedy; JoAnne Butler; '';
Subject: RE: Latest Attempt at Directive

Other option is "up to 500 MW".

Michael Lyle
General Counsel and Vice President
Legal, Aboriginal & Regulatory Affairs
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-----Original Message-----

From: Deborah Langelaan
Sent: February 4, 2011 1:28 PM
To: Michael Killeavy; Susan Kennedy; Michael Lyle; JoAnne Butler; ;
Subject: RE: Latest Attempt at Directive

I specifically asked Susan to include Contract Capacity of 450 MW but based on yesterday's discussions it looks like we need a little wiggle room. Perhaps the language could be "approximately 450 MW".

Deb

Deborah Langelaan | Manager, Natural Gas Projects|OPA | Suite 1600 - 120 Adelaide St. W. |
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-----Original Message-----

From: Michael Killeavy
Sent: February 4, 2011 1:20 PM
To: Susan Kennedy; Michael Lyle; Deborah Langelaan; JoAnne Butler; 'rsebastiano@osler.com'; 'ESmith@osler.com'
Subject: RE: Latest Attempt at Directive

Could we mention the nameplate capacity of instead of referring to the Contract Capacity, or not mention capacity at all? We may need some flexibility in this regard as we go forward with TCE.

Is it possible to mention the 7 October 2010 letter from the OPA to TCE in the last sentence on the second page, e.g., "... to reprofile investments already made by TransCanada and minimize overall costs in the context of the 7 October 2010 letter from the OPA to TransCanada"? I am thinking that we need something that links that letter's commitment to the negotiations, otherwise why are we doing it.

Michael

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416-520-9788 (cell)
Michael.killeavy@powerauthority.on.ca

-----Original Message-----

From: Susan Kennedy
Sent: Fri 04-Feb-11 9:18 AM
To: Michael Lyle; Michael Killeavy; Deborah Langelaan; JoAnne Butler;
'rsebastiano@osler.com'; 'ESmith@osler.com'
Subject: Latest Attempt at Directive

Privileged and Confidential (Solicitor and Client Privilege)

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Attached is my latest attempt at a KWC Directive that might meet MEI and OPA needs (if not wants).

All input welcome and appreciated.

Susan H. Kennedy

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~~February~~January , 2011

Mr. Colin Andersen
Chief Executive Officer
Ontario Power Authority
Suite 1600
120 Adelaide Street West
Toronto, ON M5H 1T1

Dear Mr. Andersen,

Re: Kitchener-Waterloo-Cambridge Area New Supply

I write in connection with my authority as the Minister of Energy in order to exercise the statutory power of ministerial direction that I have in respect of the Ontario Power Authority (the "OPA") under section 25.32 of the *Electricity Act, 1998* (the "Act").

Background

The 2007 proposed Integrated Power System Plan forecasted need for a gas plant in Kitchener-Waterloo-Cambridge (the "KWC Area"). Building on the needs identified in the 2007 plan, in our Long Term Energy Plan, the Government identified the value of natural gas generation for peak needs where it can address local and system reliability issues. The Government confirmed the continued need for a clean, modern natural gas-fired plant in the KWC Area.

The Government has determined with input and advice from the OPA that it is prudent and necessary to build a simple cycle natural gas-fired power plant that has contract capacity of approximately 450 up to 500 MW for deployment in the KWC Area by the spring of 2015 (the "KWC Project") to meet local system needs. In the KWC Area, demand is growing at more than twice the provincial rate.

Pursuant to a direction dated August 18, 2008 (the "2008 Direction"), the OPA procured from TransCanada Energy Ltd. ("TransCanada") the design, construction and operation of a 900MW natural gas generating station in Oakville (the "Oakville Generating Station"). On October 7, 2010, I announced that the Oakville Generating Station would not proceed as changes in demand and supply have made the Oakville Generating station no longer necessary.

In light of the foregoing, together with the OPA, the Government has discussed with TransCanada the termination of the contract for the Oakville Generating Station and a project that would meet the KWC Area supply requirement.

Direction

Therefore, pursuant to my authority under subsection 25.32(4) of the Act, I direct the OPA to assume responsibility for discussions with TransCanada to procure a gas plant with contract

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capacity of 450MW in the KWC Area to address the reliability needs described above, including the negotiation and execution of an interim implementation agreement to address the costs of and work on the KWC Project before a definitive agreement is executed. To best protect electricity rate payers, the OPA should, if it deems appropriate, combine such negotiations with settlement discussions in respect of the mutual termination of the contract for the Oakville Generating Station, looking for opportunities to reprofile investments already made by TransCanada and minimize overall costs.

It is anticipated that the OPA will complete the contract for the KWC Project by June 30, 2011 having regard to a reasonable balance of risk for TransCanada, the mutual termination of the contract for the Oakville Generation Project and the needs and interests of Ontario electricity customers. It is further expected that the contract provide for an in service date of no later than spring of 2015 to meet the demand needs of the community.

As with all electricity generation projects procured by the OPA, the KWC Project shall be required to undergo all applicable municipal and environmental approvals to ensure it meets or exceeds regulated standards, including those for air quality, noise, odour and vibration. Any duty to consult and accommodate Aboriginal communities on the KWC Project must be fulfilled.

For greater clarity, the OPA is not required by this direction to enter into a contract with TransCanada if it is unable to reach agreement with TransCanada on terms that satisfy the requirements of this direction and fully consider rate payers' interests. In such event, the OPA may seek to recover its costs, if any, relating to the implementation agreement in accordance with its statutory authority.

I further direct that the 2008 Direction is hereby revoked.

This direction shall be effective and binding as of the date hereof.

Brad Duguid
Minister of Energy

Aleksandar Kojic

From: Susan Kennedy
Sent: February 4, 2011 9:19 AM
To: Michael Lyle; Michael Killeavy; Deborah Langelaan; JoAnne Butler; 'rsebastiano@osler.com'; 'ESmith@osler.com'
Subject: Latest Attempt at Directive
Attachments: KWC TransCanada Direction 26 01 2011 cln - OPA Comments_110204v1.docx

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All input welcome and appreciated.

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February~~January~~, 2011

Mr. Colin Andersen
Chief Executive Officer
Ontario Power Authority
Suite 1600
120 Adelaide Street West
Toronto, ON M5H 1T1

Dear Mr. Andersen,

Re: Kitchener-Waterloo-Cambridge Area New Supply

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Background

The 2007 proposed Integrated Power System Plan forecasted need for a gas plant in Kitchener-Waterloo-Cambridge (the “KWC Area”). Building on the needs identified in the 2007 plan, in our Long Term Energy Plan, the Government identified the value of natural gas generation for peak needs where it can address local and system reliability issues. The Government confirmed the continued need for a clean, modern natural gas-fired plant in the KWC Area.

The Government has determined with input and advice from the OPA that it is prudent and necessary to build a simple cycle natural gas-fired power plant that has contract capacity of approximately 450MW for deployment in the KWC Area by the spring of 2015 (the “KWC Project”) to meet local system needs. In the KWC Area, demand is growing at more than twice the provincial rate.

Pursuant to a direction dated August 18, 2008 (the “2008 Direction”), the OPA procured from TransCanada Energy Ltd. (“TransCanada”) the design, construction and operation of a 900MW natural gas generating station in Oakville (the “Oakville Generating Station”). On October 7, 2010, I announced that the Oakville Generating Station would not proceed as changes in demand and supply have made the Oakville Generating station no longer necessary.

In light of the foregoing, together with the OPA, the Government has discussed with TransCanada a project—that would meet the KWC Area supply requirement.

Direction

Therefore, pursuant to my authority under subsection 25.32(4) of the Act, I direct the OPA to assume responsibility for discussions with TransCanada to procure a gas plant—with contract capacity of 450MW in the KWC Area to address the reliability needs described above, including

the negotiation and execution of an interim implementation agreement to address the costs of and work on the KWC Project before a definitive agreement is executed. To best protect electricity rate payers, the OPA should, if it deems appropriate, combine such negotiations with settlement discussions in respect of the mutual termination of the contract for the Oakville Generating Station, looking for opportunities to reprofile investments already made by TransCanada and minimize overall costs.

It is anticipated that the OPA will complete the contract for the KWC Project by June 30, 2011 having regard to a reasonable balance of risk for TransCanada, the mutual termination of the contract for the Oakville Generation Project and the needs and interests of Ontario electricity customers. It is further expected that the contract provide for an in service date of no later than spring of 2015 to meet the demand needs of the community.

As with all electricity generation projects procured by the OPA, the KWC Project shall be required to undergo all applicable municipal and environmental approvals to ensure it meets or exceeds regulated standards, including those for air quality, noise, odour and vibration. Any duty to consult and accommodate Aboriginal communities on the KWC Project must be fulfilled.

For greater clarity, the OPA is not required by this direction to enter into a contract with TransCanada if it is unable to reach agreement with TransCanada on terms that satisfy the requirements of this direction and fully consider rate payers' interests. In such event, the OPA may seek to recover its costs, if any, relating to the implementation agreement in accordance with its statutory authority.

I further direct that the 2008 Direction is hereby revoked.

This direction shall be effective and binding as of the date hereof.

Brad Duguid
Minister of Energy

Aleksandar Kojic

From: Deborah Langelaan
Sent: February 15, 2011 9:50 AM
To: 'Sebastiano, Rocco'
Cc: Michael Killeavy
Subject: FW: Latest Attempt at Directive
Attachments: KWC TransCanada Direction 26 01 2011 cln - OPA Comments_110204v2.docx

Rocco;

Do you have any comments on the latest version of the Directive? I recall you mentioning a concern with the "settlement discussions" language.

Deb

Deborah Langelaan | Manager, Natural Gas Projects|OPA | Suite 1600 - 120 Adelaide St. W. |
Toronto, ON M5H 1T1 |
T: 416.969.6052 | F: 416.967.1947 | deborah.langelaan@powerauthority.on.ca |

-----Original Message-----

From: Susan Kennedy
Sent: February 8, 2011 9:31 AM
To: JoAnne Butler; Michael Killeavy; Michael Lyle; Deborah Langelaan; '' ; ''
Subject: RE: Latest Attempt at Directive

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Further to the below, attached is my "later [and greater, hopefully] attempt at a KWC Directive that might meet MEI and OPA needs if not wants).

Susan H. Kennedy
Director, Corporate/Commercial Law Group

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From: JoAnne Butler
Sent: February 4, 2011 1:59 PM
To: Michael Killeavy; Michael Lyle; Deborah Langelaan; Susan Kennedy; '' ; ''
Subject: RE: Latest Attempt at Directive

Yes, that could work - it would need to be changed in both background and directive paragraph. I am comfortable with the other red lines that Susan made....

JoAnne C. Butler
Vice President, Electricity Resources
Ontario Power Authority

120 Adelaide Street West, Suite 1600
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416-969-6005 Tel.
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joanne.butler@powerauthority.on.ca

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Subject: RE: Latest Attempt at Directive

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-----Original Message-----

From: Michael Lyle
Sent: Fri 04-Feb-11 1:28 PM
To: Deborah Langelaan; Michael Killeavy; Susan Kennedy; JoAnne Butler; '';
Subject: RE: Latest Attempt at Directive

Other option is "up to 500 MW".

Michael Lyle
General Counsel and Vice President
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Sent: February 4, 2011 1:28 PM
To: Michael Killeavy; Susan Kennedy; Michael Lyle; JoAnne Butler; ;

Subject: RE: Latest Attempt at Directive

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Deb

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To: Susan Kennedy; Michael Lyle; Deborah Langelaan; JoAnne Butler; 'rsebastiano@osler.com'; 'ESmith@osler.com'
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~~February~~January , 2011

Mr. Colin Andersen
Chief Executive Officer
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Suite 1600
120 Adelaide Street West
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It is anticipated that the OPA will complete the contract for the KWC Project by June 30, 2011 having regard to a reasonable balance of risk for TransCanada, the mutual termination of the contract for the Oakville Generation Project and the needs and interests of Ontario electricity customers. It is further expected that the contract provide for an in service date of no later than spring of 2015 to meet the demand needs of the community.

As with all electricity generation projects procured by the OPA, the KWC Project shall be required to undergo all applicable municipal and environmental approvals to ensure it meets or exceeds regulated standards, including those for air quality, noise, odour and vibration. Any duty to consult and accommodate Aboriginal communities on the KWC Project must be fulfilled.

For greater clarity, the OPA is not required by this direction to enter into a contract with TransCanada if it is unable to reach agreement with TransCanada on terms that satisfy the requirements of this direction and fully consider rate payers' interests. In such event, the OPA may seek to recover its costs, if any, relating to the implementation agreement in accordance with its statutory authority.

I further direct that the 2008 Direction is hereby revoked.

This direction shall be effective and binding as of the date hereof.

Brad Duguid
Minister of Energy

Aleksandar Kojic

From: Deborah Langelaan
Sent: February 15, 2011 9:50 AM
To: 'Sebastiano, Rocco'
Cc: Michael Killeavy
Subject: FW: Latest Attempt at Directive
Attachments: KWC TransCanada Direction 26 01 2011 cln - OPA Comments_110204v2.docx

Rocco;

Do you have any comments on the latest version of the Directive? I recall you mentioning a concern with the "settlement discussions" language.

Deb

Deborah Langelaan | Manager, Natural Gas Projects|OPA | Suite 1600 - 120 Adelaide St. W. |
Toronto, ON M5H 1T1 |
T: 416.969.6052 | F: 416.967.1947 | deborah.langelaan@powerauthority.on.ca |

-----Original Message-----

From: Susan Kennedy
Sent: February 8, 2011 9:31 AM
To: JoAnne Butler; Michael Killeavy; Michael Lyle; Deborah Langelaan; ''; ''
Subject: RE: Latest Attempt at Directive

Privileged and Confidential (Solicitor and Client Privilege)

This email contains privileged legal advice and should not be forwarded to parties outside of OPA. Please limit internal circulation.

Further to the below, attached is my "later [and greater, hopefully] attempt at a KWC Directive that might meet MEI and OPA needs if not wants).

Susan H. Kennedy
Director, Corporate/Commercial Law Group

-----Original Message-----

From: JoAnne Butler
Sent: February 4, 2011 1:59 PM
To: Michael Killeavy; Michael Lyle; Deborah Langelaan; Susan Kennedy; ''; ''
Subject: RE: Latest Attempt at Directive

Yes, that could work - it would need to be changed in both background and directive paragraph. I am comfortable with the other red lines that Susan made....

JoAnne C. Butler
Vice President, Electricity Resources
Ontario Power Authority

120 Adelaide Street West, Suite 1600
Toronto, Ontario M5H 1T1

416-969-6005 Tel.
416-969-6071 Fax.
joanne.butler@powerauthority.on.ca

-----Original Message-----

From: Michael Killeavy
Sent: Viernes, 04 de Febrero de 2011 01:34 p.m.
To: Michael Lyle; Deborah Langelaan; Susan Kennedy; JoAnne Butler; ''; ''
Subject: RE: Latest Attempt at Directive

Sure, up to 500 MW is good.

Michael Killeavy, LL.B., MBA, P.Eng.
Director, Contract Management
Ontario Power Authority
120 Adelaide St. West, Suite 1600
Toronto, Ontario, M5H 1T1
416-969-6288 (office)
416-969-6071 (fax)
416-520-9788 (cell)
Michael.killeavy@powerauthority.on.ca

-----Original Message-----

From: Michael Lyle
Sent: Fri 04-Feb-11 1:28 PM
To: Deborah Langelaan; Michael Killeavy; Susan Kennedy; JoAnne Butler; ''; ''
Subject: RE: Latest Attempt at Directive

Other option is "up to 500 MW".

Michael Lyle
General Counsel and Vice President
Legal, Aboriginal & Regulatory Affairs
Ontario Power Authority
120 Adelaide Street West, Suite 1600
Toronto, Ontario, M5H 1T1
Direct: 416-969-6035
Fax: 416.969.6383
Email: michael.lyle@powerauthority.on.ca

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-----Original Message-----

From: Deborah Langelaan
Sent: February 4, 2011 1:28 PM
To: Michael Killeavy; Susan Kennedy; Michael Lyle; JoAnne Butler; ;

Subject: RE: Latest Attempt at Directive

I specifically asked Susan to include Contract Capacity of 450 MW but based on yesterday's discussions it looks like we need a little wiggle room. Perhaps the language could be "approximately 450 MW".

Deb

Deborah Langelaan | Manager, Natural Gas Projects|OPA |
Suite 1600 - 120 Adelaide St. W. | Toronto, ON M5H 1T1 |
T: 416.969.6052 | F: 416.967.1947 | deborah.langelaan@powerauthority.on.ca |

-----Original Message-----

From: Michael Killeavy
Sent: February 4, 2011 1:20 PM
To: Susan Kennedy; Michael Lyle; Deborah Langelaan; JoAnne Butler; 'rsebastiano@osler.com'; 'ESmith@osler.com'
Subject: RE: Latest Attempt at Directive

Could we mention the nameplate capacity of instead of referring to the Contract Capacity, or not mention capacity at all? We may need some flexibility in this regard as we go forward with TCE.

Is it possible to mention the 7 October 2010 letter from the OPA to TCE in the last sentence on the second page, e.g., "... to reprofile investments already made by TransCanada and minimize overall costs in the context of the 7 October 2010 letter from the OPA to TransCanada"? I am thinking that we need something that links that letter's commitment to the negotiations, otherwise why are we doing it.

Michael

Michael Killeavy, LL.B., MBA, P.Eng.
Director, Contract Management
Ontario Power Authority
120 Adelaide St. West, Suite 1600
Toronto, Ontario, M5H 1T1
416-969-6288 (office)
416-969-6071 (fax)
416-520-9788 (cell)
Michael.killeavy@powerauthority.on.ca

-----Original Message-----

From: Susan Kennedy
Sent: Fri 04-Feb-11 9:18 AM
To: Michael Lyle; Michael Killeavy; Deborah Langelaan; JoAnne Butler; 'rsebastiano@osler.com'; 'ESmith@osler.com'
Subject: Latest Attempt at Directive

Privileged and Confidential (Solicitor and Client Privilege)

This email contains privileged legal advice and should not be forwarded to parties outside of OPA. Please limit internal circulation.

Attached is my latest attempt at a KWC Directive that might meet MEI and OPA needs (if not wants).

All input welcome and appreciated.

Susan H. Kennedy

Director, Corporate/Commercial Law Group

Ontario Power Authority

T: 416-969-6054

F: 416-969-6383

E: susan.kennedy@powerauthority.on.ca <<mailto:susan.kennedy@powerauthority.on.ca>>

February/January, 2011

Mr. Colin Andersen
Chief Executive Officer
Ontario Power Authority
Suite 1600
120 Adelaide Street West
Toronto, ON M5H 1T1

Dear Mr. Andersen,

Re: Kitchener-Waterloo-Cambridge Area New Supply

I write in connection with my authority as the Minister of Energy in order to exercise the statutory power of ministerial direction that I have in respect of the Ontario Power Authority (the "OPA") under section 25.32 of the *Electricity Act, 1998* (the "Act").

Background

The 2007 proposed Integrated Power System Plan forecasted need for a gas plant in Kitchener-Waterloo-Cambridge (the "KWC Area"). Building on the needs identified in the 2007 plan, in our Long Term Energy Plan, the Government identified the value of natural gas generation for peak needs where it can address local and system reliability issues. The Government confirmed the continued need for a clean, modern natural gas-fired plant in the KWC Area.

The Government has determined with input and advice from the OPA that it is prudent and necessary to build a simple cycle natural gas-fired power plant that has contract capacity of approximately 450 up to 500 MW for deployment in the KWC Area by the spring of 2015 (the "KWC Project") to meet local system needs. In the KWC Area, demand is growing at more than twice the provincial rate.

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Pursuant to a direction dated August 18, 2008 (the "2008 Direction"), the OPA procured from TransCanada Energy Ltd. ("TransCanada") the design, construction and operation of a 900MW natural gas generating station in Oakville (the "Oakville Generating Station"). On October 7, 2010, I announced that the Oakville Generating Station would not proceed as changes in demand and supply have made the Oakville Generating station no longer necessary.

In light of the foregoing, together with the OPA, the Government has discussed with TransCanada the termination of the contract for the Oakville Generating Station and a project that would meet the KWC Area supply requirement.

Formatted: Highlight

Direction

Therefore, pursuant to my authority under subsection 25.32(4) of the Act, I direct the OPA to assume responsibility for discussions with TransCanada to procure a gas plant with contract

capacity of 450MW in the KWC Area to address the reliability needs described above, including the negotiation and execution of an interim implementation agreement to address the costs of and work on the KWC Project before a definitive agreement is executed. To best protect electricity rate payers, the OPA should, if it deems appropriate, combine such negotiations with settlement discussions in respect of the mutual termination of the contract for the Oakville Generating Station, looking for opportunities to reprofile investments already made by TransCanada and minimize overall costs.

It is anticipated that the OPA will complete the contract for the KWC Project by June 30, 2011 having regard to a reasonable balance of risk for TransCanada, the mutual termination of the contract for the Oakville Generation Project and the needs and interests of Ontario electricity customers. It is further expected that the contract provide for an in service date of no later than spring of 2015 to meet the demand needs of the community.

As with all electricity generation projects procured by the OPA, the KWC Project shall be required to undergo all applicable municipal and environmental approvals to ensure it meets or exceeds regulated standards, including those for air quality, noise, odour and vibration. Any duty to consult and accommodate Aboriginal communities on the KWC Project must be fulfilled.

For greater clarity, the OPA is not required by this direction to enter into a contract with TransCanada if it is unable to reach agreement with TransCanada on terms that satisfy the requirements of this direction and fully consider rate payers' interests. In such event, the OPA may seek to recover its costs, if any, relating to the implementation agreement in accordance with its statutory authority.

I further direct that the 2008 Direction is hereby revoked.

This direction shall be effective and binding as of the date hereof.

Brad Duguid
Minister of Energy

Aleksandar Kojic

From: Deborah Langelaan
Sent: February 23, 2011 10:48 AM
To: 'Sebastiano, Rocco'
Cc: John Zych; Michael Killeavy
Subject: FW: TCE Board Resolution - Osler Review and Comment
Attachments: Minutes of Board of Directors Meeting - October 7, 2010 - Draft.doc

Rocco;

Would you please review the attached Board meeting minutes and provide your comments?

Thanks,
Deb

Deborah Langelaan | Manager, Natural Gas Projects|OPA |
Suite 1600 - 120 Adelaide St. W. | Toronto, ON M5H 1T1 |
T: 416.969.6052 | F: 416.967.1947 | deborah.langelaan@powerauthority.on.ca |

From: John Zych
Sent: February 23, 2011 10:17 AM
To: Deborah Langelaan
Cc: Susan Kennedy
Subject: RE: TCE Board Resolution - Osler Review and Comment

Deborah,

The minutes of the October 7, 2010 mtg (attached).

John Zych
Corporate Secretary
Ontario Power Authority
Suite 1600
120 Adelaide Street West
Toronto, ON M5H 1T1
416-969-6055
416-967-7474 Main telephone
416-967-1947 OPA Fax
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John.Zych@powerauthority.on.ca

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From: Susan Kennedy
Sent: February 23, 2011 9:26 AM
To: John Zych
Cc: Deborah Langelaan
Subject: FW: TCE Board Resolution - Osler Review and Comment

John,

Would you deal directly with Deb on this. I believe I can attest that it will be faster if I am not in the middle.

Susan H. Kennedy
Director, Corporate/Commercial Law Group

From: Deborah Langelaan
Sent: February 23, 2011 9:08 AM
To: Susan Kennedy
Subject: RE: TCE Board Resolution - Osler Review and Comment

Susan;

What minutes are you referring to?

Deb

Deborah Langelaan | Manager, Natural Gas Projects|OPA |
Suite 1600 - 120 Adelaide St. W. | Toronto, ON M5H 1T1 |
T: 416.969.6052 | F: 416.967.1947 | deborah.langelaan@powerauthority.on.ca |

From: Susan Kennedy
Sent: February 23, 2011 8:58 AM
To: Michael Killeavy; Deborah Langelaan
Cc: John Zych
Subject: TCE Board Resolution - Osler Review and Comment

I thought I'd seen Osler comments on the draft minutes; however, John says he hasn't seen anything and I can't seem to find a record of same. Am I imagining things?

If Osler hasn't completed its review, could we get them to do so as it ideally should be finalized at next board meeting.

Thanks,

Susan H. Kennedy
Director, Corporate/Commercial Law Group
Ontario Power Authority
T: 416-969-6054
F: 416-969-6383
E: susan.kennedy@powerauthority.on.ca



MEETING OF THE BOARD OF DIRECTORS

MINUTES of a meeting of the Board of Directors of the Ontario Power Authority held on Thursday, October 7, 2010, at 10:18 a.m., by teleconference

PRESENT

Colin Andersen
John Beck
Michael Costello
Rick Fitzgerald
Adèle Hurley
Ron Jamieson
Bruce Lourie

MEMBERS OF STAFF IN ATTENDANCE

Amir Shalaby, Vice President, Power System Planning
Michael Lyle, General Counsel and Vice President, Legal, Aboriginal and Regulatory Affairs
JoAnne Butler, Vice President, Electricity Resources
Kimberly Marshall, Vice President, Business Strategies and Solutions
Ben Chin, Vice President, Communications
Michael Killeavy, Director, Contract Management, Electricity Resources
John Zych, Corporate Secretary

1. Constitution of the Meeting

Mr. John Beck acted as Chair of the meeting and Mr. John Zych acted as Secretary.

Mr. Zych advised that, with notice having been given and a quorum of members being present, the meeting was properly called and duly constituted for the transaction of business. He also indicated that the absent members – Charles Bayless, Lyn McLeod and Patrick Monahan – had advised him in writing that they waived lack of sufficient notice of the meeting.

2. Southwest Greater Toronto Area project

Mr. Andersen advised the Board members that the government of Ontario had made the decision that a gas plant in Oakville was no longer needed and, as a result, the plant would not proceed. The announcement was planned to be made by Minister of Energy Brad Duguid in Oakville at 1:00 p.m. that day.

Mr. Andersen further advised that the Ontario Power Authority had concluded that the latest information gathered on the current status of the electricity system supported the decision. When the need for this plant was first identified four years ago, there were higher demand projections for electricity in the province. Since then, changes in demand and supply, including successful conservation efforts and more than 8,000 megawatts of new, cleaner power, had made it clear that the plant was no longer required. Local reliability remained a need and a transmission solution was required to address the need.

The Board members reviewed the terms of a draft letter to TransCanada Energy Ltd. that instructed TransCanada Energy Ltd. to cease all further work in connection with the Oakville gas plant and acknowledged that TransCanada Energy Ltd. was entitled to reasonable compensation. The letter also indicated the OPA's intention to enter into good faith negotiations with TransCanada Energy Ltd. to reach an agreement to terminate the contract.

On motion duly made, seconded and unanimously carried, it was RESOLVED THAT the Board of Directors approve the sending of a letter to TransCanada Energy Ltd. pertaining to the termination of plans to proceed with the Oakville gas plant and granting authority to the Chief Executive Officer to sign and send such a letter.

3. Termination

There being no further business to be brought before the meeting, the meeting terminated at 10:45 a.m.

Approved by the Board of Directors on
the 21st day of October, 2010

John Beck
Chair of the meeting

John Zych
Secretary of the meeting

Aleksandar Kojic

From: Deborah Langelaan
Sent: February 24, 2011 9:02 AM
To: JoAnne Butler
Cc: Michael Killeavy
Subject: OGS Board Presentation
Attachments: OGS_BOD_CM_20110224.ppt

JoAnne;

Attached is the OGS presentation for today's Board meeting. Michael has reviewed it and I would appreciate if you would too and provide me with your comments. Hillary Thatcher has offered to provide us with a slide on TCE's First Nations work in the Kitchener/Waterloo area and I will add that once I receive it.

Deb



Winding Up of the Oakville Generating Station (OGS) Contract

Board of Directors

February 24, 2011

Privileged and Confidential – Prepared in Contemplation of Litigation

OGS Update

- OPA/TransCanada Energy (TCE) negotiating team has met 5 times since January's Board update.
- Discussions continue to be productive with respect to the "winding-up" of the Contract.

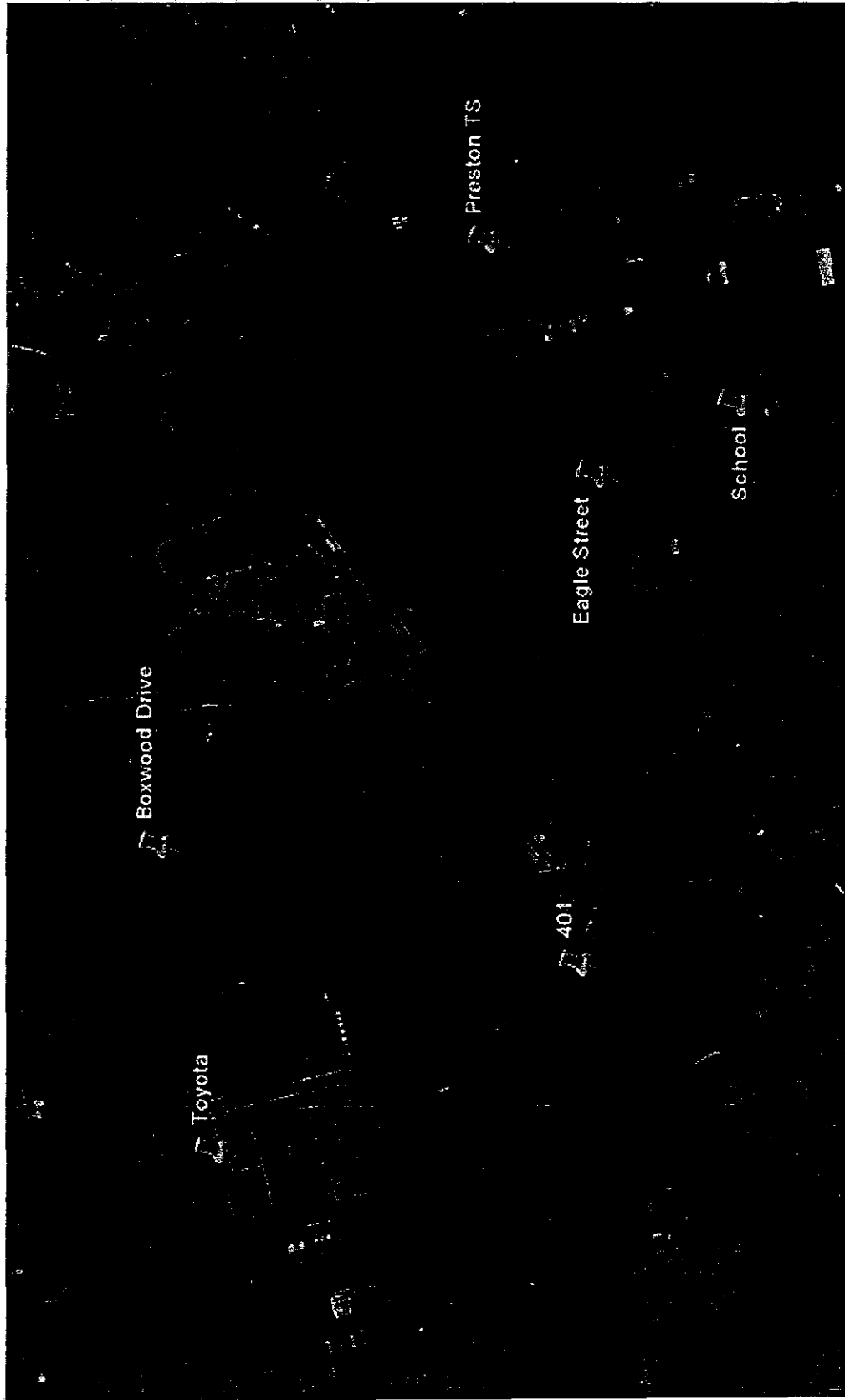
OGS Update

- Excerpt from TCE's 2010 Annual Report:
 - In September 2009, the OPA awarded TransCanada a 20-year Clean Energy Supply contract to build, own and operate a 900 MW power generating station in Oakville, Ontario. TransCanada expected to invest approximately \$1.2 billion in the natural gas-fired, combined-cycle plant. In October 2010, the Government of Ontario announced that it would not proceed with the Oakville generating station. TransCanada is negotiating a settlement with the OPA that would terminate the Clean Energy Supply contract and compensate TransCanada for the economic consequences associated with the contract's termination.

Replacement Generation Project

- TCE still leaning toward development of the Boxwood Industrial Park site.
- TCE and OPA continue to wait for Ministry of Energy authorization to contact the City of Cambridge about the proposed project.
- The continued delay in contacting the City of Cambridge is becoming extremely problematic as word is starting to leak out about the replacement project.
- **“Focus is on Cambridge site for power plant”**
headline of Toronto Star article dated February 18th

Boxwood Site



Ministry of Energy Directive

- OPA continues to work with the Ministry of Energy on the drafting of the Directive to authorize negotiations with TCE for the replacement project.
- Ministry warming up to the idea of including language that references the inclusion of the financial value of the OGS Contract into the net revenue requirement of the replacement project.

Mitsubishi (MPS) Gas Turbines (GT's)

- GT's originally purchased for OGS were designed for a Combined Cycle generation plant.
- Fall 2010 TCE suspended MPS contract until January 31, 2011.
- January 28, 2011 TCE released MPS from suspension and directed them to commence work on converting the GT's to Fast Start.
- Fast Start option will meet the requirements of a Peaking generation plant in Cambridge.
- Fixed the suspension costs that TCE had been incurring under terms of MPS ESA.

Price of Peaking Plant Conversion

- The incremental estimated price for the conversion remains \$33 MM (US) +/- 25%.
- MPS revised the price to convert the GT's to Fast Start from \$3 MM to \$6 MM.
- MPS revised the price to convert from Combined Cycle to Simple Cycle from \$15 MM to \$12 MM.
- Delayed delivery and suspension costs remain \$15 MM.

Price of Peaking Plant Conversion

- TCE expects to receive MPS final price for Peaking plant conversion on February 28, 2011 and price is not to exceed 125% of the estimated price (US \$41.25 MM).
- If the final price is higher the OPA will pass the risk onto TCE in the commercial negotiations since TCE believes they have a cap on the price.

Cambridge Capital Costs

- TCE has provided the OPA with its estimated capital cost for Cambridge.
- OPA review has concluded that TCE has included large premiums for risk.
- Site uncertainty has prevented TCE from firming up many of its capital costs.

Next Steps

- Continue discussions with TCE to achieve the following:
 - Finalize technical design requirements;
 - Siting of replacement facility;
 - Negotiation and execution of the Implementation Agreement;
 - TCE plan for handling First Nations issues.

Aleksandar Kojic

From: JoAnne Butler
Sent: February 24, 2011 11:20 AM
To: Deborah Langelaan
Cc: Manuela Moellenkamp; Michael Killeavy; Deborah Langelaan
Subject: RE: OGS Board Presentation
Attachments: OGS_BOD_CM_20110224.ppt

Deb,

I added Hilary's slide and made some changes to the slides, again thinking that we are only going to get past the first two anyway. I had a brief chat with Michael as well. We can discuss when you get back....

Manuela, when Deb has checked over slides, can you please put on USB and make 15 copies....thanks....

JCB

JoAnne C. Butler
Vice President, Electricity Resources
Ontario Power Authority

120 Adelaide Street West, Suite 1600
Toronto, Ontario M5H 1T1

416-969-6005 Tel.
416-969-6071 Fax.
joanne.butler@powerauthority.on.ca

From: Deborah Langelaan
Sent: Jueves, 24 de Febrero de 2011 10:05 a.m.
To: JoAnne Butler
Cc: Michael Killeavy
Subject: RE: OGS Board Presentation

JoAnne;

I just finished a meeting and am heading to an off site meeting. I will be back around noon and will touch base with you then.

Deb

Deborah Langelaan | Manager, Natural Gas Projects|OPA |
Suite 1600 - 120 Adelaide St. W. | Toronto, ON M5H 1T1 |
T: 416.969.6052 | F: 416.967.1947 | deborah.langelaan@powerauthority.on.ca |

From: JoAnne Butler
Sent: February 24, 2011 9:42 AM
To: Deborah Langelaan
Cc: Michael Killeavy
Subject: RE: OGS Board Presentation
Importance: High

Deb, are you free to come by and see me asap or in a meeting? I just met with TCE and we can add a few updates to the slides.

Yes, I like the idea about the FN slide...

JCB

JoAnne C. Butler
Vice President, Electricity Resources
Ontario Power Authority

120 Adelaide Street West, Suite 1600
Toronto, Ontario M5H 1T1

416-969-6005 Tel.
416-969-6071 Fax.
joanne.butler@powerauthority.on.ca

From: Deborah Langelaan
Sent: Jueves, 24 de Febrero de 2011 09:02 a.m.
To: JoAnne Butler
Cc: Michael Killeavy
Subject: OGS Board Presentation

JoAnne;

Attached is the OGS presentation for today's Board meeting. Michael has reviewed it and I would appreciate if you would too and provide me with your comments. Hillary Thatcher has offered to provide us with a slide on TCE's First Nations work in the Kitchener/Waterloo area and I will add that once I receive it.

Deb



Winding Up of the Oakville Generating Station (OGS) Contract

Board of Directors

February 24, 2011

Privileged and Confidential – Prepared in Contemplation of Litigation

OGS Update

- OPA/TransCanada Energy (TCE) negotiating team has met 5 times since January's Board update.
- Discussions continue to be productive with respect to the "winding-up" of the Contract.
- TCE planning to deliver proposal, implementation agreement and letter to Colin over next few weeks.
- We have completed our due diligence, as much as we can at this point until site is chosen, on capital costs. Still contain large risk premiums.
- We are doing our own due diligence on commercial factors and hiring third party expert.
- OPA continues to work with the Ministry of Energy on the drafting of the Directive to authorize negotiations with TCE for the replacement project.
- Ministry warming up to the idea of including language that references the inclusion of the financial value of the OGS Contract into the net revenue requirement of the replacement project.

Next Steps

- Continue discussions with TCE to achieve the following:
 - Counter offer based on commercial review;
 - Finalize technical design requirements;
 - Siting of replacement facility;
 - Negotiation and execution of the Implementation Agreement;
 - TCE plan for handling First Nations issues.

Inform MO/PO and get buy in to disclose and move forward.

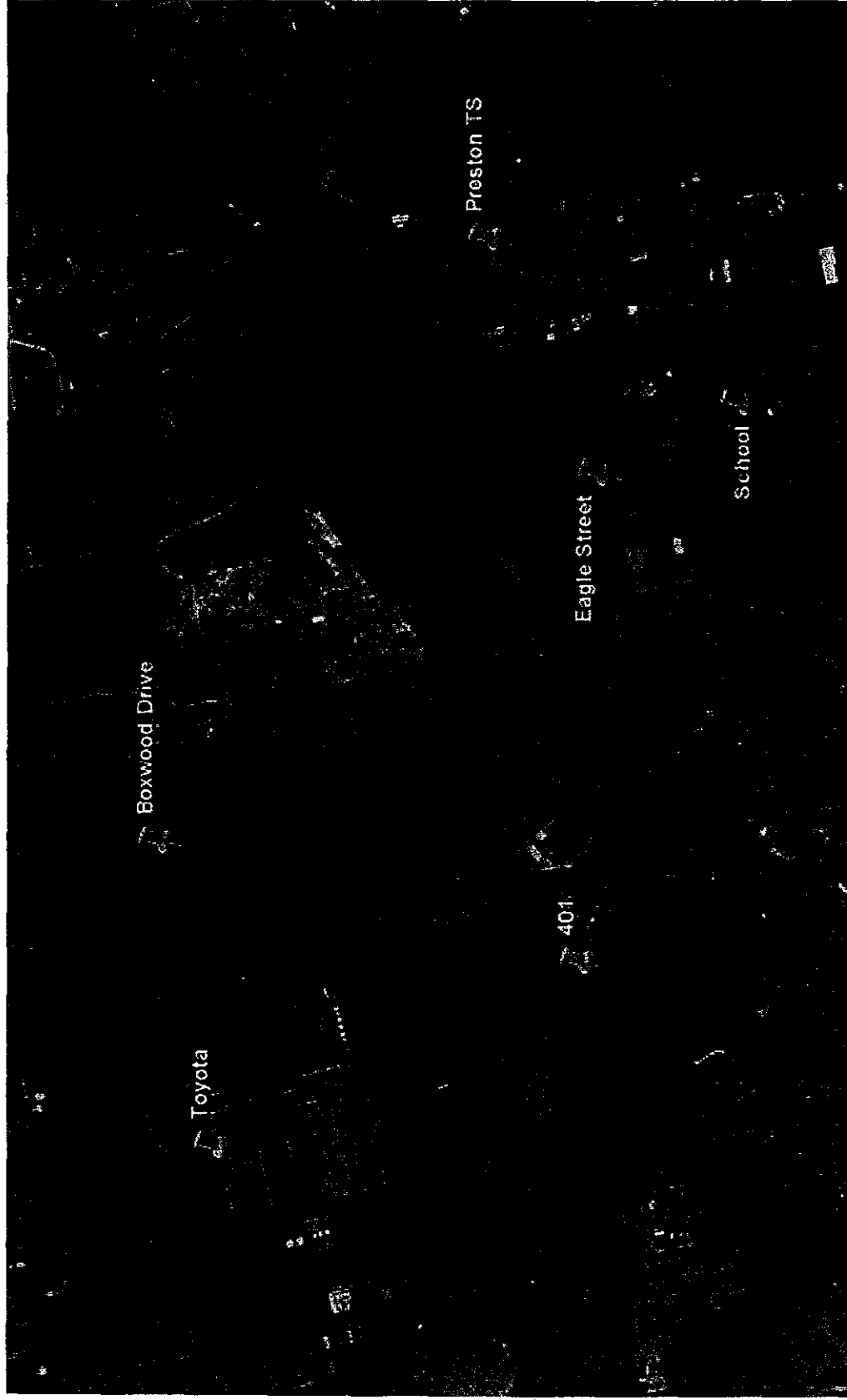
OGS Update

- Excerpt from TCE's 2010 Annual Report:
 - In September 2009, the OPA awarded TransCanada a 20-year Clean Energy Supply contract to build, own and operate a 900 MW power generating station in Oakville, Ontario. TransCanada expected to invest approximately \$1.2 billion in the natural gas-fired, combined-cycle plant. In October 2010, the Government of Ontario announced that it would not proceed with the Oakville generating station. TransCanada is negotiating a settlement with the OPA that would terminate the Clean Energy Supply contract and compensate TransCanada for the economic consequences associated with the contract's termination.

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- The continued delay in contacting the City of Cambridge is becoming extremely problematic as word is starting to leak out about the replacement project.
- **“Focus is on Cambridge site for power plant”**
headline of Toronto Star article dated February 18th

Boxwood Site



Aboriginal Relations and TransCanada

- TransCanada has begun high level consultation with Aboriginal communities in the Kitchener Waterloo Cambridge area, as they await an announcement from the OPA with respect to the project.
- TransCanada has engaged the elected officials and community at the Mississauga of New Credit, as well as the Elected Council and Confederacy Chiefs at Six Nations of the Grand River on the KWC project.
- In 2008, TransCanada entered into a community agreement with the Mississauga of New Credit First Nation to deal with projects in their territory. There continues to be a positive working relationship between the community and TransCanada.
- TransCanada recently offered to enter into community agreements with each of the Elected Council and Confederacy Chiefs as it relates to TransCanada's operations and projects throughout their traditional territory. Both groups have expressed openness to developing such an agreement.



Mitsubishi (MPS) Gas Turbines (GT's)

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- January 28, 2011 TCE released MPS from suspension and directed them to commence work on converting the GT's to Fast Start.
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Cambridge Capital Costs

- TCE has provided the OPA with its estimated capital cost for Cambridge.
- OPA review has concluded that TCE has included large premiums for risk.
- Site uncertainty has prevented TCE from firming up many of its capital costs.

Aleksandar Kojic

From: John Mikkelsen [john_mikkelsen@transcanada.com]
Sent: February 25, 2011 10:26 AM
To: Deborah Langelaan; Michael Killeavy
Cc: Terry Bennett; Geoff Murray; John Cashin; Terri Steeves
Attachments: 6519 - MPS Full Letter Agreement No. 4 executed.pdf

Dear Deborah,

Attached please find Letter Agreement #4 between TransCanada Energy Ltd. and MPS Canada, Inc.

Further to our e-mail on January 31st, 2011 where we indicated our rationale to release MPS to start the fast start conversion, we need to provide further direction to MPS by early March 4, 2011 with respect to the New Scope as this term is defined in the attached agreement.

Specifically, we need to determine whether to include the New Scope in the amended Contract or to exclude it now and issue direction to MPS for the New Scope at a future date. Firm pricing for the New Scope is to be provided by MPS by February 28, 2011. Please note that in the event TransCanada employs the MPS gas turbines in simple cycle configuration, MPS has exclusivity surrounding the New Scope.

If we were to release MPS to construct the new Scope we believe the benefits to be as follows:

1. This action will provide additional cost certainty on the scope as the currently defined. Given the level of engineering completed to date on the project it is very likely that further changes will be required and facilitated through change orders but it would lock down a baseline. Otherwise assuming we finalize an agreement to develop a potential project with the OPA, we are at risk to future price increases by MPS where they have the exclusivity to supply that scope.
2. The release of MPS provides performance certainty as the entire power island scope is wrapped in a single guarantee from MPS. Again there may be modifications to the performance guarantees as a consequence of changes but at least we would have a strong baseline.
3. The release of MPS will enable the generation of additional engineering information to facilitate the design of the balance of the plant and improve the cost estimate for the balance of plant for the project. There would be fewer gaps in the design between engineer's scope and that of MPS.
4. Lastly the release of MPS will reduce the exposure to risks as we will have completed a greater level of definition by the time of our contract execution and we will be able to close any gaps that might exist (e.g. noise mitigation).

In the event that we are unable to provide direction to MPS on the New Scope in by March 4, our proposal would be to get the New Scope written into the MPS contract as an option. We would attempt to get the terms and conditions to include the scope and guarantees for the option, a date by which the option would need to be exercised, and how the final price would be determined.

We ask the OPA to carefully consider the above and advise us of your views concerning direction on the New Scope. Please do not hesitate to contact me should you have any questions or concerns surrounding the foregoing.

Best regards,

John Mikkelsen, P.Eng.

Director, Eastern Canada, Power Development

TransCanada

Royal Bank Plaza
200 Bay Street
24th Floor, South Tower
Toronto, Ontario M5J 2J1

Tel: 416.869.2102

Fax:416.869.2056

Cell:416.559.1664

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January 31, 2011



MPS Canada, Inc.
Royal Bank Plaza, South Tower
200 Bay Street, Suite 3220
Toronto, ON Canada M5J 2J1

Attention: Shinichi Ueki

Subject: Equipment Supply Contract #6519 dated July 7, 2009 between TransCanada Energy Ltd. and MPS Canada, Inc. (the "**Contract**"), the Letter Agreement dated October 29, 2010 (the "**Original Letter Agreement**"), the Letter Agreement dated November 19, 2010 (the "**Second Letter Agreement**") and the Letter Agreement dated December 31, 2010 (the "**Third Letter Agreement**") (together, the "**Suspension Letter Agreements**").

Dear Mr. Ueki,

This letter (this "**Letter Agreement**") is intended to set forth certain agreements, understandings and commitments between TransCanada Energy Ltd. ("**Purchaser**") and MPS Canada, Inc. (the "**Supplier**") regarding the Contract and the Previous Letter Agreements.

Background. Purchaser was informed by the Ontario Power Authority (the "**OPA**") that the Project will not proceed forward based on the current site location designated in the Contract. OPA requested Purchaser's cooperation to seek a viable alternative site or multiple sites in order to avoid, at this time, paying cancellation fees and costs, including Supplier's Termination Payment. In the Suspension Letter Agreements, Purchaser suspended Supplier's Work effective October 29, 2010 until January 31, 2011 in order to have time to pursue potential alternative project(s) and configuration(s) with the OPA. During this time, the OPA indicated its interest in a potential alternative project(s) and configuration(s).

During this suspension period,, Supplier provided information to Purchaser to support its efforts to negotiate with the OPA. Purchaser and the OPA have agreed to work together in good faith to negotiate a definitive form of agreement for an alternate project to be sited in or around Cambridge, Ontario which will employ two M501 GAC Fast Start gas turbines in simple cycle configuration. On December 16, 2010, Supplier provided Purchaser a budgetary commercial proposal and budgetary technical proposal No. MP-A2335 for such alternate project with the new delivery dates, including Guaranteed Net Power Output, Guaranteed Net Heat Rate, the ramp rate implied in the start up graph and Start Up Time, all as set out in Attachment 1 (collectively the "**Budgetary Proposal**"). Supplier has also provided information of new components and specification changes to existing components due to the change to a simple cycle project

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described in the Budgetary Proposal (but those are not due to fast start conversion) ("New Scope"). Purchaser has reviewed the Budgetary Proposal with the OPA.

On January 6, 2011, Purchaser requested a cost breakdown of the Budgetary Proposal for suspension & delay; fast start conversion; and New Scope. Supplier provided such a cost breakdown on January 28, 2011, in an email attached as Attachment 2.

Supplier and Purchaser now agree that the Supplier's Work shall no longer be suspended effective January 31, 2011 and Supplier shall proceed with the Work in accordance with the Budgetary Proposal and the Contract, with the exception of the New Scope, subject to the terms and conditions set out herein. With respect to the New Scope Supplier agrees that Purchaser can defer determining such scope until a more definitive agreement regarding the alternative project is executed between it and the OPA, provided this occurs on or before February 28, 2011. The Parties agree that the New Scope will be put into effect using the Formal Contract Amendment process contemplated in paragraph 2 below. Purchaser acknowledges Supplier has the exclusive right to supply the "New Scope" if the alternative project is a simple cycle project.

1. Commitment. The Parties agree to amend the Contract to provide for the furnishing, design, fabrication and supply of two 501 GAC Fast Start gas turbines (the "New Equipment") which meet the Budgetary Proposal together with all other services, equipment and materials required for the supply of such equipment as the Parties may agree.

Supplier agrees to propose a revised Contract Price based upon such New Equipment on or before **February 28, 2011**. Such proposed Contract Price shall include amounts determined under Articles 4 and 14 of the Contract as needing to be paid as a result of the suspensions described in the Suspension Letter Agreements and amounts for the New Scope. Supplier agrees that the additional amount for the New Equipment that will be included in the revised Contract Price will not exceed 125% of such amount included in the Budgetary Proposal. However, the Budgetary Proposal was based upon the scope of supply and technical information set out in the Budgetary Proposal and is subject to change depending upon any changes in the scope of supply or new information provided by Purchaser or OPA after December 16, 2010.

2. Formal Contract Amendment. The Parties agree to meet on a regular basis and in good faith to identify, negotiate and agree upon the changes to the Contract as are necessary to amend the Contract and give full effect to this Letter Agreement. It is the intention of the Parties to execute such amendment by **March 31, 2011**.

3. Termination. In the event the Contract is terminated after the date of this Letter Agreement, Purchaser agrees to pay Supplier based on with the cancellation schedule stipulated in the APPENDIX "VI" and in accordance with the Contract. For purposes of calculating the Termination Payment, the Contract Price shall be determined by including the amounts set forth

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in the Budgetary Proposal and, upon execution of the Contract amendment referenced in paragraph 2 above, the revised Contract Price shall be used.

4. Defined Terms. Capitalized terms used but not defined herein shall have the meaning given them in the Contract.

5. Other Terms and Conditions. Except as expressly set forth herein, this Letter Agreement shall not by implication or otherwise limit, impair, constitute a waiver of, or otherwise affect the rights and remedies of either party to the Contract, nor alter, modify, amend or in any way affect any of the terms, conditions, obligations, covenants or agreements contained in the Contract, all of which shall continue and remain in full force and effect.

6. Governing Law. This Letter Agreement shall be, for all purposes, governed by and construed in accordance with the laws of the Province of Ontario, excluding its rules governing conflicts of law.

7. Entire Agreement. This Letter Agreement represents the entire agreement and understanding of the Parties with respect to the amendment and modification of the Contract or Suspension Letter Agreements on the subject hereof, and supersedes all prior or contemporaneous discussions, understandings and agreements between the Parties with respect thereto.

8. Amendments in Writing. No change, amendment or modification of this Letter Agreement shall be valid or binding upon the Parties unless such change, amendment or modification shall be in writing and duly executed by both Parties.

9. Counterparts; Signatures. This Letter Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one instrument. Any signature page of any such counterpart, or any electronic facsimile thereof, may be attached or appended to any other counterpart to complete a fully executed counterpart of this Letter Agreement. Any electronic facsimile transmission of any signature of a Party shall be deemed an original and shall bind such Party.

10. Confidentiality. The Parties agree that neither Party shall disclose the contents of this Letter Agreement to any third party without the prior written consent of the other Party; provided that Purchaser may disclose the contents of this Letter Agreement to the OPA, subject to that certain Acknowledgement by Ontario Power Authority and Osler, Hoskin & Harcourt LLP dated December 17, 2010.

If the foregoing accurately reflects the understanding and agreements of Supplier and Purchaser with respect to the subject matter hereof, please indicate your assent by having a duly authorized representative of Supplier countersign below and return one duplicate original of this Letter Agreement to Purchaser.

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CONFIDENTIAL

*Letter Agreement
between TransCanada Energy Ltd.,
and MPS Canada, Inc.*

Accepted this 31st day of January, 2011.

TransCanada Energy Ltd.

By: 

Name: Terry Bennett

Title: Vice President

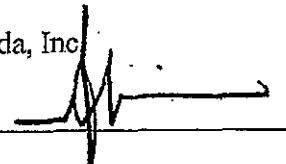
By: 

Name: John Cashin

Title: Assistant Corporate Secretary



MPS Canada, Inc.

By: 

Name: Shinichi Ueki

Title: President



CONFIDENTIAL

Letter Agreement
between TransCanada Energy Ltd.
and MPS Canada, Inc.

Attachment I
Budgetary Proposal

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MPS Canada

Mitsubishi Power Systems group

MPS Canada, Inc. 200 Bay Street, Suite No.3220, Toronto, Ontario M5J 2J1, Canada

MPS Canada, Inc.

Indicative budgetary non-binding proposal

For

**Project schedule change and specification/scope
change in the EQUIPMENT SUPPLY
CONTRACT #6519 BETWEEN TransCanada
Energy Ltd. AND MPS Canada, Inc FOR GAS
TURBINE EQUIPMENT**

December, 2010



MPS Canada

Mitsubishi Power Systems group

MPS Canada, Inc. 200 Bay Street, Suite No.3220, Toronto, Ontario M5J 2J1, Canada

1. Basis of the quotation

(1) Change in project schedule

Unit 1		Original	New (informed by TCE)
	FOB port of export	July 1, 2011	March 1, 2013
	DDP Job Site	N/A (had not agreed)	June 1, 2013 *reference only
	Substantial Completion	December 31, 2013	December 31, 2014

Unit 2		Original	New (informed by TCE)
	FOB port of export	August 1, 2011	April 1, 2013
	DDP Job Site	N/A (had not agreed)	July 1, 2013 *reference only
	Substantial Completion	December 31, 2013	December 31, 2014

* New DDP Job Site date is expected only and shall be changed subject to transportation study which will be done once official Change Order is concluded by Parties.

(2) Change in specification/scope

- (a) Site condition is changed as separately informed by TCE.
- (b) Plant configuration is changed from "2 on 1 combined cycle" to "2 on 0 simple cycle".
- (c) Gas turbine type is changed from "M501GAC" to "M501GAC Fast".
- (d) Due to the above changes (a) through (c), the following components are added as a scope of supply of MPS Canada.

- (i) closed cooling water cooler
- (ii) closed cooling water pump
- (iii) closed cooling water piping
- (iv) closed cooling water make-up tank
- (v) closed cooling water instrumentation and valve(s)
- (vi) 100 ft stack with applicable expansion joints

- (e) In addition to above new scope of supply, some of existing components require changes in their specification due to the above change (a) through (c).

2. Indicative budgetary non-binding price for this change

US\$ 33,000,000.00 for two (2) Units

(Note)

As same as original Contract condition, the above price includes import duty of Canada but does NOT include ocean transportation, inland transportation and any necessary insurance in connection with ocean and inland transportation.

3. Terms and conditions

- (1) Payment schedule of original Contract Price shall be amended as shown below. The amended payment schedule shall be applied to the above additional US\$ 33,000,000 also.

MPS Canada

Mitsubishi Power Systems group

MPS Canada, Inc. 200 Bay Street, Suite No.3220, Toronto, Ontario M5J 2J1, Canada

	Original Contract Price (US\$ 144,698,480.00)	Price for this Change (US\$ 33,000,000.00)
Milestone event or calendar dates	Payment percentage	Payment percentage
Issuance of NTP (milestone payment)	7.5% Already paid	N/A
March 15, 2011 (calendar date payment)	10%	10% + 7.5% (7.5% is catch up of NTP payment)
September 1, 2011 (calendar date payment)	16.25%	16.25%
Mach 1, 2012 (calendar date payment)	16.25%	16.25%
September 1, 2012 (calendar date payment)	16.25%	16.25%
March 1, 2013 (calendar date payment)	16.25%	16.25%
Delivery to the site (milestone payment)	12.5%	12.5%
Substantial Completion (milestone payment)	5%	5%
TOTAL	100%	100%

- (2) The following sections of the Contract (#6519) shall need to be modified due to this changes in project schedule and specification/scope.

Section Number	Section Item
1	Definitions
2.2	Schedule
2.4	Options
3.1	Price
5.1.	Equipment Warranty
6.1	Performance Guarantee
6.2	General Requirement for Performance Tests
7.1 / 7.2	Substantial Completion
8.6	Final Completion
9.1	Performance Liquidated Damages/Offsets
9.2	Liquidated Damages for Delivery and Schedule Delay
11	Delivery

(Note)

This is preliminary only and MPS Canada does not guarantee that above listed sections are only the sections which need to be modified. Sections not listed above may need to be modified and new sections may need to be added. Appendixes has not been checked.

- (3) The detail of the modification of the terms and conditions as well as additional terms and conditions shall be mutually discussed and agreed at a later stage.

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MPS Canada

Mitsubishi Power Systems group

MPS Canada, Inc. 200 Bay Street, Suite No.3220, Toronto, Ontario M5J 2J1, Canada

- (4) In reply to question from Terri (TCE) how MPS Canada can modify one of the warranty condition which is "(iii) Thirty-six (36) months after the date that such Unit, or any part thereof, is initially placed in storage under Purchaser's direction" in case MPS Canada is planning to complete the manufacturing of components much before the scheduled shipping dates, this condition can be modified by stipulating that storage after the scheduled shipping date. This is one example and TCE and MPS Canada will work together to finalize this condition.
- (5) Once TCE decide to apply this change, the following agreements shall be discussed by both Parties.
- (a) Letter of Agreement No.7188 for the Technology Risk Support
 - (b) Long Term Service Agreement No.7011
- (6) This quotation is an estimate, and is for information use only. This is not a binding obligation or commitment on the part of MPS Canada.

-End of Sheet-

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BUDGETARY TECHNICAL PROPOSAL

FOR

TransCanada

FOR

SOUTHWEST GTA CLEAN ENERGY SUPPLY (CES)

WITH A

2 x M501GAC-Fast Gas Turbine & Generator

MP-A2335

December 2010



MITSUBISHI POWER SYSTEMS AMERICAS, INC.

Highly Confidential and Without Prejudice: This record contains information provided to or obtained by the OPA and that is designated by the OPA as highly confidential and intended, for the purpose of section 17 of the *Freedom of Information and Protection of Privacy Act*, to be a record that reveals a trade secret or scientific, technical, commercial, financial or labour relations information, supplied in confidence implicitly or explicitly, the disclosure of which could reasonably be expected to prejudice significantly the competitive position or interfere significantly with the contractual or other negotiations of a person, group of persons, or organization.

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Executive Summary

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Project No.6865W01

Specification No. MP-A2335

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2 x M501GAC-Fast Project

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Executive Summary

1. EXECUTIVE SUMMARY

1.1 Preface

Mitsubishi Power Systems, Inc. (MPS), a wholly owned subsidiary of Mitsubishi Heavy Industries in charge of power industry sales and service in the Americas is pleased to present this proposal for our model M501GAC-Fast indoor simple cycle power plant for your gas turbine generator units.

"MPS" in this document means Supplier.

1.2 Scope

This proposal contains the scope of supply and the technical information for the simple cycle power plant equipment.

1.2.1 Project Information

Project Name: TBD

Project Location: Cambridge Area, Ontario, Canada

1.2.2 Main Equipment

Below is a list of the major equipment included in this proposal.

The Mitsubishi packaged gas turbine generator unit is a compact and self-contained electric power generating plant. It is a pre-designed, completely integrated power plant consisting of the following major components:

- Gas turbine package
- Generator package
- SFC type starting device
- GT Control package
- Inlet air system
- Exhaust gas system
- Cooling system
- Fuel system

Due to shipping limitations, all components are shipped to the site separately. At the site, only final assembly and connections are needed before the plant can generate power. Once the plant is assembled at the site, it is ready for final

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Executive Summary

connections to the Purchaser's electric utility grid. After this is done, the plant can be started using the Purchaser's electric power supply, utility supply, and fuel supply.

1.2.3 Environmental Impact

The plant configuration has a minimal impact on the environment, with its high efficiency and minimal emissions generated equipment: a high efficiency gas turbine and a dry, low NOx combustion process. In this way, the Mitsubishi plant configuration minimizes the environmental impact of generating electricity.

1.3 Proven Record

Since 1963 Mitsubishi has been a leader in the power industry. Over 552 Mitsubishi gas turbine generators ranging from 6 MW to 334 MW in both industrial and utility applications produce more than 53,000 MW of power. The large capacity and high efficiency M501G gas turbine evolved from the long-term operating experiences Mitsubishi has with the highly reliable M501/701 foundation. The first field operation on the G-class machine was conducted in 1997.

The Mitsubishi M501GAC-Fast gas turbine generator unit consists of a M501GAC-Fast industrial type heavy duty gas turbine with air cooled combustor, a hydrogen cooled synchronous generator, and auxiliary equipment as described in this detailed specification.

1.4 Background

The information included in this proposal has been prepared in accordance with Mitsubishi Power Systems (MPS) as well as industry accepted engineering standards and is based on experience gained by Mitsubishi Heavy Industries, Ltd. (MHI) during the completion of power plants throughout the world. Mitsubishi is now serving the American market from Central Florida where both its corporate headquarters and service headquarters are based.

On July 2, 2001, the Power Systems Division of Mitsubishi Heavy Industries America (MHIA) became Mitsubishi Power Systems, Inc. (MPS) – a full-fledged, dedicated operating company headquartered in Central Florida. The new company is chartered to oversee sales and engineering for Mitsubishi turbines, SCRs and gas-, steam- and combined-cycle generating projects in North America, as well as to provide responsive service and replacement parts for our installed fleet throughout the Western Hemisphere.

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Executive Summary

Americas Headquarters: Our new Lake Mary, FL headquarters offices are home to a growing, multicultural professionals in all facets of sales, engineering, project management, customer support and administration, with total access to the global manufacturing and technology resources of Mitsubishi Heavy Industries.

Orlando Service & Manufacturing Center: Began operations in late 2001, our dedicated OEM service facility offers state-of-the-art repair and manufacturing capabilities for critical turbine components, as well as remote plant monitoring and engineering response services.

1.5 Summary

The reliable simple-cycle system described here is a direct result of Mitsubishi's international experience and conservative design philosophy. The high reliability is a result of Mitsubishi's conservative approach to step-by-step technology advancements and optimizing on prudent methodologies. These methodologies are utilized to assure each facility is well above the requirements set for it. The Gas Turbine (GT) engine has design enhancements that are developed and proven prior to inclusion in the plant.

Mitsubishi Power Systems looks forward to being your equipment supplier for this state-of-the-art simple cycle power plant.

A majority of the components of the gas turbine including, but not limited to, the rotor disks, casings, and blades, have already been designed and the gas turbine will be assembled utilizing such components at the factory in accordance with the original equipment manufacturer's practices and procedures prior to delivery of the gas turbine to the site.

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Performance

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MITSUBISHI POWER SYSTEMS, INC.

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2 x M501GAC-Fast Project

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MITSUBISHI POWER SYSTEMS, INC.

Project No.6865W01
Specification No. MP-A2335

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2 x M501GAC-Fast Project



Performance

2.0 PERFORMANCE

Mitsubishi agrees to guarantee the items listed as guaranteed in Table 2.2.1 and Table 2.2.2 in Section 2.2, based on the conditions listed in Section 2.3.

2.1 Warranty

Please refer to the commercial proposal.

2.2 Guarantees & Expectation

The values which Supplier guarantees are as follows and are based on the conditions stated in Section 2.3.

2.2.1 Performance

Table 2.2.1 Guaranteed Performance on Natural Gas firing

Parameter	Value	Units
Ambient Temperature	69.44	°F
Relative Humidity	53.1	%
Barometric Pressure (Site Elevation)	14.159 (1025)	Psia (Feet above MSL)
Guaranteed Net Power Output	242,220	kW
Guaranteed Net Heat Rate	8,927	Btu/kWh (LHV)

Note

The guaranteed performance for Net Power Output and Net Heat Rate as stated here in are valid only under the following conditions and those stated in Section 2.3 :

1. Actual heating values of the fuel used during the tests shall be verified by laboratory analysis acceptable to both parties.
2. The guaranteed values are based on the equipment being in a new and clean condition. New and clean condition means that the actual operating hours are within 200 hours from the initial firing. The deterioration curve is utilized during the acceptance test when the test is delayed beyond 200 hours. In the event of any plant trips, load rejections and rapid load changes which are caused due to reasons not attributable to Supplier, such event shall be included in the calculation of EDH per IBP-08012 for degradation correction factor even if the fired hours are below 200 hours.
3. The listed performance is based on the gas turbine at base load.

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Performance

2.2.2 Emissions

The emission guarantees are listed below and are subject to the design ambient condition specified in Section 2.3.1, when burning the specified fuel in Section 2.3.2 in accordance with the fuel quality specification in Section 5.

Table 2.2.2 Guaranteed Emissions on Natural Gas Firing

Fuel	Natural Gas	
Pollutant ⁽¹⁾	ppmvd ⁽²⁾	mg/Nm ³ ⁽³⁾
NOx ⁽⁴⁾⁽⁵⁾	15	---
CO	10	---
PM10 ⁽⁶⁾⁽⁷⁾	---	1
Note (1) - Short-term GT exhaust emission data specified in this table are based on following conditions. <ul style="list-style-type: none">• 3-hour rolling average.• Gas turbine load : steady state between 60% and 100% load*• Ambient temperature range:-24.3°F to 100.9°F. * Definition of the gas turbine load is referred to Section 2.3.4.		
Note (2) - Values given are @ 15% O ₂ dry volume conditions.		
Note (3) - Values given are @ actual O ₂ dry volume conditions.		
Note (4) - Values given are based on no Fuel Bound Nitrogen in the Natural Gas.		
Note (5) - Fuel gas temperature at FGH outlet shall be equal to or greater than 392°F.		
Note (6) - PM emissions shall be the sum of non-condensable emissions determined using Method 201 or 201A.		
Note (7) - Values given are front half only not including sulfur mist.		
Note (8) - Values given are as measured at the GT exhaust flange.		

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Project No.6865W01

Specification No. MP-A2335

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2 x M501GAC-Fast Project



Performance

2.2.3 Sound Pressure Level

The Sound Pressure Level guarantee is listed below and is subject to the design ambient condition in Section 2.3.1 when burning the specified fuel in Section 2.3.2.

Table 2.2.3 Guaranteed Sound Pressure Level

Parameter	DBA (A wgt)
General Near Field Guarantee ¹⁻⁹	85
Notes	
1 – The Reference Sound Data in IBO-10297 and exceptions as noted.	
2 – This is based on our supplied equipment without any background noise contribution, in the areas normally occupied by site personnel. Equipment locations inside enclosures are not included in this guarantee.	
3 – Sound readings shall only be taken while the plant is operated at steady state, the rated capacity with the auxiliary equipment needed for normal operation in service. Intermittent operations such as pulse air filter cleaning and etc. are not included.	
4 – Enclosure doors and access panels shall remain closed during the demonstration.	
5 – The sound level demonstration procedure will be based upon the relevant ANSI demonstration procedures [e.g. ISO 1996-1:82 and ISO 1996-2:83].	
6 – The demonstration will be conducted during times of average background noise levels and mathematically removing it from the measurement per ISO 3746 (1995 edition).	
7 – No external disturbing influences shall be permitted to interfere with the microphone. Some of these are: Air currents Vibrations Electric or magnetic fields Nearby structures Paved or hard surface roads	
8 – Additional requirements for the measurement equipment and procedures will be detailed at the time of the Procedure Development.	
9 – Near Field is at Approx. 3ft away from the surface and 5ft above the ground.	

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2.2.4 Start-Up Time

The Start-Up Time guarantee is listed below and is subject to the design ambient condition in Section 2.3.1 when burning the specified fuel in Section 2.3.2.

Table 2.2.4 Guaranteed Start-Up Time

Parameter	Minute
Start-Up Time Guarantee ¹⁻⁴	16
Notes 1 – The definition of start-up time is from start PB to 60% GT Load. 2 – The time for synchronization is assumed as 1 minute and is not guaranteed. 3 – The time for GT fuel gas purge is considered, provided that new NFPA 85 will be issued in January 2011 and the requirement of minimum 5 minutes for purging as specified in the current NFPA 85 will not be applicable to simple cycle plant. 4 – The Typical Start-up and Shutdown Curve (IBO-10292) is attached in section 5.	

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Performance

2.3 Basis for Guarantees

2.3.1 Guarantee Basis Conditions

Table 2.3.1 Ambient and flange conditions

Parameter	Value
Factor	NET Power Output NET Heat Rate
Fuel	Natural gas as per Section 2.3.2
Ambient temperature	69.44°F (dry bulb)
Relative humidity	53.1 %
Barometric pressure	14.159 psia (1025ft above MSL)
Frequency	60 Hz
Power factor	0.9 Lagging at generator terminal
Fuel gas temperature at FGH outlet	392°F
Min. fuel gas pressure	600 psig at Fuel Gas Unit inlet
Test Condition	New & Clean
Tolerance	0.5 % (power output) 1.0 % (heat rate)
Generator	Hydrogen-cooled, static exciter
Generator hydrogen purity	99%
Steam Injection	N/A
Evaporative Cooler	OFF
Anti Icing Operation	OFF

*Performance offset credit should be determined by change order signing.

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Performance

2.3.2 Basis Fuel Properties

Table 2.3.2 Natural Gas Conditions

Parameter	Units	Guarantee Basis Value	Site Operational range	
			Min Value	Max Value
Methane	% Vol	96.05	TBD	TBD
Ethane	% Vol	1.59	TBD	TBD
Propane	% Vol	0.14	TBD	TBD
I-butane	% Vol	0.03	TBD	TBD
N-butane	% Vol	0.02	TBD	TBD
I-pentane	% Vol	0.02	TBD	TBD
N-pentane	% Vol	0.02	TBD	TBD
N-hexanes	% Vol	0.00	TBD	TBD
N2	% Vol	1.57	TBD	TBD
CO2	% Vol	0.56	TBD	TBD
Fuel gas pressure at GT Enclosure	Psig	600	600	642
Lower Heating Value	Btu/lb	20,581	TBD	TBD
Sulfur Contents, Max	mg/Nm3	7.48	TBD	TBD
Notes				
1 - GT performance and emissions guarantees are based on the above fuel properties and compliance with the fuel specification "E00-05139 (R-1)" in Section 5. In the case that any of the above fuel properties are changed, performance and emissions guarantees will be corrected.				
2 - No Fuel Bound Nitrogen (FBN) is considered in the fuel. If FBN is present in the fuel the emissions will be compensated per CFR 40.				

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2.3.3 Auxiliary Power Consumption

Table 2.3.3 Supplier's Equipment Auxiliary Power Consumers

O : In Service

Major Item	Description	Natural Gas Firing
GT	Main Lubricating Oil Pump	O
	Vapor Extractor	O
	GT Package Vent Fan	O
	Main Control Oil Pump	O
	GT CO ₂ Fire Fighting System	O
	HVAC in Local Control Package	O
	Control Power	O
	GT Fuel Gas Unit Vent Fan	O
	TCA Cooler Fan	O
	GT Cooling Water Pump	O
	GT Cooling Water Cooler Fan	O
GT GEN	Seal Oil Pump	O
	Vapor Extractor	O
	Excitation Cubicle	O
	AVR Cubicle	O
	GEN Control Panel	O
	Protection Relay Cubicle	O
	H2 Gas and Seal Oil Control Panel	O
	PT/SA Cubicle	N.A.
	GEN Vacuum Pump	O
	H2 Gas Pressure / Purity Monitoring Unit	O
Total (kW)		800

* - To account for the minor loads during the performance testing their design values will be used, with the values to be mutually agreed upon with the Purchaser.

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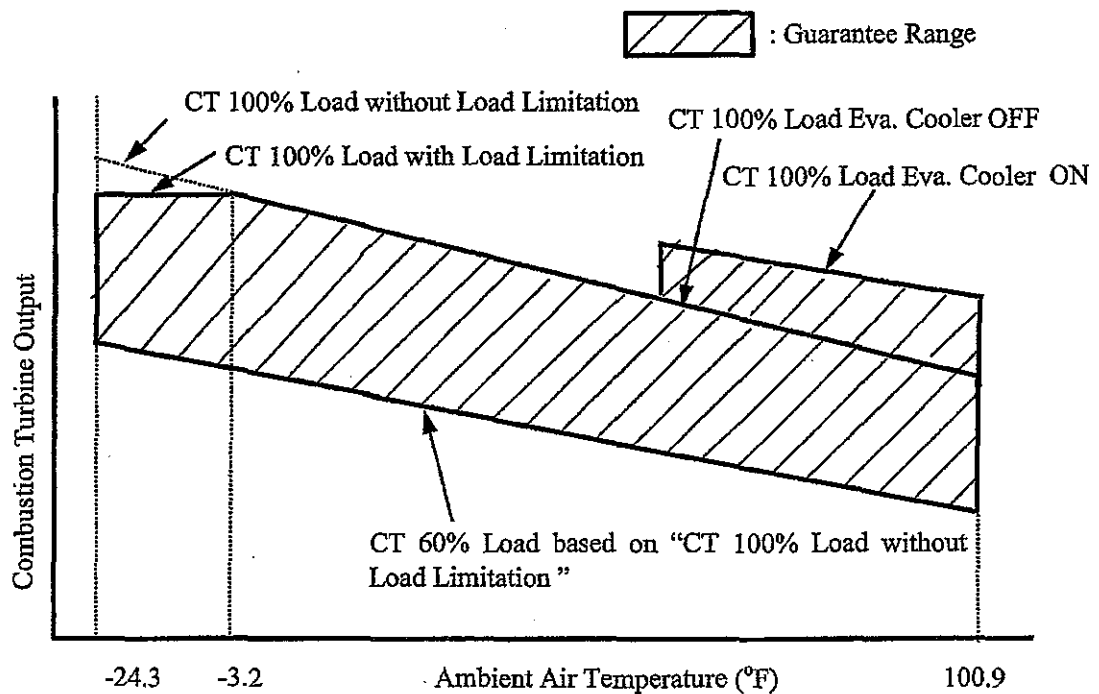


2.3.4 Emissions Performance Basis

GT Exhaust Flange Air Emission Range

The Applicable Gas Turbine operation range for the GT exhaust flange air emission guarantee is specified as follows.

Figure 2.3.4 Emission Operation Range



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2.4 Expected GT Performance

The expected performance data sheet is attached in the following:

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Site C 25104C Part B1d Engine Expected Performance Data Elevation = 1025 Ft. (312 m) AMSL										
Case	1	2	3	4	5	6	7	8	9	11
Case Description	Exhaust Max. Ambient Temp. On	ISO Summer	ORA Season 3	Typical Summer Day Temp. On	Typical Summer Day Temp. Off	ISO Winter	Annual Average Ambient Temp. On	Annual Average Ambient Temp. Off	Annual Average Ambient Temp. On	Annual Average Ambient Temp. Off
Ambient Dry Bulb Temperature, F	101	85	88	87.5	87.5	50	45.5	45.5	45.5	45.5
Ambient Wet Bulb Temperature, F	81	74	78	74	74	46.5	40	40	40	40
Load Level	Base	Base	Base	Base	Base	Base	Base	Base	Base	Base
Exhaust Cooler Status	On	On	On	On	On	On	On	On	On	On
Air Filter Status	On	On	On	On	On	On	On	On	On	On
Generator Power Factor	0.85 lagging	0.85 lagging	0.85 lagging	0.85 lagging	0.85 lagging	0.85 lagging	0.85 lagging	0.85 lagging	0.85 lagging	0.85 lagging
Site Exhaust Pressure Loss, in. w.c.	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
Total Inlet Pressure Loss, in. w.c.	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
Fuel Gas Temperature, F	392	392	392	392	392	392	392	392	392	392
Compressor Inlet Temperature, F	84.2	71.18	78.7	68.54	67.5	60	45.5	45.5	45.5	45.5
Combustion Turbine Performance										
Gross Power Output, MW	232009	257670	233700	251150	244400	258320	261030	261030	261030	261030
Gross Heat Rate, Btu/kWh (HHV)	8077	8077	8077	8077	8077	8077	8077	8077	8077	8077
Gross Heat Rate, Btu/kWh (LHV)	8077	8077	8077	8077	8077	8077	8077	8077	8077	8077
Auxiliary Power, MW	800	800	800	800	800	800	800	800	800	800
Net Heat Rate, Btu/kWh (LHV)	8077	8077	8077	8077	8077	8077	8077	8077	8077	8077
Fuel Flow, lb/hr	101640	105400	102850	105300	105300	105400	111550	111550	111550	111550
Heat Input, mmBtu/hr (LHV)	2092	2129	2119	2129	2129	2129	2129	2129	2129	2129
Heat Input, mmBtu/hr (HHV)	2092	2129	2119	2129	2129	2129	2129	2129	2129	2129
Exhaust Temperature, F	1160	1144	1147	1132	1132	1127	1123	1123	1123	1123
Exhaust Flow, 1000 cfm	4002	4407	4484	4493	4493	4478	4485	4485	4485	4485
Refr. Air Cooler Heat Load, mmBtu/hr										
Exhaust Gas Composition by wt%										
Oxygen	15.32	15.46	15.35	15.51	15.72	15.69	15.73	15.73	15.73	15.73
Carbon Dioxide	5.12	5.11	5.12	5.12	5.08	5.13	5.12	5.12	5.12	5.12
Water	72.1	72.47	72.27	72.13	72.10	72.34	72.10	72.10	72.10	72.10
Argon	1.34	1.3	1.33	1.31	1.31	1.31	1.31	1.31	1.31	1.31
Molecular Weight										
Engine Emissions (kg/hr)										
NOx (ppm @ 15% O ₂)	15	15	15	15	15	15	15	15	15	15
CO (ppm @ 15% O ₂)	10	10	10	10	10	10	10	10	10	10
CO ₂ (ppm @ 15% O ₂)	59	59	59	59	59	59	59	59	59	59
SO ₂ (ppm @ 15% O ₂)	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
VOC (ppm @ 15% O ₂)	4	4	4	4	4	4	4	4	4	4
VOC (lb/hr as CH ₄)	14	14	14	14	14	14	14	14	14	14
Particulate (lb/hr)	3.6	3.7	3.7	3.9	3.8	4	4.1	4.1	4.1	4.1
Neutral Gas Flow										
Use composition and heating value in calculating Cofuel										

Notes:
1. Performance based on new and clean engine condition.
2. If flow gas is higher please verify wet of source.



Design Conditions

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Design Conditions

3. DESIGN CONDITIONS

The equipment and systems included in this proposal are designed based on the design conditions described herein and MPS's standard design practice.

In the event the design conditions and assumptions as stated in this section are changed in a substantive manner, MPS reserves the right to modify the design, guarantees, and/or pricing accordingly.

3.1 Site Design Conditions

3.1.1 Atmospheric Data and site design conditions

Table 3.1.1-A Atmospheric Data

Parameter	Value	Units
Barometer	14.159	psia
Ambient Air Design Temperature	69.44	°F (Dry bulb)
Ambient Air Temperature Range	Min. -24.3 / Max. 100.9	°F (Dry bulb) / °F (Dry bulb)
Relative Humidity	53.1	%
Relative Humidity Range	Min. 10/ Max. 90	%
Location	Indoor	-

Seismic Performance Category

Gas Turbine, GTG Auxiliaries, Generator and Generator Auxiliaries shall be designed per Section 4.1.8 of the OBC 2006; where more severe, the National Building Code 2005 shall also be considered. The peak ground acceleration (PGA) and 5% damped spectral response acceleration values shall be based on a 2% probability of exceedance in 50 years per the *User's Guide - NBC 2005, Structural Commentaries*. The following table summarizes site-specific seismic hazard data for use with OBC design guidelines:

National Building Code interpolated seismic hazard values

2%/50 years (0.000404 per annum) probability:

$S_a(0.2)$	$S_a(0.5)$	$S_a(1.0)$	$S_a(2.0)$	PGA
0.349	0.171	0.062	0.021	0.258 x g

Wind Loading for outdoor equipment

Exposed portions of each Gas Turbine, GTG Auxiliary, Generator and Generator Auxiliary shall be designed per Section 4.1.7 of the OBC 2006; where more severe, the National Building Code 2005 shall also be considered. The reference velocity pressure shall be based on mean hourly wind speed and determined based on the probability of being exceeded in any one year of 1-in-50 per the *User's Guide - NBC 2005, Structural Commentaries*.

For exposed components within Supplier's scope of supply shall be designed for a

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reference wind velocity pressure (q) of 0.50 kPa shall be utilized. Any special construction may require more detailed analysis per OBC Section 4.1.7.2.

Snowfall/Frost for outdoor equipment

Snow/Rain: Specified load due to snow or rain on Supplier's equipment shall be per Section 4.1.6 of the OBC 2006, with 1-in-50 year ground snow and rain loads derived from the *User's Guide - NBC 2005, Structural Commentaries*. For the Oakville site and closeness to Lake Ontario, a ground snow load (S_g) of 2.1 kPa and associated rain load (S_r) of 0.4 kPa shall be utilized.

Frost: 1.2 m depth below existing grade for exposed foundations (primarily associated with intake filter house loads only).

3.1.2 Electricity Conditions

The maximum generator output corresponds to the maximum output of the gas turbine, which is at an ambient temperature of approximately -3.2° F. When the ambient temperature is lower, the generator output will remain constant due to the gas turbine low temperature characteristic.

Gas Turbine Generator will be in compliance with IESO's Market Rules for the Ontario Electricity Market, Chapter 4 : Grid Connection Requirements.

Table 3.1.2-A Electrical Conditions

	Design	
Generator line	AC-21kV	60 Hz 3Phase
Auxiliary power Sources		
a. Auxiliaries	AC-21 kV	60 Hz 3Phase
	AC-4,160 V	60 Hz 3Phase
	AC-600 V	60 Hz 3Phase
	AC-120 V	60 Hz single phase(vital & non Vital)
	DC-125 V	
b. Control and Instruments	AC-120 V	60 Hz single phase(vital & non Vital)
	DC-125 V	

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Design Conditions

3.1.3 Fuel Gas

The plant is designed to burn Natural Gas per the Mitsubishi Fuel Gas Specification E00-05139 (R-1) in Section 5, and as specified in Section 2.3.2. The Fuel gas delivery system should be designed for the following pressure regulation scenario.

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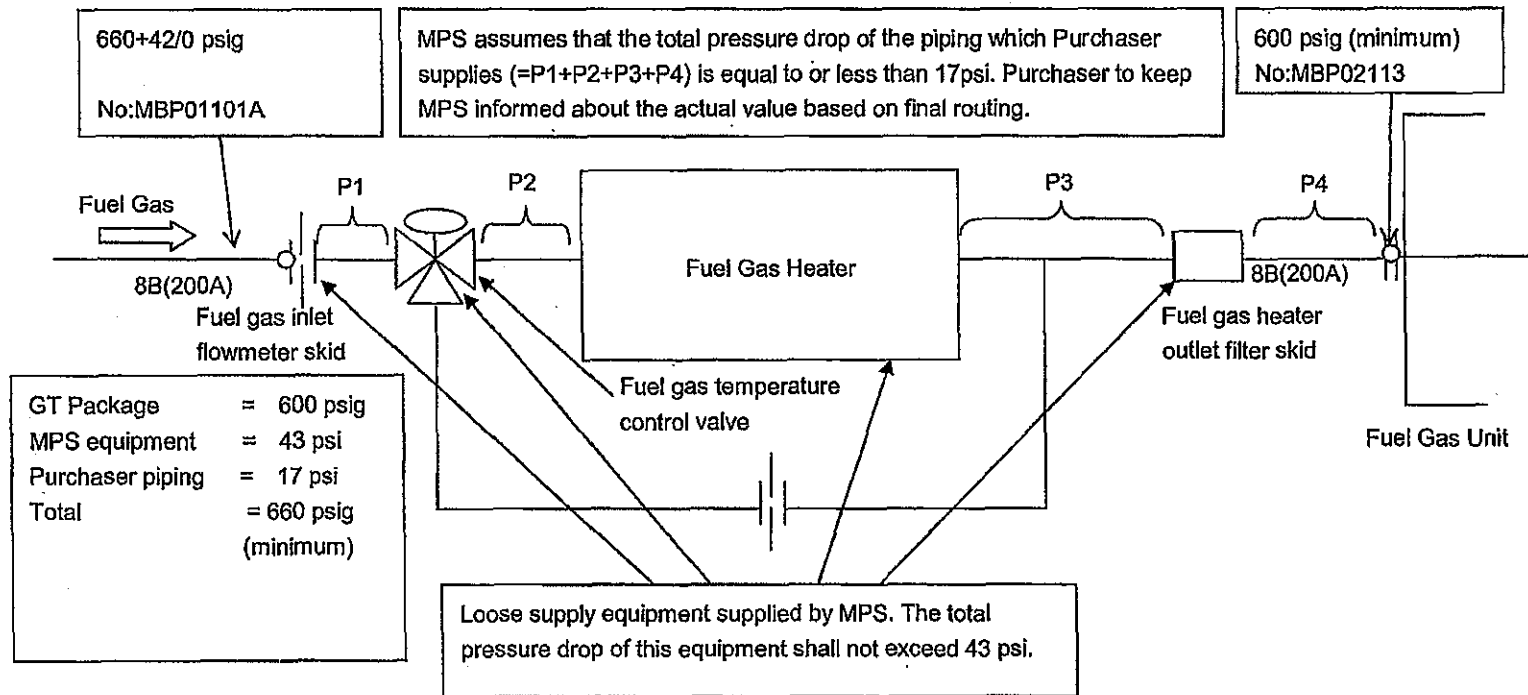
Design Conditions



Figure 3.1.3-A Illustration of the recommended design of the fuel delivery system

MPS recommends Purchaser to provide the fuel gas at 660+42/-0 psig at the inlet of fuel gas flow meter.

Note: This is a standard illustration of the system. The actual values may change during project execution.



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3.1.4 Painting

The plant is prepared and painted in accordance with MPS's standardized painting specification.

3.1.5 Pipe Material

The unit piping will be made of the following material:

Table 3.1.5-A Pipe Material

Component	Description
Lube oil line	
-Supply line (upstream of supply filter)	Carbon steel pipe ASTM A106Gr.B or equiv.
-Supply line (downstream of supply filter)	Stainless steel pipe ASTM A312 Gr.TP304 or equiv.
-Return line Lube Oil Line (Upstream of supply filter)	Carbon steel pipe ASTM A106Gr.B or equiv.
Compressor bleed line	Carbon and low alloy steel pipe, ASTM A106Gr.B or equiv.
Turbine cooling air piping	ASTM A515Gr.60
Fuel gas line	
- Up to unit fuel gas strainer	Carbon steel pipe ASTM A106Gr.B or equiv.
- Downstream of unit fuel gas strainer	Stainless steel pipe ASTM A312Gr.TP304 or equiv.
Control oil line	Stainless steel pipe ASTM A312Gr.TP304 or equiv.
Instrument air line	Stainless steel pipe ASTM A312Gr.TP304 or equiv.
Fire protection system line (CO2 line)	Carbon steel pipe ASTM A106Gr.B or equiv.
Water washing line	Stainless steel pipe ASTM A312Gr.TP304 or equiv.
Vent and drain line for all line	Carbon steel pipe ASTM A106Gr.B or equiv.

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3.1.6 Motor

Rating and specification of the motor for turbine and generator auxiliaries are as follows.

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Design Conditions

Type of AC motor	Induction
Type of AC motor rotor	Cage
Rated Voltage	
- AC motor (MV)	Not in the scope
- AC motor (LV)	575V, 60Hz
- DC motor	125V
Insulation class	Class F (temperature rise B) Note:
Some	small motors may be of Class E
Enclosure Protection	Generally TE or TEFC
Method of starting ;	
- AC motor	DOL (Direct on Line)
- DC motor	Resistor
Starting current of Motor ;	
- MV motor	Not Applicable
- LV motor	According to manufacture's standard
Running duty	Continuous
Service factor	1.0

Note 1: Alternating current Motors will generally comply to high efficiency requirements of CSA C390 standard. Refer to Note 2 for exceptions.

Note 2: Explosion proof motors, motors specially designed for the driving machine, motors supplied with machines and DC motors will be according to manufacturers' standard

Note 3: Some minor motors may have different specifications from above, and it will be indicated on detailed specifications submitted during design stage after contract award.

Note 4: Motors purchased from other countries will comply with the originating country standard.

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Design Conditions

3.1.7 Utility

Our utility list is submitted later..

3.1.8 Sound Data

Our preliminary sound generation data is provided in Section 5.

3.2 Gas Turbine & Auxiliary Standards

MPS has developed its design and manufacturing standards and procedures by incorporating many years of operation and design experience. The following table lists the major groups of US, ISO and Japanese codes and standards that are generally applicable. Good engineering practice calls for these codes to be generally followed in the design and manufacture of the equipment to the extent they are applicable to an electric utility generating station.

It is the Owner's responsibility to verify and communicate to the Supplier requirements for additional or different codes and standards. If the Owner desires additional or different codes and standards to be applied to and or incorporated in the equipment, such changes will be subject to negotiation.

Table 3.2-A Codes & Standards

No.	Description
1	International Electrotechnical Commission (IEC)
2	The Institute of Electrical and Electronics Engineers (IEEE)
3	American National Standards Institute (ANSI)
4	Japan Industrial Standards (JIS)
5	Standard of The Japanese Electrotechnical Committee (JEC)
6	Japan Electrotechnical Manufacturer's Association (JEM)
7	National Fire Protection Association/National Electric Code (NFPA/NEC)
8	American Society of Mechanical Engineers (ASME)
9	Manufacturer's Standards
The codes and standards applicable to individual pieces of equipment will be available in detailed specification drawings, which will be issued at a later stage.	

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3.3 Language and Measurement

3.3.1 Language

Throughout the Contract, all letters, instructions, leaflets, descriptions, invoices, certificates and documents of any kind are in English.

3.3.2 Units of Measurement

In all correspondence, on all drawings, specifications, or any document, the US standard system is employed. All instrument dial face and scale is calibrated to give direct readings in US standard units.

NOTE: Upon request of the Purchaser, the SI unit system can be utilized.

3.4 Factory Tests

3.4.1 Gas Turbine

Factory tests are performed according to the following schedule:

- 1) The interlock test of the gas turbine control system.
- 2) The gas turbine rotor assemblies are mechanically balanced.
- 3) The gas turbine assembly is not fired or load tested due to the reliability of the production facility.

3.4.2 Generator

Factory tests are performed according to the following schedule:

- 1) Electrical measurement and test for generator
 - a) Measurement of coil resistance
 - b) Measurement of insulation resistance
 - c) Dielectric test
- 2) Mechanical inspection and test for generator
 - a) Outline and layout check
 - b) Measurement of rotor vibration
 - c) Overspeed test of rotor

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3.5 IESO test

Supplier shall assist Purchaser with conducting all IESO demonstration tests as per IESO market rules.

3.6 Canadian/Local regulations

Supplier shall comply with Canadian/Local regulations which are required by law as of the Effective Date. If such regulations are changed after the Effective Date, price/schedule adjustment, if required, shall be applied.

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Bill of Material –M501GAC-Fast Gas Turbine & Generator



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2 x M501GAC-Fast Project



4. BILL OF MATERIAL

This Mitsubishi proposal includes the design, manufacture, supply, testing, packing, insurance, shipment, site testing, and warranty of the model M501GAC-Fast package Gas turbine generator units. These units are coordinated as part of 2 x simple cycle plants.

The Gas turbine and mechanical auxiliaries are made up of the major equipment listed below.

This is the standard/expected plant equipment/design. MPS reserves the right to modify and change the equipment as needed to optimize the plant for the intended site, service and operational conditions as they develop in the detailed design, provided that such changes do not reduce the redundancy without Purchaser's prior consent. If significant deviations are required the customer will be notified.

4.1 Gas Turbine and Mechanical Equipment

For the Simple Cycle power generation system the following equipment and systems are typically provided in the package. These ratings, material and data are preliminary for tender purpose only and are subject to change during the detailed design.

4.1.1 Gas Turbine

No.	Item	Quantity	Comment
1	Gas Turbine	One (1) x 2	M501GAC-Fast
2	Combustor	Sixteen (16) x 2	DLN, equipped to burn Natural Gas
3	Igniter	Two (2) x 2	Electrical spark Type
4	Inlet Guide Vane Actuator	One (1) x 2	Hydraulic Type
5	Not Used		
6	GT Turning Gear	One (1) x 2	
7	GT Turning Motor (AC)	One (1) x 2	15HP (11kW) 1800rpm, AC 460V
8	GT Rotor Grounding Device	One (1) x 2	
9	GT Base Plate	One (1) x 2	
10	Gas Turbine Enclosure	One (1) x 2	Steel Structure
11	Explosion-proof Ventilating Fan	Three (3) x 2 (1 for standby)	GT Enclosure
12	Explosion-proof Ventilating Fan Motor	Three (3) x 2 (1 for standby)	30HP (22kW) 900rpm, AC 460V
13	GT Bolt Heater	One (1) set x 2	

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Bill of Material -M501GAC-Fast Gas Turbine & Generator

14	GT Bolt Heater Distribution Board	One (1) x 2	
15	GT Turning Gear Motor Jog Switch	One (1) set x 2	

4.1.2 Inlet Air System

No.	Item	Quantity	Comment
1	GT Inlet Air Filter	One (1) x 2	Pulse Air Self-Cleaning Type
2	GT Inlet Air Silencer	One (1) x 2	Splitter Type
3	Evaporative Cooler	One (1) x 2	Recirculation Type Using demineralized water
4	GT Inlet Air Duct	One (1) x 2	Carbon Steel
5	Anti-Icing System for GT Inlet Air	One (1) x 2	Compressor Air Extraction
6	Expansion Joint for GT Inlet Air Duct	One (1) x 2	

4.1.3 Air and Flue Gas System

No.	Item	Quantity	Comment
1	Turbine Cooling Air Cooler with Fuel Gas Heater	One (1) x 2	Radiator Type
2	Cooling Air Filter	One (1) x 2	Inertia Type 1.66m3
3	Bearing Seal Air Filter	One (1) x 2	Inertia Type
4	Bearing Seal Air Drain Separator	One (1) x 2	
5	Compressor High Pressure Bleed Valve	One (1) x 2	Pneumatic Valve (On - Off Valve)
6	Compressor High Pressure Bleed Drain Valve	One (1) x 2	Pneumatic Valve (On - Off Valve)
7	Compressor Middle Pressure Bleed Valve(with Chamber Tank)	One (1) x 2	Pneumatic Valve (On - Off Valve)
8	Compressor Middle Pressure Bleed Drain Valve	One (1) x 2	Pneumatic Valve (On - Off Valve)
9	Compressor Low Pressure Bleed Valve (with Chamber Tank)	One (1) x 2	Pneumatic Valve (On - Off Valve)
10	Compressor Low Pressure Bleed Drain Valve	One (1) x 2	Pneumatic Valve (On - Off Valve)

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Bill of Material -M501GAC-Fast Gas Turbine & Generator



4.1.4 GT Lubrication System

No.	Item	Quantity	Comment
1	GT Lube Oil Reservoir with Strainer	One (1) x 2	26m3
2	GT Main Lube Oil Pump (A),(B)	Two (2) x 2 (1 for standby)	Centrifugal Type 713gal/min
3	GT Main Lube Oil Pump Motor (A),(B)	Two (2) x 2 (1 for standby)	100HP (75kW) 3600rpm, AC460V
4	GT Emergency Lube Oil Pump	One (1) x 2	Centrifugal Type 581gal/min
5	GT Emergency Lube Oil Pump Motor	One (1) x 2	30HP (22kW) 1800rpm, DC 125V
6	GT Lube Oil Cooler	One (1) x 2	Water cooled Plate Type
7	GT Lube Oil Heater	Two (2) x 2	15HP (11kW) AC 460V
8	GT Lube Oil Vapor Extractor	Two (2) x 2 (1 for standby)	Centrifugal Type
9	GT Lube Oil Vapor Extractor Motor	Two (2) x 2 (1 for standby)	15HP (11.2kW) 3600rpm, AC460V
10	GT Lube Oil Mist Separator	One (1) x 2	Coalescent Type
11	GT Lube Oil Filter	One (1) x 2	10μ Duplex Type
12	GT O.S.T. Oil Filter	One (1) x 2	
13	GT Lube Oil Accumulator	Three (3) x 2	183 L x 3 Bladder Type
14	GT Lube Oil Temperature Control Valve	One (1) x 2	Pneumatic Type 3-way Valve
15	GT Lube Oil Pressure Regulating Valve	One (1) x 2	

4.1.5 GT Control Oil System

No.	Item	Quantity	Comment
1	GT Control Oil Reservoir	One (1) x 2	1000L
2	GT Control Oil Pump (A),(B)	Two (2) x 2 (1 for standby)	Axial Piston Type
3	GT Control Oil Pump Motor (A),(B)	Two (2) x 2 (1 for standby)	60HP (45kW) 1200rpm, AC 460V
4	GT Control Oil Supply Filter (A),(B)	Two (2) x 2 (1 for standby)	3μ

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Bill of Material –M501GAC-Fast Gas Turbine & Generator

No.	Item	Quantity	Comment
5	GT Control Oil Return Filter (A),(B)	Two (2) x 2 (1 for standby)	3μ
6	GT Control Oil Cooler	One (1) x 2	Water Cooled Shell & Tube with stainless steel tube
7	GT Control Oil Heater	One (1) x 2	5.4HP (4kW) AC 460V
8	GT Control Oil Accumulator (A),(B),(C)	Three (3) x 2	Piston Type 10L x 3
9	GT Control Oil Cleaning Unit	One (1) set x 2	

4.1.6 GT Fuel Gas System

No.	Item	Quantity	Comment
1	Fuel Gas Heater Outlet Strainer Skid	One (1) x 2	200mesh(100 um) Y Type
2	Fuel Gas Flow Meter Skid	One (1) x 2	Turbine Type
3	GT Fuel Gas Unit	One (1) x 2	
4	Explosion-proof Ventilating Fan	Two (2) x 2 (1 for standby)	GT Fuel Gas Unit
5	Explosion-proof Ventilating Fan Motor	Two (2) x 2 (1 for standby)	3HP (2.2kW) 1800rpm, AC 460V
6	Fuel Gas Supply Pressure Control Valve (A)	One (1) x 2	Hydraulic Type
7	Fuel Gas Supply Pressure Control Valve (B)	One (1) x 2	Hydraulic Type
8	Fuel Gas Main (A) Flow Control Valve	One (1) x 2	Hydraulic Type
9	Fuel Gas Main (B) Flow Control Valve	One (1) x 2	Hydraulic Type
10	Fuel Gas Pilot Flow Control Valve	One (1) x 2	Hydraulic Type
11	Fuel Gas Top Hat Flow Control Valve	One (1) x 2	Hydraulic Type
12	Fuel Gas Shut Off Valve	One (1) x 2	Hydraulic Type
13	Fuel Gas Vent Valve	One (1) x 2	Hydraulic Type
14	Fuel Gas Temp. Control Valve	One (1) x 2	Pneumatic Type
15	Fuel Gas Emergency Shut Off Valve	One (1) x 2	Pneumatic Type
16	Fuel Gas Emergency Vent Valve	One (1) x 2	Pneumatic Type

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Bill of Material -M501GAC-Fast Gas Turbine & Generator

4.1.7 Fuel Gas Nozzle Purge Air System

No.	Item	Quantity	Comment
1	Purge Air Unit	One (1) x 2	
2	GT Purge Air Shut Off Valve	One (1) x 2	Pneumatic Type
3	GT Purge Air Vent Valve	One (1) x 2	Pneumatic Type
4	Pilot Nozzle Purge Air Supply Valve	One (1) x 2	Pneumatic Type
5	Main (A) Nozzle Purge Air Supply Valve	One (1) x 2	Pneumatic Type
6	Main (B) Nozzle Purge Air Supply Valve	One (1) x 2	Pneumatic Type
7	Tophat Nozzle Purge Air Supply Valve	One (1) x 2	Pneumatic Type

4.1.8 Exhaust System

No.	Item	Quantity	Comment
1	GT Exhaust Duct (External Insulation)	One (1) x 2	Stainless Steel, EB01
2	GT Exhaust Duct (Internal Insulation)	One (1) x 2	Carbon Steel, EB02
3	GT Exhaust Stack	One (1) x 2	100ft
4	Exhaust stack silencer	One (1) x 2	
5	Expansion Joint for GT Exhaust Duct	One (1) x 2	Between EB01 and EB02
6	Expansion Joint for GT Exhaust Duct	One (1) x 2	Between EB02 and Stack

4.1.9 Fire Fighting System

No.	Item	Quantity	Comment
1	CO2 Tank	One (1) x 2	Low pressure type
2	CO2 Local Control Panel	One (1) x 2	

4.1.10 Compressor Blade Water washing System

No.	Item	Quantity	Comment
1	Compressor Blade Washing Nozzle & Piping	Total One (1) sets	Manual Wet Type Common for 2 GTs
2	Compressor Blade Washing Water Tank	Total One (1) sets	Low pressure Tank Type
3	Compressor Blade Washing Pump	Total One (1) sets	39.6gal/min (150L/min)
4	Compressor Blade Washing Pump Motor	Total One (1) sets	20HP (15kW) 3600rpm, AC 460V

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Bill of Material –M501GAC-Fast Gas Turbine & Generator

4.1.11 Casing Cooling Air System

No.	Item	Quantity	Comment
1	GT Casing Cooling Fan	One (1) x 2	Centrifugal type
2	GT Casing Cooling Air Shut Off Valve	One (1) x 2	Pneumatic Type
3	GT Casing Cooling Air Supply Valve	One (1) x 2	Pneumatic Type

4.1.12 Maintenance Support Equipment

No.	Item	Quantity	Comment
1	Special tool	Total One (1) set	Common for 2 GTs

4.1.13 GT cooling water system

No.	Item	Quantity	Comment
1	GT cooling water radiator cooler	One (1) x 2	
2	GT cooling water pump	Two (2) x 2	
3	Make up tank	One (1) x 2	

4.2 Generators and Auxiliaries

For the Simple Cycle power generation system the following equipment and systems are typically provided in the package. These ratings, material and data are preliminary for tender purpose only and are subject to change during the detailed design.

4.2.1 Gas Turbine Generator and Auxiliaries

No.	Item	Quantity	Comment
1	GT Generator	One (1) x 2	Hydrogen Cooled Turbine Generator
2	GTG Vapor Extractor	One (1) x 2	Fan & Motor
3	GTG Gas Dryer	One (1) x 2	Reactivating Type
4	GTG Gas Pressure/Purity Monitoring Unit	One (1) x 2	Panel Type
5	GTG Seal Oil Supply Unit	One (1) x 2	Vacuum Treating Type
6	GTG H2 Supply Unit	One (1) x 2	Stainless Steel Piping
7	GTG Water Detector	Two (2) x 2	Reed Switch Type
8	GTG Loop Seal Oil Tank	One (1) x 2	Carbon Steel
9	GTG Seal Oil Control Panel	One (1) x 2	

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Bill of Material –M501GAC-Fast Gas Turbine & Generator

No.	Item	Quantity	Comment
10	GTG NGR Cubicle	One (1) x 2	Grounding Resistor Type
11	GTG AVR Cubicle	One (1) x 2	
12	GTG Excitation Cubicle	One (1) x 2	
13	GTG Excitation Transformer	One (1) x 2	3 ϕ , 60Hz
14	GTG Protection Relay Panel	One (1) x 2	
15	GTG Control Panel	One (1) x 2	
16	(GT Start Up Device) Converter Cubicle for SFC	Two(2) per 2GTs	7MW
17	Inverter Cubicle for SFC	Two(2) per 2GTs	
18	SFC Start Up Switch Board	One(1) per 2GTs	
19	Control panel for SFC Start-Up Switch Circuit	One(1) per 2GTs	
20	Control Cubicle for SFC	Two(2) per 2GTs	
21	DC Reactor for SFC	Two(2) per 2GTs	
22	Transformer for SFC	Two(2) per 2GTs	
23	H2 Regulating Valve Unit	One (1) x 2	
24	CO2 Supply Unit	One (1) x 2	

4.3 Electrical and I&C Systems

For the Simple Cycle power generation system the following equipment and systems are typically provided in the package. These ratings, material and data are preliminary for tender purpose only and are subject to change during the detailed design.

4.3.1 GT Electrical & Control System

No.	Item	Quantity	Comment
1	GT Control Package - A	One (1) set x 2	
2	GT Control Package - B	One (1) set x 2	
3	GT Control System	One (1) set x 2	
4	GT Supervisory Instrument Panel	One (1) set x 2	
5	GT Interlock Panel	One (1) set x 2	
6	GT Local Operator Station	One (1) set x 2	
7	GT 600V AC MCC	One (1) set x 2	
8	GT 600V AC Essential MCC	One (1) set x 2	
9	GT 600/208V-120V AC Distribution Transformer	One (1) set x 2	

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Bill of Material –M501GAC-Fast Gas Turbine & Generator

No.	Item	Quantity	Comment
10	GT 600/208V-120V AC Essential Distribution Transformer	One (1) set x 2	
11	GT 208-120V AC Distribution Panel	One (1) set x 2	
12	GT 208-120V AC Essential Distribution Panel	One (1) set x 2	
13	GT 125V DC Battery	One (1) set x 2	
14	GT 125V DC Battery Charger	One (1) set x 2	
15	GT 125V DC Starter Panel	One (1) set x 2	
16	GT 125V DC Distribution Panel	One (1) set x 2	
17	GT 125V DC Battery Fuse Box	One (1) set x 2	
18	Operator Station (GT-OPS)	One (1) set x 2	Remote stations for GT in CCR
19	Combustion Pressure Fluctuation Analyzer system (CPFA) monitor	One (1) set x 2	To be installed in CCR
20	Accessory Station (ACS)	One (1) set x 1	Data logger for GT in CCR
21	Data Management PC (DMPC)	One (1) set x 1	To be installed in CCR
22	OPC Server (DA2.0)	One (1) set x 1	Gateway for interface with DCS in CCR

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Additional Engineering Information

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Additional Engineering Information

5. ADDITIONAL ENGINEERING INFORMATION

5.1 Fuel Gas Specification

E00-05139 R1

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GAS FUEL SPECIFICATION
(for DLN Combustor Application)

Historically, high BTU natural gas has been the primary gaseous fuel burned in gas turbines. Its clean burning characteristic, coupled with ready availability, made it an ideal fuel for such service.

MITSUBISHI DLN Combustor is designed to suit Natural Gas firing with low NO_x emission without water/steam injection. Many kind of natural gas with widely varying chemical content have been successfully used in gas turbines.

However, certain restrictions should be mentioned so that the best application can be made for the user. The most important restrictions are as follows:

Component

In order to maintain a stable combustion, components in natural gas is preferable restricted as follows.

A. Methane

Methane content in the natural gas with subtraction of inert gases is within the range from 80 to 98 mol. % preferably.

However, once a gas is defined for a specific application and combustor is tuned, the variations of Methane content in the natural gas with subtraction of inert gases should not exceed +/- 9%.

Methane content effects the location of the combustion flame and the characteristics of combustion may be changed. So it is necessary to adjust the combustion tuning without the range from 80% to 98 mol% with subtraction of inert gases.

B. Inert gases

Inert gas including Nitrogen and Carbon dioxide content in the natural gas is not more than 4 mol.% preferably.

Combustion fluctuation tends to occur during the combustion of high content of inert gas. So the combustion ratio of the diffusion type may be increased and tuned in order to combust stably. As the results, NO_x emission may be increased.

Beyond the limits specified above, consult Mitsubishi Heavy Industries,LTD.

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Heat Content

In order to determine system handling capability, heating value and specific gravity are the characteristics of natural gases which must be considered.

They are combined in a convenient term called "GAS INDEX (i.e. GI equivalent to Wobbe Index)".

GI is defined by the ratio of the LHV of the fuel to the square root of specific gravity.

$$\text{GAS INDEX (GI)} = \frac{\text{LHV}_{\text{vol}}}{\sqrt{\text{S.G.}}}$$

where : LHV_{vol} = Actual lower heating value in Btu/Scf (kJ/Nm³)

and $\text{S.G.} = \frac{\text{Density of Gas (Standard Conditions)}}{\text{Density of Air (Standard Conditions)}}$

As an example for standard gas $\text{LHV}_{\text{vol}} = 900 \text{ Btu/Scf} (35,500 \text{ kJ/Nm}^3)$, $\text{S.G.} = 0.6$ and $\text{GI} = 1161.9 (45,830)$.

Most common gases having a GI of 1,200(47,300) $\pm 15\%$ from a design point can be handled with standard fuel gas equipment. However, once a gas is defined for a specific application, the variations from a control point of view should not exceed $\pm 5\%$.

GI change rate shall not exceed 5% per minutes.

Beyond the limits specified above, the fuel supply system must be reviewed.

Pressure

Depending upon unit frame size, minimum ambient temperature, elevation and applied fuels, the approximately required pressure level is 400 to 660 psig(2.8 to 4.6MPa(g)) at the inlet of GT package. For specific pressure requirements, consult Mitsubishi.

Once the pressure at the terminal point is determined, the following conditions shall be complied in the event of the various gas turbine operation modes specified in Figure 2.

- Pressure fluctuation range shall be restricted within $\pm 21 \text{ psi} (0.14 \text{ MPa})$.
- Speed of pressure variation shall not exceed 11 psi(0.08MPa) per second.
- Peak to peak amplitude of pressure vibration with more than 10Hz frequency shall not exceed 0.14 psi(0.001MPa) continuously for 2 seconds. This limit may require reciprocating gas compressor with minute pressure vibration.

When gas compressor will be installed, centrifugal type or screw type are recommendable.

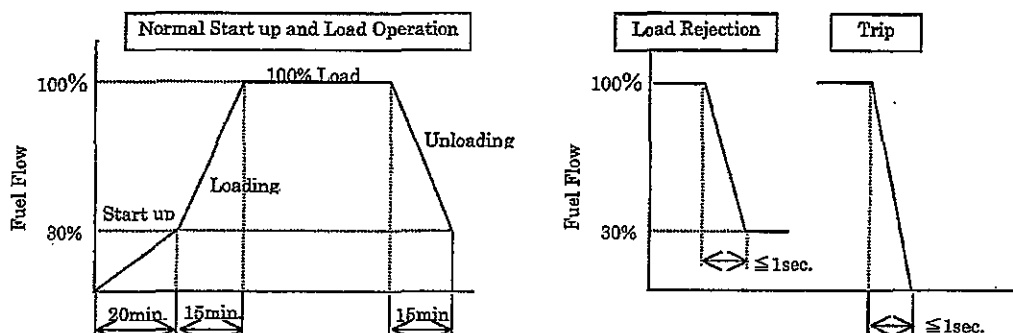


Figure 2 Gas Turbine Operation Modes

Condensable Liquids in the Gas

The fuel gas as fed to the nozzles of the combustion system must contain no constituents in the liquid state. This means that the constituent having the highest saturation temperature must have at least 20 degrees F(11 degree C) superheat. Minor traces of heavier liquid hydrocarbons that might be carried over from the source of fuel supply should be excluded from the fuel system. This carryover of liquid can usually be prevented by traps and heaters in the fuel supply line.

Minimum fuel gas supply temperature is recommended higher than 41 degrees F(5 degree C) to prevent icing of fuel gas piping and equipments.

It is the customer's responsibility to insure that no liquid hydrocarbons are present in the gas as it is delivered to the combustion turbine. Liquid carry-over can be detrimental to engine parts life. Liquids can be removed by KNOCK OUT SCRUBBERS followed by SEPARATORS & HEATERS. Where long runs of pipes exist between the gas conditioning equipment and the physical arrangement can allow pockets of liquid to collect, a "LAST CHANCE" SEPARATOR near the combustion turbine is also recommended. Proper liquid level alarm and shutdown protection are also recommended.

Solid Particle in the Gas

Solid Particle should be limited to prevent erosion, deposition, plugging of fuel gas nozzle. Solid Particle in the fuel gas as fed to the nozzles of the combustion system shall be limited to 30ppmwt. maximum up to size of 5microns(μ m) and the size of all solid particle shall not exceed 5microns(μ m).

For this requirement, typically, 99.5wt% of all particles and 100% of all particles larger than 5 microns shall be removed by the filters supplied by the Owner before delivery to the gas turbine.

It is important that total particle content of fuel gas should be summed and satisfy the



limits specified. Solid particle are typically composed of sand, rust, tar, iron and silica(SiO_2), etc.

If the content of the total particle into the gas turbine beyond the above limit, consult Mitsubishi Heavy Industries, Ltd.

Total Particle (Maximum)	30ppmwt (on fuel wt basis)
Maximum Particle Size	5 microns(μm)

Nitrogen (FBN) Content

Nitrogen content (fuel bound nitrogen FBN) causes to increase NO_x formation in addition to the standard (thermal) NO_x formed by the reaction between oxygen and nitrogen in the flame zone. Therefore, the guaranteed NO_x level is increased in case that there is FBN content in fuel gas. FBN content in fuel gas is none preferably.

Oil Mist and Vapor Content

Total amount of oil mist and vapor in the fuel gas shall not exceed 0.5 ppmwt. to prevent fuel nozzle clogging and unstable firing. This limit usually requires reciprocating gas compressor and screw type gas compressor.

Sulfur Content

For peaking applications sulfur in the form of hydrogen sulfide (H_2S) is limited to 5% (mole percent) max. This is done to limit the detrimental effects of H_2S to the fuel system. H_2S levels in excess of 5% (mole) can be tolerated with special fuel system components. In heat recovery applications, the total sulfur in the fuel (from H_2S plus other sulfur compounds) is recommended to limit 0.5% (mole) due to the low temperature corrosion on HRSG and if the sulfur is contained, MITSUBISHI should be consulted.

Composition Factor in Gum Products

There are some kind of gas fuel composition which will make gum and cause the nozzle clogging problem. MITSUBISHI knows the compositions which will cause the clogging problem but it is very difficult to define the specific limitation.

So MITSUBISHI makes the guide line of the limitation of the composition which will cause the clogging problem based on our experience.

Limitation of the Fuel Gas composition

C_4H_6 (Butadiene) < 1 ppmv

$\text{C}_6\text{H}_5\text{CH}=\text{CH}_2$ (Styrene) < 1 ppmv



NOx*	< 0.5 ppmv
Inden	< 1 ppmv
C ₅ H ₁₀ (Cyclopentane)	< 1 ppmv
C ₆ H ₆ (Benzene)	< 1 ppmv
C ₁₀ H ₈ (Naphthalene)	< 50 mg/Nm ³
Tar	< 1 mg/Nm ³
BTX(Benzene/Toluene/Xylene)	< 1 mg/Nm ³

*Generally, above compositions are not included in natural gas and LNG.

Trace Metals

Total trace elements in fuel, water and inlet air flow shall not exceed MITSUBISHI fuel specification requirements.

Specifically, the combined total quantity of elements in fuel, water and air must not exceed the following on a fuel weight basis :

<u>Trace Metals</u>	<u>Per Million Parts of Fuel by Weight</u>	<u>Notes</u>
Sodium & Potassium	0.5 ppm	Consult MITSUBISHI for 0.5ppm
Vanadium	0.5 ppm	
Lead	2.0 ppm	
Calcium	10 ppm	
Other trace metals	2.0 ppm	



Inlet Air Contaminants

The compressor inlet air can greatly increase the level of impurities entering the hot gas path. To determine the extent of contamination, the air to fuel mass flow ratio is multiplied by the air contaminant level in ppm(wt.) to obtain the contaminant concentration on an assumed liquid fuel equivalent basis. For example 10ppb of Na in the inlet air is equivalent to approximately 0.5ppm sodium in the fuel on a weight basis.

Water-Borne Contaminants

Water employed for emissions control(i.e. water injection) and/or compressor cleaning can also increase the level of impurities entering the hot gas path. Calculation of waterborne contaminants on a liquid fuel equivalent basis is accomplished in the same manner as illustrated for air borne contaminants. In general, water injection quality standards for MITSUBISHI gas turbines are stated as follows. If levels of impurities exceed these limits, MITSUBISHI should be consulted with regard to water purification systems.

1)Reactive Dissolved Solids

Silicon	18 ppm
Chlorides	6 ppm
Iron & Copper	0.1 ppm
Oxygen	2 to 9 ppm
(as determined by O ₂ saturated water)	
pH	7.5 to 8.0

Note) Demineralized water is required.

2)Total Dissolved Solids

Other solids not detected and present on the analysis above are assumed to turn to oxides in the combustion process and results in added emissions in the exhaust stack. The quantity of dissolved solids is considered to be doubled due to oxidation in the combustion process and are exhausted as particulate. The quantity of solids in water and fuel is thus limited by local regulations.

Approximate Total	
Dissolved Solids	90 ppm



Fuel, Air and Water Evaluation

Prior to burning gaseous fuels in MITSUBISHI gas turbines, it is recommended that the customers submit gas fuel analysis to MITSUBISHI for review and recommendation. The fuel, air and water analysis should cover all requirements as specified in this specification. Where analytical services are not available to the customer, services can be purchased from MITSUBISHI.

The following will be reported ;

- A. Water Analysis - See Appendix I
- B. Fuel Analysis - See Appendix II
- C. Air Analysis - See Appendix III

A handwritten signature or mark, possibly initials, is located in the bottom right corner of the page.



APPENDIX I

WATER ANALYSIS

<u>Contaminants</u>	<u>ppt wt.</u>
Sodium	_____
Potassium	_____
Vanadium	_____
Calcium	_____
Lead	_____
Other Metals (over 2ppm wt.)	_____
 <u>Reactive Dissolved Solids</u>	
Silicon	_____
Chlorides	_____
Iron & Copper	_____
Oxygen	_____
(as determined by O ₂ saturated water)	
 <u>Total Dissolved Solids</u>	
Dissolved Solids	_____



APPENDIX II

GAS FUEL ANALYSIS

I Chemical Analysis

As per ASTM D-1137 or ASTM D-1945

Component		Mole fraction of mole percent
Hydrogen	H ₂	_____
Helium	He	_____
Nitrogen	N ₂	_____
Carbondioxide	CO ₂	_____
Methane	CH ₄	_____
Ethane	C ₂ H ₆	_____
Propane	C ₃ H ₈	_____
Butane	C ₄ H ₁₀	_____
Pentane	C ₅ H ₁₂	_____
Carbon Monoxide	CO	_____
Water Vapor	H ₂ O (per ASTM D-1142)	_____
Total Sulfur		_____
Other		_____
Molecular Weight		_____

II Heating Value

Gross Heating Value	kJ/Nm ³	_____
Lower Heating Value	kJ/Nm ³	_____
Gross Heating Value	kJ/kg	_____
Lower Heating Value	kJ/kg	_____

**III Contaminants**

Mole Fraction

Hydrogen Sulfide H₂SAmmonia NH₃

Carbonyl Sulfide COS

Condensable Liquids

Solids

Amount

Particle Size Range

Alkali

Other

IV Operating Conditions

Pressure Range Max.

MPa(g)

Min.

MPa(g)

Temperature Max.

°C

Min.

°C

V Physical Properties

Specific Gravity

@ 15°C

Critical Pressure

MPa(g)

Critical Temperature

°C

Dew Point

°C

APPENDIX IIICOMPRESSOR INLET AIR ANALYSIS

<u>Contaminants</u>	<u>ppt wt.</u>
Sodium	_____
Potassium	_____
Vanadium	_____
Calcium	_____
Lead	_____
Other Metals (over 2ppm wt.)	_____

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Additional Engineering Information

5.2 Start-up/Shut-down Curve for G/T

IBO-10292

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MITSUBISHI POWER SYSTEMS, INC

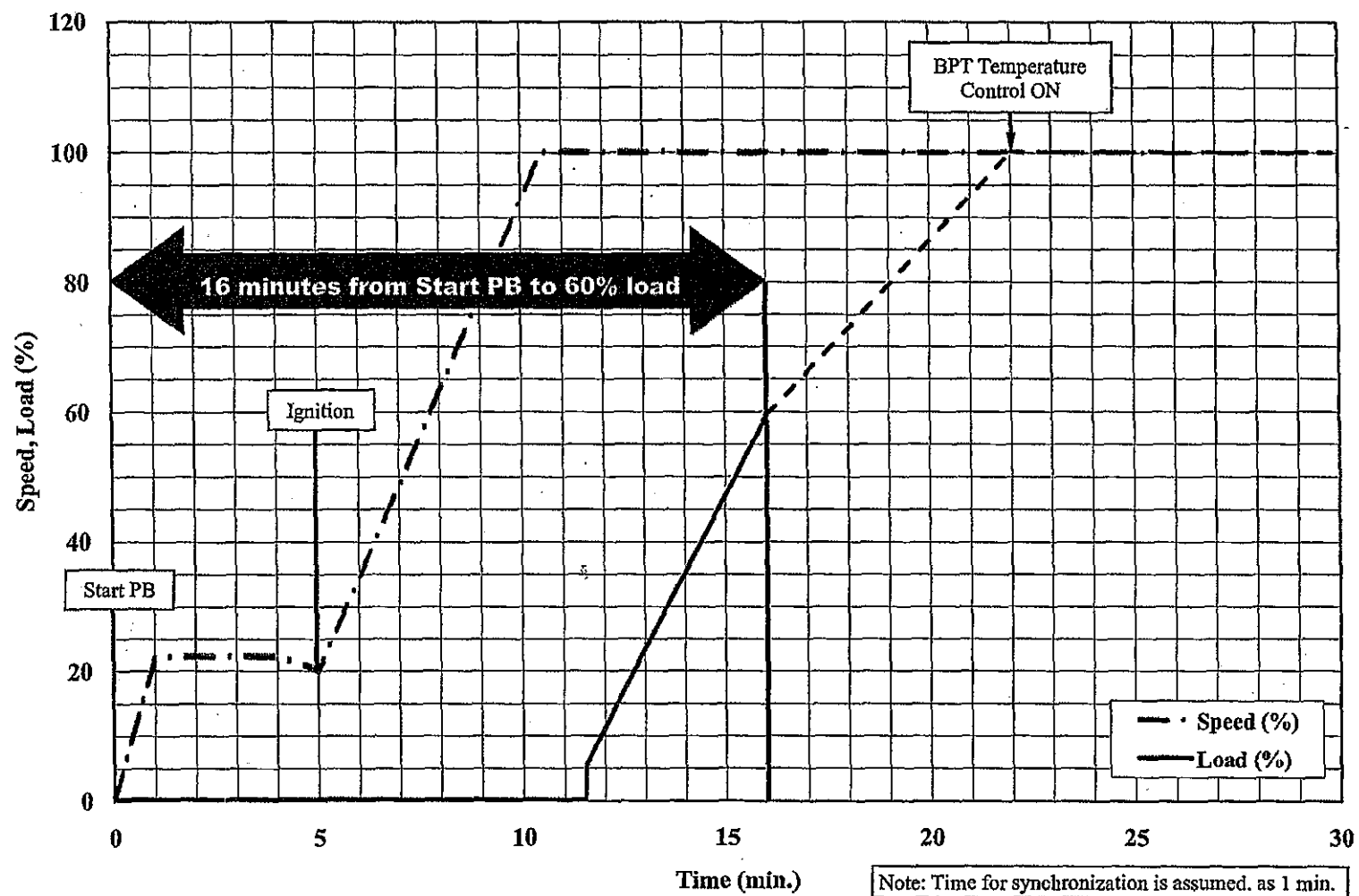
Project No.6865W01

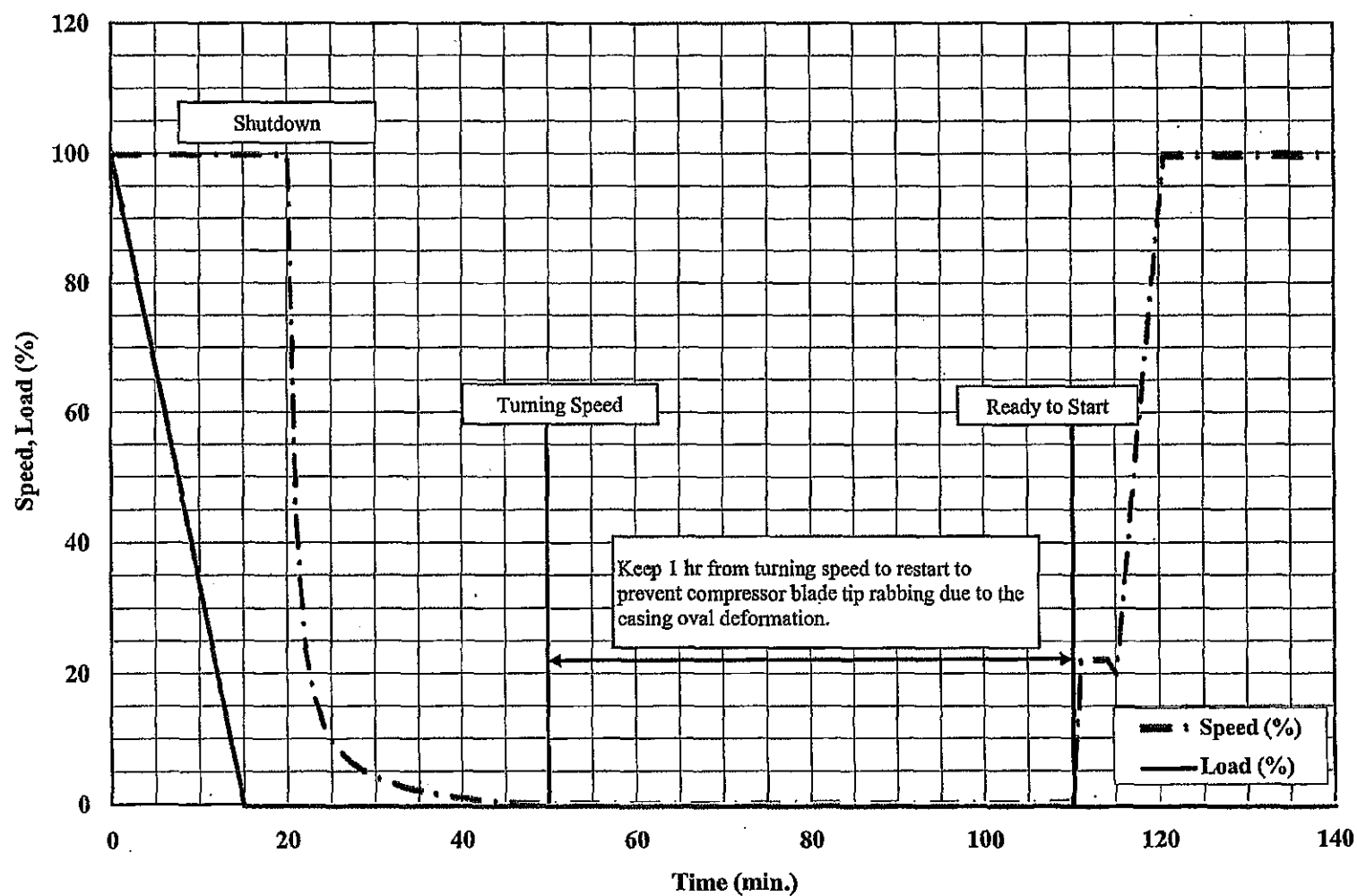
Specification No. MP-A2335

Tab 5-2

2 x M501GAC-Fast Project

M501GAC-Fast / Typical Start Up Curve on gas firing



M501GAC-Fast / Typical Shutdown & Re-Starting Curve on gas firing



Additional Engineering Information

5.3 Noise Simulation Data

IBO-10297

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Project No.6865W01

Specification No. MP-A2335

Tab 5-3

2 x M501GAC-Fast Project

28

PRELIMINARY

M501GAC-Fast GT NOISE SIMULATION DATA

Location No.	Equipment	SPL	Noise Source Dimension			Octave Band Level (dB as ref 10 ⁻¹² watts)										Overall dB(A)	Remark
			W (m)	L (m)	H (m)	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz			
G-1	GT Inlet Air Filter	SPL	15.4	9.2	9.7	95.3	85.2	87.6	78.4	76.7	80.2	79.0	76.1	66.6	85.0		
G-2	GT Air Inlet Duct - I	SPL	10.3	0.5	6.3	95.3	85.2	87.6	78.4	76.7	80.2	79.0	76.1	66.6	85.0		
G-3	Inlet Air Silencer	SPL	10.3	4.1	6.3	95.3	85.2	87.6	78.4	76.7	80.2	79.0	76.1	66.6	85.0		
G-4	GT Air Inlet Duct - II	SPL	10.3	3.5	6.3	95.3	85.2	87.6	78.4	76.7	80.2	79.0	76.1	66.6	85.0		
G-5	GT Air Inlet Duct - III	SPL	9.5	3.7	10.8	90.1	90.5	91.1	83.4	82.2	84.5	83.8	79.9	70.8	89.0		
G-6	Gas Turbine Enclosure	SPL	11.8	17.0	10.0	90.3	93.6	83.4	81.1	77.7	80.8	78.1	75.5	67.2	85.0		
G-6'	Gas Turbine Enclosure(during start-up)	SPL	11.8	17.0	10.0	98.4	96.2	91.1	90.6	93.2	91.0	85.8	80.0	72.1	95.0		
G-7	GT Generator	SPL	4.3	8.6	4.4	106.3	94.0	88.0	81.5	81.1	79.9	76.7	74.9	68.0	85.0		
G-8	GT Generator Slip Ring House	SPL	2.3	2.5	2.5	104.5	93.2	85.2	85.7	84.3	75.1	77.9	63.1	65.2	85.0		
G-9	GT Exhaust Duct A	SPL	7.0	1.0	7.0	88.0	85.6	84.4	85.1	78.6	78.5	78.5	76.9	65.9	85.0		
G-9'	GT Exhaust Duct A(during start-up)	SPL	7.0	1.0	7.0	108.4	106.2	101.1	100.6	103.2	101.0	95.8	90.0	82.1	105.0		
G-9A	GT Exhaust Expansion Joint	SPL	Φ5.3	0.9	-	92.8	90.0	88.2	88.3	85.4	88.5	89.1	88.8	82.7	95.0		
G-9A'	GT Exhaust Expansion Joint (during start-up)	SPL	Φ5.3	0.9	-	118.4	116.2	111.1	110.6	113.2	111.0	105.8	100.0	92.1	115.0		
G-10	GT Exhaust Duct B	SPL	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.		
G-10'	GT Exhaust Duct B (during start-up)	SPL	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.		
G-10A	GT Stack Silencer Duct	SPL	Φ8.0	-	-	110.4	112.2	107.5	97.0	87.8	75.7	74.6	62.9	58.4	95.0		
G-10B	GT Stack Duct	SPL	Φ7.0	-	-	108.9	102.3	98.5	86.7	73.8	62.6	40.6	32.9	38.9	85.0		
G-10C	GT Stack Outlet	PWL	-	-	-	132.6	127.4	127.3	119.2	110.3	92.2	79.7	74.4	83.3	115.0		
G-11	GT Lube Oil Unit	SPL	9.8	12.5	6.2	89.4	81.2	86.1	85.6	82.2	81.0	74.8	65.0	53.2	85.0		
G-12	GT TCA Cooler with FGH	SPL	3.5	8.5	6.5	39.4	92.0	91.0	86.0	83.0	80.0	72.0	68.0	64.0	85.0	Radiator Type	
G-13	GT Closed Cooling Water System	SPL														Later	
	A-Weight Conversion Factor	-	-	-	-	-39.4	-26.2	-16.1	-8.6	-3.2	0.0	1.2	1.0	-1.1			

- Note:)
- Noise level of each octave band level is without A-Weight correction.
 - SPL: Sound Pressure Level / PWL: Sound Power Level
 - The above data is based on free - field condition during normal running of the equipment, and 1m apart from the source and a height of 1.2m.
 - Noise Source Dimension X-Direction: W, Y-Direction: L, Z-Direction: H
 - The Location data will be decided by EPC Contractor.
 - Notwithstanding anything else in this Contract to the contrary, with respect to sound levels requirements for the Noise Guarantee, Supplier shall only be required to cause the Units to comply with the Noise Guarantee specified in APPENDIX "IV" of the Contract.
 - For the avoidance of doubt, each Octave Band Level shown above is for reference only and not as a guarantee. Actual sound levels in excess of each level shown in the above Octave Band Level table shall not be considered as a warranty defect.



Additional Engineering Information

5.4 Typical Layout

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MITSUBISHI POWER SYSTEMS, INC

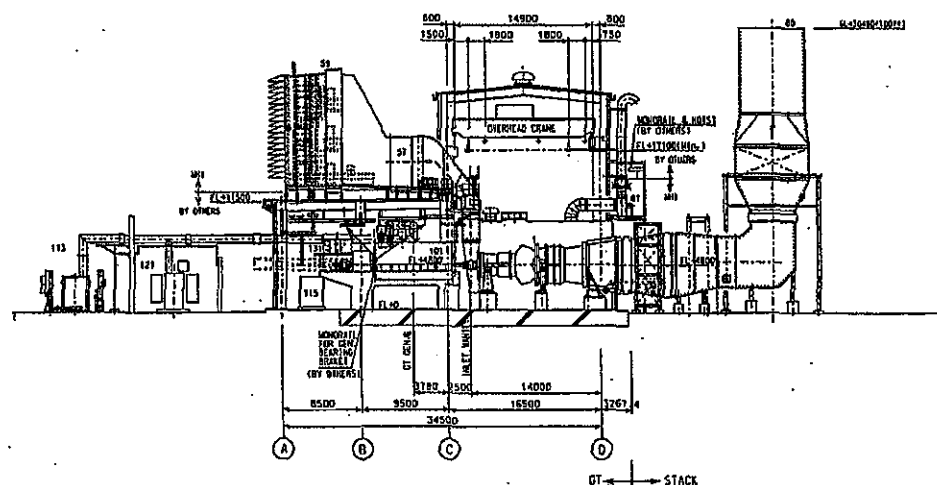
Project No. 6865W01
Specification No. MP-A2335

Tab 5-4

2 x M501GAC-Fast Project

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NO.	EQUIPMENT LIST
1	GAS TURBINE
51	BY TRACT AIR FILTER
52	BY TRACT AIR FILTER
61	BY EXHAUST VENTILATION FAN
80	STACK
111	BY EXHAUST
113	BY TRANSFORMER
115	BY PUMP
121	BY TR.
131	BY DMC



2010/12/17

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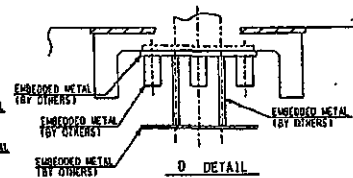
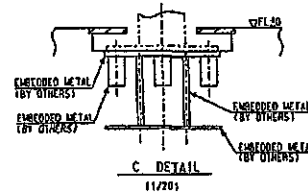
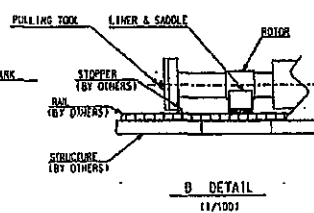
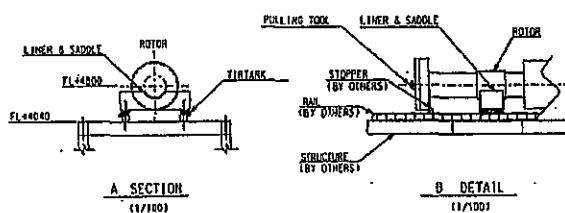
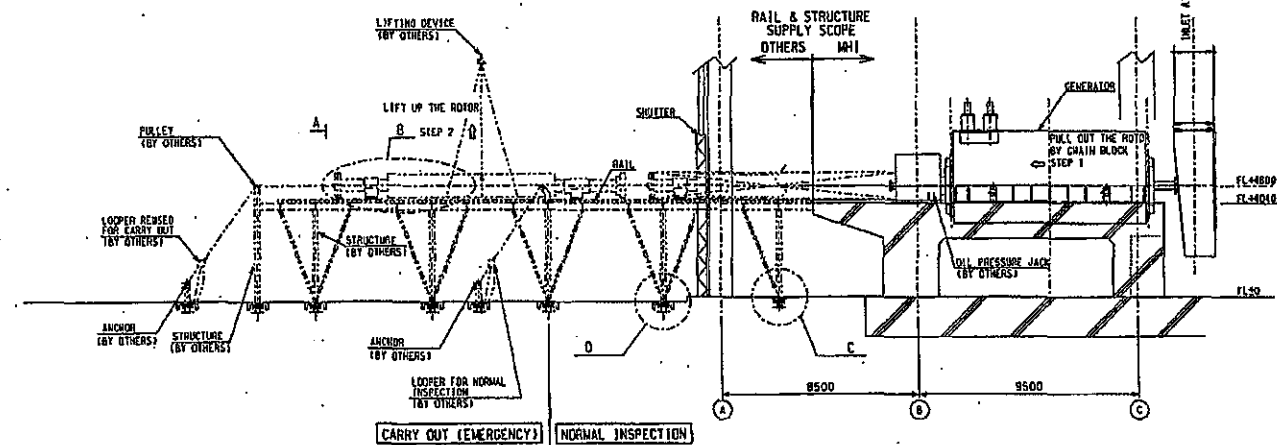
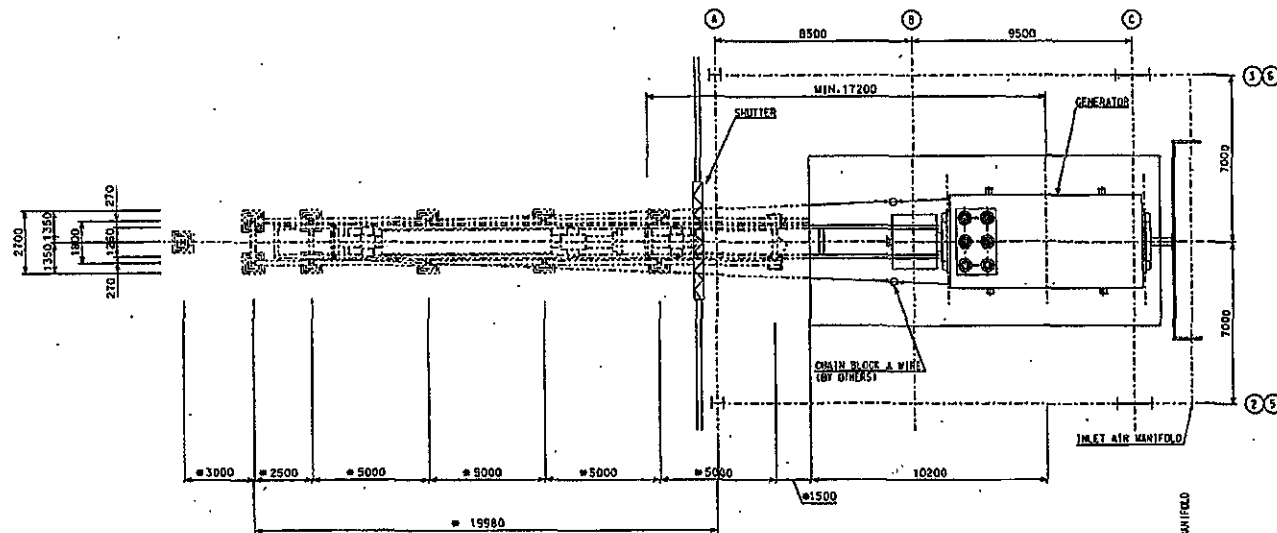
SCALE 1/500

TRANS CANADA

TYPICAL LAYOUT (3/3)

MITSUBISHI HEAVY INDUSTRIES, LTD.

2010/12/17



NOTE

1. WEIGHT

NAME	kg
ROTOR	42000

2. WORK DIMENSION AND DETAIL DESIGN SHALL BE DETERMINED BY OTHERS.

3. SUITABLE LIFTING DEVICE SHALL BE ARRANGED BY OTHERS. CLEARANCE INDICATED IN THIS DRAWING IS FOR REFERENCE ONLY. ACTUAL DIMENSION TO BE DETERMINED BY OTHERS.

0 10(m)

SCALE 1/200

2010/12/17

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TRANS CANADA

TYPICAL GT GENERATOR
ROTOR REMOVAL PLAN

MITSUBISHI HEAVY INDUSTRIES, LTD.

2010/12/17



Additional Engineering Information

5.5 Terminal Point Diagram

M1-G6249

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————— MITSUBISHI POWER SYSTEMS, INC —————

Project No.6865W01

Specification No. MP-A2335

Tab 5-5

2 x M501GAC-Fast Project

28

THE TERMINAL POINTS OF ALL UTILITIES ARE
ADJACENT TO GAS TURBINE PACKAGE

INSTRUMENT AIR
SERVICE AIR
SUPPLY

N2

(NOTE)
P = TERMINAL POINT
P = SUPPLIED BY PURCHASER
M = SUPPLIED BY MESA

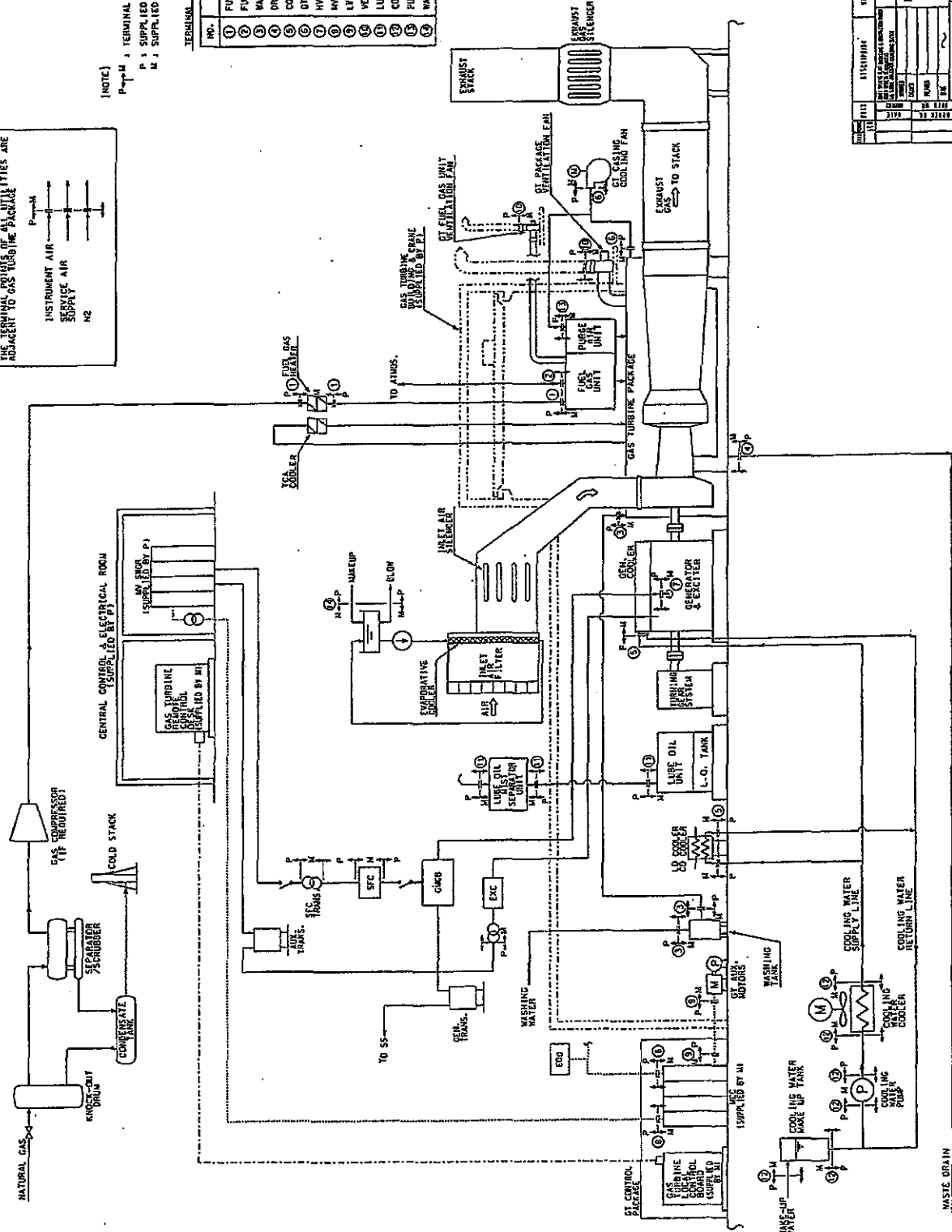
TERMINAL POINT LIST

NO.	DESCRIPTION
1	FUEL GAS SUPPLY
2	FUEL GAS VENT
3	WATER SUPPLY FOR COMPRESSOR WASHING
4	DRAIN RETURN
5	COOLING WATER SUPPLY & RETURN
6	OT CASING COOLING AIR
7	HYDRO OIL AT GENERATOR TERMINAL
8	HYDRO OIL CONNECTION TERMINAL
9	VENTILATION INLET FOR OT CONTROL PACKAGE & MOTOR
10	LUBE OIL VAPOR
11	COOLING WATER
12	PURGE AIR
13	WATER SUPPLY FOR EVAPORATIVE COOLER

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PROJECT NO.		U-E0900	
REVISION NO.		R-0	
DATE		11/11/66	
DRAWN BY		MHI	
CHECKED BY		MHI	
APPROVED BY		MHI	
TITLE		TERMINAL POINT DIAGRAM	
PROJECT NO.		U-E0900	
REVISION NO.		R-0	
DATE		11/11/66	
DRAWN BY		MHI	
CHECKED BY		MHI	
APPROVED BY		MHI	
FIRM		MITSUBISHI HEAVY INDUSTRIES, LTD.	



WASTE DRAIN

CONFIDENTIAL

*Letter Agreement
between TransCanada Energy Ltd.,
and MPS Canada, Inc.*

Attachment 2
Cost Breakdown

28

Terri Steeves

From: KNamba@mpshq.com
Sent: Friday, January 28, 2011 1:14 PM
To: Terri Steeves
Cc: George.Papaioanou@mpshq.com; John Mikkelsen; jpm-tec@comcast.net; KNamba@mpshq.com; Mark Brache; Phil.Prigge@mpshq.com; Bill Small; newsomb@osc.mpsHQ.com; sueki@mpshq.com; wunderg@osc.mpsHQ.com; KNamba@mpshq.com
Subject: (Revision.A)[REPLY about PRICE]Re: FW: MPS-TCE Equipment Supply Agreement and MPS Fast Start Proposal - Review of Technical Information Provided By MPS ...

(Revision.A)

Terri-san,

As Bill (Newsom) informed you, we mistakenly included some amount in bucket 2 which is actually belong to bucket 3.

Please see the correct numbers as follows.

We will review a revised LOA#4 Release from Suspension sent from you today (Jan 28, 2010) and will reply with our comment (if any) by the end of today or Monday (Jan 31, 2010) noon.

1. Price – We have been given an aggregate price for a number of different items. It seems that the price stated in the December 2010 Fast Start Proposal ("the Proposal") includes some cost provisions related to project schedule change/delay/suspension.

Could you please itemize:

(a) suspension from October 7, 2010 to 31 December 2010 and (b) delayed delivery;

[REPLY] US\$ 15 Million

(c) additional scope including but not limited to the cost of the increased exhaust and cooling system scope (delineated by major works); and

[REPLY] US\$ 12 Million

(d) conversion of the M501GAC to M501GAC Fast Start gas turbine;

[REPLY] US\$ 6 Million

2/1/2011

28

Best regards,

Namba (MPS)

Terri Steeves <terri_steeves@transcanada.com>

2011/01/10 11:18

To "Prigge, Phil" <Phil.Prigge@mpshq.com>, <KNamba@mpshq.com>

cc "Papaioanou, George" <George.Papaioanou@mpshq.com>, Bill Small
<william_small@transcanada.com>, Mark Brache
<mark_brache@transcanada.com>, <jpm-tec@comcast.net>, John
Mikkelsen <john_mikkelsen@transcanada.com>, Bill Small
<william_small@transcanada.com>

Subject FW: MPS-TCE Equipment Supply Agreement and MPS Fast Start Proposal -
Review of Technical Information Provided By MPS ...

Phil / Namba-san,

Please find attached the request for additional information from the OPA. As I suspected, the OPA is looking for a more detailed breakdown of the costs. I believe the OPA needs to be able to reconcile the estimate and demonstrate to their decision makers that the cost is justified. Without the breakdown, they are having difficulty with their justification. I believe the breakdown would demonstrate further that the fast start conversion is very economic (versus going simple cycle with the original GAC machine).

If you have any questions, please let me know, otherwise we can discuss tomorrow.

Thank you,

Terri

From: Michael Killeavy [mailto:Michael.Killeavy@powerauthority.on.ca]
Sent: Friday, January 07, 2011 3:49 PM
To: John Mikkelsen

2/1/2011

Cc: Deborah Langelaan; Susan Kennedy; Sebastiano, Rocco; Ivanoff, Paul; Smith, Elliot; Safouh Soufi
Subject: MPS-TCE Equipment Supply Agreement and MPS Fast Start Proposal - Review of Technical Information Provided By MPS ...
Importance: High

John,

We've the following questions and comments:

1. Price – We have been given an aggregate price for a number of different items. It seems that the price stated in the December 2010 Fast Start Proposal ("the Proposal") includes some cost provisions related to project schedule change/delay/suspension.

Could you please itemize:

(a) suspension from October 7, 2010 to 31 December 2010;

(b) delayed delivery;

(c) additional scope including but not limited to the cost of the increased exhaust and cooling system scope (delineated by major works); and

(d) conversion of the M501GAC to M501GAS Fast Start gas turbine;

2. Fast Start - The Equipment Supply Agreement ("ESA") of July 2009 shows in Appendix I that the main equipment includes a Static Frequency Converter ("SFC") for starting device. SFC is an option provided by equipment suppliers for applications requiring fast start. The alternative would be a starting system based on AC electric motor or diesel engine that will take more time to complete the start-up process. SFC is used to run-up the machine quickly by using the generator itself as motor from push button to ignition speed. We concluded, subject to Item 3 below, that the equipment as originally purchased by TCE from MPS includes fast start capability. Is this correct?

3. SFC - We noted from page 4-7 of the December 2010 proposal in the comment section of line item 16 the inclusion of "7MW". The original ESA includes a SFC with a rated output of 4MW. MPS to confirm if the M501GAC package comes with SFC starting device rated at 4MW as a standard supply from Mitsubishi? If not, what is the standard supply for starting device? The reference to 7MW may indicate that the SFC has been up-rated and the proposed price is for the size increase and not for the installation of a complete system. Further information and explanation is required. The original SFC rating of 4MW may add few minutes to start time of 7MW SFC but may still be acceptable for the purpose of offering 30-min OR. This is the most important issue for which we require further information and cooperation from MPS;

4. Start-up Curve - We have compared the original and latest (December 2010) start up curves from MPS. The original may have been composed for a combined cycle where ramping of the gas turbine is restricted by HRSG thermal stress considerations. The benefit of faster ramping in start-up is not specifically discussed in the December 2010 proposal and additional information on this subject is required;

2/1/2011

1. Purge Credit - MPS statement concerning 5 minutes minimum purge is somewhat ambiguous and needs more clarification;
2. SC v. CC - It would be helpful if MPS can tell us if the start-up curve included in Appendix I of Agreement No. 6519 is typical for when the machine is operating in Combined Cycle configuration? If so, then it would be helpful if they could provide a start-up curve for the machine described in Appendix I, having SFC of 4MW, operating in Simple Cycle configuration
3. Synchronisation Time - It would appear that 5 minutes to synchronize is used in the original start-up curve whereas the latest curve assumes 1 minute. We would like MPS to confirm this;
5. Additional Technical Information – We would very much like the ramp rates for Simple Cycle operation. Could MPS please provide the machine's (M501GAC) normal and maximum ramp up rates together with the baseload curve for a temperature range from 16 – 100°F? More specifically, we'd like ramp rates for the following cases:
 1. To 100% speed no load,
 2. To 60% load and;
 3. From 60 to 100% load

Thank you,
Michael

Michael Killeavy, LL.B., MBA, P.Eng.
Director, Contract Management
Ontario Power Authority
120 Adelaide Street West, Suite 1600
Toronto, Ontario
M5H 1T1
416-969-6288
416-520-9788 (CELL)
416-967-1947 (FAX)

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2/1/2011

RB

Aleksandar Kojic

From: Michael Killeavy
Sent: February 25, 2011 2:19 PM
To: Anshul Mathur
Subject: RE: Financial Consulting Services
Attachments: NDA - Financial Consulting Services.docx

As requested.

Michael Killeavy, LL.B., MBA, P.Eng.
Director, Contract Management
Ontario Power Authority
120 Adelaide St. West, Suite 1600
Toronto, Ontario, M5H 1T1
416-969-6288 (office)
416-969-6071 (fax)
416-520-9788 (cell)
Michael.killeavy@powerauthority.on.ca

-----Original Message-----

From: Anshul Mathur
Sent: Fri 25-Feb-11 1:53 PM
To: Michael Killeavy
Subject: FW: Financial Consulting Services

Hi Michael - do you have a word version of the Confidentiality Agreement? RBC is looking for it.

Thanks,

Anshul

From: Walker, Kyle [<mailto:Kyle.Walker@rbccm.com>]
Sent: February 25, 2011 1:49 PM
To: Anshul Mathur
Subject: RE: Financial Consulting Services

Thanks Anshul. Is it possible for you to provide a word version of the CA. I am going to send it to RBC's internal legal counsel for review and a word version would be very helpful in case they have any comments.

Regards,

Kyle

Kyle Walker
Global Investment Banking
RBC Capital Markets
' (416) 842-7701
* kyle.walker@rbccm.com

From: Anshul Mathur [<mailto:Anshul.Mathur@powerauthority.on.ca>]
Sent: 2011, February, 25 1:41 PM
To: Walker, Kyle
Subject: Financial Consulting Services

Hello Kyle,

It was a pleasure speaking with you on the phone. As mentioned, we are interested in soliciting a submission from your firm to provide financial consulting services in connection with a confidential matter. In order to receive the request for submission, we require that you execute the attached non-disclosure agreement ("Agreement"). If you are interested in receiving the request for submission please execute the Agreement, scan it, and email it to me and I can then send out the RFS.

Thank you,

Anshul

Anshul Mathur, MBA, P. Eng
Contract Analyst, Contract Management
Ontario Power Authority
120 Adelaide St. W., Suite 1600
Toronto, Ontario M5H 1T1
Tel: 416-969-6252
Cell: 416-473-3297
Fax: 416-969-6071
anshul.mathur@powerauthority.on.ca

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Si vous recevez ce courriel par erreur, veuillez m'en aviser immédiatement, par retour de courriel ou par un autre moyen.

CONFIDENTIALITY AGREEMENT

This Confidentiality Agreement, effective as of the ____ day of February, 2011 (the "**Agreement**") is between the Ontario Power Authority ("**OPA**") and _____ ("**Participant**"), each referred to as a "**Party**" and together referred to as the "**Parties**".

WHEREAS the OPA will be entering into discussions with TransCanada Energy Ltd. regarding the cancellation of the Oakville generation facility (the "**Project**");

AND WHEREAS the OPA wishes to include the Participant as a proponent in the OPA's procurement process to retain a consultant (the "**Process**") to provide consultancy services to the OPA for the Project and given the confidential nature of the subject matter of the Project the OPA wishes to first have the Participant agree to the confidentiality obligations contained in this Agreement;

AND WHEREAS the Parties are entering into this Agreement in part to make it explicit that all Confidential Information disclosed by the OPA to the Participant is supplied in confidence and intended by the Parties to be confidential;

NOW THEREFORE for value received, the Parties agree as follows:

1. **Ownership and Permitted Use.** All Confidential Information remains, at all times, the exclusive property of the OPA. Participant may use Confidential Information only in connection with its participation in the Process, and if so retained, in connection with providing the services. Except as expressly set out in this Section 1, neither the Participant nor any of its Representatives has any license or other right to use or disclose any Confidential Information for any purpose whatsoever.

2. **Non-disclosure.** Subject to Sections 3 and 7 of this Agreement, Participant shall protect the confidentiality of the Confidential Information and shall not disclose Confidential Information except that Participant may disclose Confidential Information to its Representatives who need to know Confidential Information with respect to the Process. On each copy of Confidential Information made by Participant, Participant must reproduce all notices which appear on the original. Participant shall inform its Representatives of the confidentiality of Confidential Information and shall be responsible for any breach of this Agreement by any of its Representatives.

Participant shall use the same means to protect the confidentiality of the Confidential Information that Participant uses to protect its own confidential and proprietary information, but in any event Participant will use not less than reasonable means.

3. **Notice Preceding Compelled Disclosure.** If Participant or any of its Representatives are required by law or requested in any judicial or regulatory proceeding or by any governmental authority to disclose any Confidential Information, Participant shall, or shall cause its Representatives to, if permitted under applicable law, promptly notify OPA of the existence, terms and circumstances of such request or requirement so that OPA may seek an appropriate protective order or waive compliance with the terms of this Agreement. If, in the absence of a protective order or the receipt of a waiver hereunder, Participant or its Representatives are compelled to disclose the Confidential Information, Participant and its Representatives may

disclose only such of the Confidential Information to the party compelling disclosure as is required by law.

4. **Definitions.** The following terms shall have the following meanings:

"Confidential Information" means all material, data, information or any item in any form, whether oral, written, or otherwise, including in electronic or hard-copy format, supplied by, obtained from or otherwise provided by OPA to Participant in relation to the Process or the Project, and includes the request for proposals document issued pursuant to the Process. Confidential Information shall not include: (i) publicly-available information, unless made public by Participant or its Representatives in a manner not permitted by this Agreement; (ii) information already known to Participant prior to being furnished by OPA; and (iii) information disclosed to Participant from a source other than OPA, or its Representatives, if such source is not subject to any agreement with OPA, prohibiting such disclosure to Participant.

"FIPPA" means the *Freedom of Information and Protection of Privacy Act* (Ontario), as amended or supplemented from time to time.

"Representatives" means an individual, corporation, limited liability company, joint stock entity, joint venture, partnership, trust, unincorporated organization, or any other entity having legal capacity, associated or affiliated with a Party, or any shareholder, partner, trustee, director, officer, employee, representative, agent, consultant or advisor of a Party or of any individual, corporation, limited liability company, joint stock entity, joint venture, partnership, trust, unincorporated organization, or any other entity having legal capacity, associated or affiliated with a Party.

5. **Return of Confidential Information.** Upon written request by OPA, Confidential Information in printed paper format or contained on a compact disc or digital video disc, together with all copies or other reproductions in whole or in part of such Confidential Information, will be returned to OPA and Confidential Information transmitted in electronic format will be deleted from the e-mails and directories of Participant's and its Representatives' computers; provided, however, any Confidential Information (i) found in drafts, notes, studies and other documents prepared by or for the Participant or its Representatives, or (ii) found in electronic format as part of the Participant's off-site or on-site data storage/archival process system, which cannot through reasonable efforts be returned to OPA or deleted from the e-mails and directories of Participant's and its Representatives' computers, as the case may be, will be held by the Participant and kept subject to the terms of this Agreement or destroyed at the Participant's option.

6. **Remedies.** Participant acknowledges that a breach of any provisions of this Agreement may prejudice the economic or competitive interests of, and may result in undue loss to, OPA or to any third party to whom OPA owes a duty of confidence, and that the prejudice or injury to OPA or to any third party may be difficult to calculate and inadequately compensable in damages. Participant agrees that OPA is entitled to specific performance and injunctive relief (without proving any damage sustained by it or by any of its Representatives or by any third party) or any other remedy against any actual or potential breach of the provisions of this Agreement.

7. **FIPPA Records and Compliance.** The Parties acknowledge and agree that OPA is subject to FIPPA and that FIPPA applies to and governs all Confidential Information in the custody or control of OPA ("**FIPPA Records**"), and may, subject to FIPPA, require the disclosure of such FIPPA Records to third parties. The confidentiality covenants contained in

this Agreement are expressly subject to any and all obligations and requirements that may exist or may in the future arise under FIPPA, including all disclosure obligations. The provisions of this Section shall prevail over, and in lieu of, any other applicable provisions in this Agreement.

8. **Notice.** Any notice, consent or approval required or permitted to be given in connection with this Agreement ("**Notice**") shall be in writing and shall be sufficiently given if delivered (whether in person, by courier services or other personal method of delivery), or if transmitted by facsimile or e-mail:

(a) to OPA at:

120 Adelaide Street West
Suite 1600
Toronto, Ontario, Canada M5G 1T1

Attention: JoAnne Butler, Vice President, Electricity Resources
Facsimile: (416) 969-6356

with a copy to:

Attention: Michael Lyle, General Counsel and Vice President Legal,
Aboriginal and Regulatory Affairs
Facsimile: (416) 967-1947

(b) to Participant at:

Address

Attention

Facsimile

Any Notice delivered or transmitted to a Party as provided above shall be deemed to have been given and received on the day it is delivered or transmitted, provided that it is delivered or transmitted on a business day prior to 5:00 p.m. local time in the place of delivery or receipt. However, if the Notice is delivered or transmitted after 5:00 p.m. local time or if such day is not a business day then the Notice shall be deemed to have been given and received on the next business day. Any Party may, from time to time, change its address by giving Notice to the other Parties in accordance with the provisions of this Section.

9. **Miscellaneous.**

(a) This Agreement (i) constitutes the entire agreement among the Parties with respect to the subject matter hereof, (ii) may not be assigned by a Party without the prior written consent of the other Parties, and (iii) enures to the benefit of and

is binding on the Parties hereto and their successors and permitted assigns. The division of this Agreement into sections and the insertion of headings are for convenience of reference only and are not to affect the construction or interpretation of this Agreement. Words importing the singular include the plural and vice versa. The term "including" means "including without limitation", and the terms "includes" and "included" have similar meanings. If any term of this Agreement is or becomes illegal, invalid or unenforceable, the illegality, invalidity or unenforceability will be deemed severable and will not affect any other term of this Agreement. For every term of this Agreement, time is of the essence. No term of this Agreement may be amended or waived except in writing. No failure or delay in exercising any right or remedy hereunder will operate as a waiver, nor will any single or partial exercise preclude any other exercise of any other right or remedy. This Agreement may be executed in counterparts, each of which when executed shall be deemed to be an original, but all of which when taken together shall constitute one and the same agreement. Signatures by facsimile or scanned electronic transmission shall be as effective as original signatures to this Agreement.

- (b) This Agreement will be governed by and construed in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable in the Province of Ontario.
- (c) The provisions of this Agreement shall survive indefinitely, and for greater certainty, shall survive any cancellation of the Project and the conclusion of the Project.

IN WITNESS WHEREOF, the Parties have executed this Agreement effective as of the date first written above.

ONTARIO POWER AUTHORITY

By: _____

Name: JoAnne C. Butler

Title: Vice President, Electricity Resources

By: _____

Name: _____

Title: _____

Aleksandar Kojic

From: Anshul Mathur
Sent: February 25, 2011 5:44 PM
To: Michael Killeavy
Subject: Fw: Financial Consulting Services
Attachments: CA- RBC Dominion Securities Inc..pdf, NDA - Financial Consulting Services_RBC Comments.docx

I haven't opened the attachment...but atleast they are responding with something!

Sent from BB

From: Walker, Kyle [<mailto:Kyle.Walker@rbccm.com>]
Sent: Friday, February 25, 2011 05:17 PM
To: Anshul Mathur
Cc: Dal Bello, David <david.dalbello@rbccm.com>
Subject: RE: Financial Consulting Services

Anshul,

Please find attached a NDA that was executed between RBC and OPA with respect to a previous RFP. As per my voice message, would it be agreeable to the OPA to use a similar form of NDA for the current RFP process. Also attached for your reference is a blacklined version of the NDA that you sent earlier today to the version that was used in the last RFP process, which reflected comments from RBC's internal legal counsel.

Thanks,
Kyle

From: Anshul Mathur [<mailto:Anshul.Mathur@powerauthority.on.ca>]
Sent: 2011, February, 25 2:58 PM
To: Walker, Kyle
Subject: RE: Financial Consulting Services

Kyle – please see attached a word version of NDA. If you have any other questions, please feel free to contact me.

Thanks,
Anshul

From: Walker, Kyle [<mailto:Kyle.Walker@rbccm.com>]
Sent: February 25, 2011 1:49 PM
To: Anshul Mathur
Subject: RE: Financial Consulting Services

Thanks Anshul. Is it possible for you to provide a word version of the CA. I am going to send it to RBC's internal legal counsel for review and a word version would be very helpful in case they have any comments.

Regards,
Kyle

Kyle Walker
Global Investment Banking
RBC Capital Markets
☎ (416) 842-7701
✉ kyle.walker@rbccm.com

From: Anshul Mathur [<mailto:Anshul.Mathur@powerauthority.on.ca>]
Sent: 2011, February, 25 1:41 PM
To: Walker, Kyle
Subject: Financial Consulting Services

Hello Kyle;

It was a pleasure speaking with you on the phone. As mentioned, we are interested in soliciting a submission from your firm to provide financial consulting services in connection with a confidential matter. In order to receive the request for submission, we require that you execute the attached non-disclosure agreement ("Agreement"). If you are interested in receiving the request for submission please execute the Agreement, scan it, and email it to me and I can then send out the RFS.

Thank you,
Anshul

Anshul Mathur, MBA, P. Eng
Contract Analyst, Contract Management
Ontario Power Authority
120 Adelaide St. W., Suite 1600
Toronto, Ontario M5H 1T1
Tel: 416-969-6252
Cell: 416-473-3297
Fax: 416-969-6071
anshul.mathur@powerauthority.on.ca

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CONFIDENTIALITY AGREEMENT

This Confidentiality Agreement, effective as of the 20th day of January, 2010 (the "**Agreement**") is between the Ontario Power Authority ("**OPA**") and RBC Dominion Securities Inc. ("**Participant**"), each referred to as a "**Party**" and together referred to as the "**Parties**".

WHEREAS the OPA will be entering into discussions with Bruce Power LP regarding opportunities at the Bruce Power generation facility (the "**Project**");

AND WHEREAS the OPA wishes to include the Participant as a proponent in the OPA's procurement process to retain a consultant (the "**Process**") to provide financial advisory services to the OPA for the Project and given the confidential nature of the subject matter of the Project the OPA wishes to first have the Participant agree to the confidentiality obligations contained in this Agreement;

AND WHEREAS the Parties are entering into this Agreement in part to make it explicit that all Confidential Information disclosed by the OPA to the Participant is supplied in confidence and intended by the Parties to be confidential;

NOW THEREFORE for value received, the Parties agree as follows:

1. **Ownership and Permitted Use.** All Confidential Information (excluding Working Papers, as defined in Section 5) remains, at all times, the exclusive property of the OPA. Participant may use Confidential Information only in connection with its participation in the Process, and if so retained, in connection with providing the services. Except as expressly set out in this Agreement, neither the Participant nor any of its Representatives has any license or other right to use or disclose any Confidential Information for any purpose whatsoever.
2. **Non-disclosure.** Subject to Sections 3 and 7 of this Agreement, Participant shall protect the confidentiality of the Confidential Information and shall not disclose Confidential Information except that Participant may disclose Confidential Information to its Representatives who need to know Confidential Information with respect to the Process. On each copy of Confidential Information made by Participant, Participant must reproduce all notices which appear on the original. Participant shall inform its Representatives of the confidentiality of Confidential Information and shall be responsible for any breach of this Agreement by any of its Representatives. Participant shall use the same means to protect the confidentiality of the Confidential Information that Participant uses to protect its own confidential and proprietary information of similar nature and kind, but in any event Participant will use not less than reasonable means.
3. **Notice Preceding Compelled Disclosure.** If Participant or any of its Representatives are required by law or requested in any judicial or regulatory proceeding or by any governmental authority to disclose any Confidential Information, Participant shall, or shall cause its Representatives to, if permitted under applicable law, promptly notify OPA of the existence, terms and circumstances of such request or requirement so that OPA may seek, at its own expense, an appropriate protective order or waive compliance with the terms of this Agreement. If, in the absence of a protective order or the receipt of a waiver hereunder, Participant or its Representatives are compelled to disclose the Confidential Information, Participant and its Representatives may disclose only such of the Confidential Information to the party compelling disclosure as is required by law.

4. **Definitions.** The following terms shall have the following meanings:

"Confidential Information" means all material, data, information or any item in any form, whether oral, written, or otherwise, including in electronic or hard-copy format, supplied by, obtained from or otherwise provided by OPA to Participant in relation to the Process or the Project, and includes the request for proposals document issued pursuant to the Process. Confidential Information shall not include: (i) publicly-available information, unless made public by Participant or its Representatives in a manner not permitted by this Agreement; (ii) information already known to Participant or its Representatives prior to being furnished by OPA; (iii) information disclosed to Participant or its Representatives from a source other than OPA, or its Representatives, if such source is not subject to any agreement with OPA, prohibiting such disclosure to Participant; and (iv) information that is or was independently developed by the Participant or its Representatives without the use of OPA's information.

"FIPPA" means the *Freedom of Information and Protection of Privacy Act* (Ontario), as amended or supplemented from time to time.

"Representatives" means an individual, corporation, limited liability company, joint stock entity, joint venture, partnership, trust, unincorporated organization, or any other entity having legal capacity, associated or affiliated with a Party, or any shareholder, partner, trustee, director, officer, employee, representative, agent, consultant or advisor of a Party or of any individual, corporation, limited liability company, joint stock entity, joint venture, partnership, trust, unincorporated organization, or any other entity having legal capacity, associated or affiliated with a Party.

5. **Return of Confidential Information.** Upon written request by OPA, Confidential Information in printed paper format or contained on a compact disc or digital video disc, together with all copies or other reproductions in whole or in part of such Confidential Information, will be returned to OPA or destroyed (at Participants option) and Confidential Information transmitted in electronic format will be deleted from the e-mails and directories of Participant's and its Representatives' computers; provided, however, any Confidential Information (i) found in drafts, notes, studies and other documents prepared by or for the Participant or its Representatives (collectively, "Working Papers"), or (ii) found in electronic format as part of the Participant's off-site or on-site data storage/archival process system, which cannot through reasonable efforts be returned to OPA or deleted from the e-mails and directories of Participant's and its Representatives' computers, as the case may be; will be held by the Participant and kept subject to the terms of this Agreement or destroyed at the Participant's option.

6. **Remedies.** Participant acknowledges that a breach of any provisions of this Agreement may prejudice the economic or competitive interests of, and may result in undue loss to, OPA or to any third party to whom OPA owes a duty of confidence, and that the prejudice or injury to OPA or to any third party may be difficult to calculate and inadequately compensable in damages. Participant agrees that OPA may be entitled to specific performance and injunctive relief or any other remedy against any actual or potential breach of the provisions of this Agreement.

7. **FIPPA Records and Compliance.** The Parties acknowledge and agree that OPA is subject to FIPPA and that FIPPA applies to and governs all Confidential Information in the custody or control of OPA ("FIPPA Records"), and may, subject to FIPPA, require the disclosure of such FIPPA Records to third parties in which case OPA shall provide the Participant with prior written notice so that the Participant may seek a protective order, injunction, or other appropriate remedy. The confidentiality covenants contained in this

Agreement are expressly subject to any and all obligations and requirements that may exist or may in the future arise under FIPPA, including all disclosure obligations. The provisions of this Section shall prevail over, and in lieu of, any other applicable provisions in this Agreement.

8. **Notice.** Any notice, consent or approval required or permitted to be given in connection with this Agreement ("**Notice**") shall be in writing and shall be sufficiently given if delivered (whether in person, by courier services or other personal method of delivery), or if transmitted by facsimile or e-mail:

(a) to OPA at:

120 Adelaide Street West
Suite 1600
Toronto, Ontario, Canada M5G 1T1

Attention: JoAnne Butler, Vice President, Electricity Resources
Facsimile: (416) 969-6356

with a copy to:

Attention: Michael Lyle, General Counsel and Vice President Legal,
Aboriginal and Regulatory Affairs
Facsimile: (416) 967-1947

(b) to Participant at:

4th Floor, South Tower, Royal Bank Plaza,
200 Bay Street
Toronto, Ontario, Canada M5J 2W7

Attention: David Dal Bello, Managing Director
Facsimile: (416) 842-5366

Any Notice delivered or transmitted to a Party as provided above shall be deemed to have been given and received on the day it is delivered or transmitted, provided that it is delivered or transmitted on a business day prior to 5:00 p.m. local time in the place of delivery or receipt. However, if the Notice is delivered or transmitted after 5:00 p.m. local time or if such day is not a business day then the Notice shall be deemed to have been given and received on the next business day. Any Party may, from time to time, change its address by giving Notice to the other Parties in accordance with the provisions of this Section.

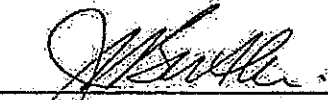
9. **Definitive Agreement.** The Parties agree that unless a definitive agreement regarding the Project has been executed by the parties, neither party will be under any legal obligation of any kind whatsoever with respect to the Project by virtue of this Agreement, except for the matters specifically agreed to in this Agreement. Without limiting the preceding sentence, nothing in this Agreement requires either party to enter into the Project.

9. **Miscellaneous.**

- (a) This Agreement (i) constitutes the entire agreement among the Parties with respect to the subject matter hereof, (ii) may not be assigned by a Party without the prior written consent of the other Parties, and (iii) enures to the benefit of and is binding on the Parties hereto and their successors and permitted assigns. The division of this Agreement into sections and the insertion of headings are for convenience of reference only and are not to affect the construction or interpretation of this Agreement. Words importing the singular include the plural and vice versa. The term "including" means "including without limitation", and the terms "includes" and "included" have similar meanings. If any term of this Agreement is or becomes illegal, invalid or unenforceable, the illegality, invalidity or unenforceability will be deemed severable and will not affect any other term of this Agreement. For every term of this Agreement, time is of the essence. No term of this Agreement may be amended or waived except in writing. No failure or delay in exercising any right or remedy hereunder will operate as a waiver, nor will any single or partial exercise preclude any other exercise of any other right or remedy. This Agreement does not create any agency or partnership relationship between parties or its Representatives, and neither party is responsible for the acts of the other party or its Representatives. This Agreement may be executed in counterparts, each of which when executed shall be deemed to be an original, but all of which when taken together shall constitute one and the same agreement. Signatures by facsimile or scanned electronic transmission shall be as effective as original signatures to this Agreement.
- (b) This Agreement will be governed by and construed in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable in the Province of Ontario.
- (c) The provisions of this Agreement shall be superseded in its entirety by the terms of any definitive agreement entered into after the date hereof between the Parties relating to the Project, but in any event will terminate and be of no further force or effect on the second anniversary date hereof.

IN WITNESS WHEREOF, the Parties have executed this Agreement effective as of the date first written above.

ONTARIO POWER AUTHORITY

By: _____

Name: JoAnne C. Butler

Title: Vice President, Electricity Resources

RBC DOMINION SECURITIES INC.

By: _____

Name: David Dal Bello

Title: Managing Director

CONFIDENTIALITY AGREEMENT

This Confidentiality Agreement, effective as of the 25th day of February, 2011 (the "Agreement") is between the Ontario Power Authority ("OPA") and RBC Dominion Securities Inc. ("Participant"), each referred to as a "Party" and together referred to as the "Parties".

WHEREAS the OPA will be entering into discussions with TransCanada Energy Ltd. regarding the cancellation of the Oakville generation facility (the "Project");

AND WHEREAS the OPA wishes to include the Participant as a proponent in the OPA's procurement process to retain a consultant (the "Process") to provide ~~consultancy-financial advisory~~ services to the OPA for the Project and given the confidential nature of the subject matter of the Project the OPA wishes to first have the Participant agree to the confidentiality obligations contained in this Agreement;

AND WHEREAS the Parties are entering into this Agreement in part to make it explicit that all Confidential Information disclosed by the OPA to the Participant is supplied in confidence and intended by the Parties to be confidential;

NOW THEREFORE for value received, the Parties agree as follows:

1. **Ownership and Permitted Use.** All Confidential Information (excluding Working Papers, as defined in Section 5) remains, at all times, the exclusive property of the OPA. Participant may use Confidential Information only in connection with its participation in the Process, and if so retained, in connection with providing the services. Except as expressly set out in this ~~Section 4~~ Agreement, neither the Participant nor any of its Representatives has any license or other right to use or disclose any Confidential Information for any purpose whatsoever.

1.2. **Non-disclosure.** Subject to Sections 3 and 7 of this Agreement, Participant shall protect the confidentiality of the Confidential Information and shall not disclose Confidential Information except that Participant may disclose Confidential Information to its Representatives who need to know Confidential Information with respect to the Process. On each copy of Confidential Information made by Participant, Participant must reproduce all notices which appear on the original. Participant shall inform its Representatives of the confidentiality of Confidential Information and shall be responsible for any breach of this Agreement by any of its Representatives.

Participant shall use the same means to protect the confidentiality of the Confidential Information that Participant uses to protect its own confidential and proprietary information of similar nature and kind, but in any event Participant will use not less than reasonable means.

3. **Notice Preceding Compelled Disclosure.** If Participant or any of its Representatives are required by law or requested in any judicial or regulatory proceeding or by any governmental authority to disclose any Confidential Information, Participant shall, or shall cause its Representatives to, if permitted under applicable law, promptly notify OPA of the existence, terms and circumstances of such request or requirement so that OPA may seek, at its own expense, an appropriate protective order or waive compliance with the terms of this Agreement. If, in the absence of a protective order or the receipt of a waiver hereunder, Participant or its Representatives are compelled to disclose the Confidential Information, Participant and its

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Representatives may disclose only such of the Confidential Information to the party compelling disclosure as is required by law.

4. **Definitions.** The following terms shall have the following meanings:

"Confidential Information" means all material, data, information or any item in any form, whether oral, written, or otherwise, including in electronic or hard-copy format, supplied by, obtained from or otherwise provided by OPA to Participant in relation to the Process or the Project, and includes the request for proposals document issued pursuant to the Process. Confidential Information shall not include: (i) publicly-available information, unless made public by Participant or its Representatives in a manner not permitted by this Agreement; (ii) information already known to Participant or its Representatives prior to being furnished by OPA; and (iii) information disclosed to Participant or its Representatives from a source other than OPA, or its Representatives, if such source is not subject to any agreement with OPA, prohibiting such disclosure to Participant; and (iv) information that is or was independently developed by the Participant or its Representatives without the use of OPA's information..

"FIPPA" means the *Freedom of Information and Protection of Privacy Act* (Ontario), as amended or supplemented from time to time.

"Representatives" means an individual, corporation, limited liability company, joint stock entity, joint venture, partnership, trust, unincorporated organization, or any other entity having legal capacity, associated or affiliated with a Party, or any shareholder, partner, trustee, director, officer, employee, representative, agent, consultant or advisor of a Party or of any individual, corporation, limited liability company, joint stock entity, joint venture, partnership, trust, unincorporated organization, or any other entity having legal capacity, associated or affiliated with a Party.

5. **Return of Confidential Information.** Upon written request by OPA, Confidential Information in printed paper format or contained on a compact disc or digital video disc, together with all copies or other reproductions in whole or in part of such Confidential Information, will be returned to OPA or destroyed (at Participant's option) and Confidential Information transmitted in electronic format will be deleted from the e-mails and directories of Participant's and its Representatives' computers; provided, however, any Confidential Information (i) found in drafts, notes, studies and other documents prepared by or for the Participant or its Representatives (collectively, "Working Papers"), or (ii) found in electronic format as part of the Participant's off-site or on-site data storage/archival process system, which cannot through reasonable efforts be returned to OPA or deleted from the e-mails and directories of Participant's and its Representatives' computers, as the case may be, will be held by the Participant and kept subject to the terms of this Agreement or destroyed at the Participant's option.

6. **Remedies.** Participant acknowledges that a breach of any provisions of this Agreement may prejudice the economic or competitive interests of, and may result in undue loss to, OPA or to any third party to whom OPA owes a duty of confidence, and that the prejudice or injury to OPA or to any third party may be difficult to calculate and inadequately compensable in damages. Participant agrees that OPA is may be entitled to specific performance and injunctive relief (without proving any damage sustained by it or by any of its Representatives or by any third party) or any other remedy against any actual or potential breach of the provisions of this Agreement.

6-7. **FIPPA Records and Compliance.** The Parties acknowledge and agree that OPA is subject to FIPPA and that FIPPA applies to and governs all Confidential Information in the

custody or control of OPA ("FIPPA Records"), and may, subject to FIPPA, require the disclosure of such FIPPA Records to third parties in which case OPA shall provide the Participant with prior written notice so that the Participant may seek a protective order, injunction, or other appropriate remedy. The confidentiality covenants contained in this Agreement are expressly subject to any and all obligations and requirements that may exist or may in the future arise under FIPPA, including all disclosure obligations. The provisions of this Section shall prevail over, and in lieu of, any other applicable provisions in this Agreement.

8. **Notice.** Any notice, consent or approval required or permitted to be given in connection with this Agreement ("Notice") shall be in writing and shall be sufficiently given if delivered (whether in person, by courier services or other personal method of delivery), or if transmitted by facsimile or e-mail:

(a) to OPA at:

120 Adelaide Street West
Suite 1600
Toronto, Ontario, Canada M5G 1T1

Attention: JoAnne Butler, Vice President, Electricity Resources
Facsimile: (416) 969-6356

with a copy to:

Attention: Michael Lyle, General Counsel and Vice President Legal,
Aboriginal and Regulatory Affairs
Facsimile: (416) 967-1947

(b) to Participant at:

4th Floor, South Tower, Royal Bank Plaza,
200 Bay Street
Toronto, Ontario, Canada M5J 2W7

Address

Attention: David Dal Bello, Managing Director

Facsimile: (416) 842-5366

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Any Notice delivered or transmitted to a Party as provided above shall be deemed to have been given and received on the day it is delivered or transmitted, provided that it is delivered or transmitted on a business day prior to 5:00 p.m. local time in the place of delivery or receipt. However, if the Notice is delivered or transmitted after 5:00 p.m. local time or if such day is not a business day then the Notice shall be deemed to have been given and received on the next business day. Any Party may, from time to time, change its address by giving Notice to the other Parties in accordance with the provisions of this Section.

9. Definitive Agreement. The Parties agree that unless a definitive agreement regarding the Project has been executed by the parties, neither party will be under any legal obligation of any kind whatsoever with respect to the Project by virtue of this Agreement, except for the matters specifically agreed to in this Agreement. Without limiting the preceding sentence, nothing in this Agreement requires either party to enter into the Project.

(e)

9-10. Miscellaneous.

- (a) This Agreement (i) constitutes the entire agreement among the Parties with respect to the subject matter hereof, (ii) may not be assigned by a Party without the prior written consent of the other Parties, and (iii) enures to the benefit of and is binding on the Parties hereto and their successors and permitted assigns. The division of this Agreement into sections and the insertion of headings are for convenience of reference only and are not to affect the construction or interpretation of this Agreement. Words importing the singular include the plural and vice versa. The term "including" means "including without limitation", and the terms "includes" and "included" have similar meanings. If any term of this Agreement is or becomes illegal, invalid or unenforceable, the illegality, invalidity or unenforceability will be deemed severable and will not affect any other term of this Agreement. For every term of this Agreement, time is of the essence. No term of this Agreement may be amended or waived except in writing. No failure or delay in exercising any right or remedy hereunder will operate as a waiver, nor will any single or partial exercise preclude any other exercise of any other right or remedy. This Agreement does not create any agency of partnership relationship between parties or its Representatives, and neither party is responsible for the acts of the other party or its Representatives. This Agreement may be executed in counterparts, each of which when executed shall be deemed to be an original, but all of which when taken together shall constitute one and the same agreement. Signatures by facsimile or scanned electronic transmission shall be as effective as original signatures to this Agreement.

- (a)(b) This Agreement will be governed by and construed in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable in the Province of Ontario.

- (c) The provisions of this Agreement shall be superseded in its entirety by the terms of any definitive agreement entered into after the date hereof between the Parties relating to the Project, but in any event will terminate and be of no further force or effect on the second anniversary date hereof, survive indefinitely, and for greater certainty, shall survive any cancellation of the Project and the conclusion of the Project.

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IN WITNESS WHEREOF, the Parties have executed this Agreement effective as of the date first written above.

ONTARIO POWER AUTHORITY

By: _____

Name: JoAnne C. Butler

Title: Vice President, Electricity Resources

RBC DOMINION SECURITIES INC.

By: _____

Name: _____ David Dal Bello

Title: _____ Managing Director

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Aleksandar Kojic

From: Sebastiano, Rocco [RSebastiano@osler.com]
Sent: February 28, 2011 8:31 PM
To: Michael Killeavy; Deborah Langelaan
Cc: Smith, Elliot; Hua, Linda; safouh@smsenergy-engineering.com
Subject: RE: TransCanada - MPS Canada Firm Price Proposal for 2xM501GAC Fast

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Director, Eastern Canada, Power Development

TransCanada

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Deborah Langelaan | Manager, Natural Gas Projects| OPA |
Suite 1600 - 120 Adelaide St. W. | Toronto, ON M5H 1T1 |
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- 4. The payment schedule has been slightly amended to break down the milestone payments for deliver and substantial completion into separate Unit 1 and Unit 2 milestone payments.

Regards, Rocco

From: John Mikkelsen [mailto:john_mikkelsen@transcanada.com]
Sent: Monday, February 28, 2011 7:14 PM
To: Sebastiano, Rocco
Cc: John Cashin; Terry Bennett; Geoff Murray
Subject: TransCanada - MPS Canada Firm Price Proposal for 2xM501GAC Fast

Dear Mr. Sebastiano,

Subject to and in accordance with the Acknowledgement executed by the Ontario Power Authority and Osler, Hoskin & Harcourt LLP on December 17, 2010, please find attached Technical Proposal and Firm price Proposal for Project schedule change and specification/scope change in the EQUIPMENT SUPPLY CONTRACT #6519 BETWEEN TransCanada Energy Ltd. AND MPS Canada, Inc. FOR GAS TURBINE EQUIPMENT WITH A 2 x M501GAC-Fast Gas Turbine & Generator.

Best regards,

John Mikkelsen, P.Eng.

Director, Eastern Canada, Power Development

TransCanada

Royal Bank Plaza
200 Bay Street
24th Floor, South Tower
Toronto, Ontario M5J 2J1

Tel: 416.869.2102

Fax: 416.869.2056

Cell: 416.559.1664

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Aleksandar Kojic

From: Sebastiano, Rocco [RSebastiano@osler.com]
Sent: March 1, 2011 8:58 AM
To: Deborah Langelaan
Cc: Hua, Linda; Michael Killeavy
Subject: Re: TransCanada - MPS Canada Firm Price Proposal for 2xM501GAC Fast

Deb, I am out of the office this morning, but I will have Linda arrange for a room at 10 am. She will have a copy of the MPS proposal available for you to review.

Regards, Rocco

From: Deborah Langelaan [mailto:Deborah.Langelaan@powerauthority.on.ca]
Sent: Tuesday, March 01, 2011 08:43 AM
To: Sebastiano, Rocco
Cc: Hua, Linda; Michael Killeavy <Michael.Killeavy@powerauthority.on.ca>
Subject: RE: TransCanada - MPS Canada Firm Price Proposal for 2xM501GAC Fast

Rocco;

I would like to come over at 10:00 a.m. to review the proposal. Please let me know if that works for you.

Thanks,
Deb

Deborah Langelaan | Manager, Natural Gas Projects | OPA |
Suite 1600 - 120 Adelaide St. W. | Toronto, ON M5H 1T1 |
T: 416.969.6052 | F: 416.967.1947 | deborah.langelaan@powerauthority.on.ca |

From: Sebastiano, Rocco [mailto:RSebastiano@osler.com]
Sent: February 28, 2011 8:31 PM
To: Michael Killeavy; Deborah Langelaan
Cc: Smith, Elliot; Hua, Linda; safouh@smsenergy-engineering.com
Subject: RE: TransCanada - MPS Canada Firm Price Proposal for 2xM501GAC Fast

Michael and Deb,

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1. Price has increased 10% from US\$33 million to US\$36.295 million.
2. MPS has made a couple of high level changes to the additional scope (the cooling water piping now excludes interconnecting piping) and the stack has been changed from 100 feet to 45 meter stack with standard silencer) [Note: I will let Safouh comment on any other scope changes from the indicative technical proposal.]
3. Section 3 Terms and Conditions has been expanded to include six additional conditions, including:
 - a. Firm price proposal only valid until March 31, 2011
 - b. Price proposal does not include technical information provided by TCE on December 20 (regarding Atmospheric Data and site design conditions), TCE's comments in Feb 18 email on

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Director, Eastern Canada, Power Development

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Aleksandar Kojic

From: John Cashin [john_cashin@transcanada.com]
Sent: March 3, 2011 5:26 PM
To: Susan Kennedy
Cc: John Mikkelsen; Deborah Langelaan; Michael Killeavy; Robert Godhue
Subject: RE: FIPPA designation letter

Thanks Susan.

Can you proceed with obtaining the 2 designations that you referred to. I'd suggest the following descriptions:

1. A letter from Alex Pourbaix, TransCanada Energy Ltd. to Colin Andersen, Ontario Power Authority, dated March 4, 2011, including attachments "Implementation Agreement" and "Implementation Agreement Summary", and any and all revisions, amendments or updates thereto or any revised or amended version thereof.
2. Implementation Agreement between TransCanada Energy Ltd. and Ontario Power Authority dated January 24, 2011, including all exhibits and schedules, and any and all revisions, amendments or updates thereto or any revised or amended version thereof.

Regards,

John

Tel: (403) 920-2157
Fax: (403) 920-2354

From: Susan Kennedy [mailto:Susan.Kennedy@powerauthority.on.ca]
Sent: Wednesday, March 02, 2011 2:33 PM
To: John Cashin
Cc: John Mikkelsen; Deborah Langelaan; Michael Killeavy; Robert Godhue
Subject: RE: FIPPA designation letter

Sorry for the delayed response.

Where I believe we are at is that we have, most recently done designations (both on February 24th) for:

1. TransCanada Potential Project Pricing and Terms Proposal designated as Schedule B1, B2, and B3 and Schedule C all dated February 24, 2011 and any and all amendments and updates thereto or any amended version thereof.
2. TransCanada Oakville Generating Station Development Cost Summary – Development Phase/Volume 1/Project 2067945/February 24, 2011
3. TransCanada Oakville Generating Station Development Cost Summary – Implementation Phase/Volume 2/Project 2116164 /February 24, 2011

That leaves (in the foreseeable future/near term), designations for:

1. There would be a letter from TCE to Colin, cc'd to the Ministry of Energy, setting out our proposal (including pricing); we will probably provide the OPA with a draft before formally issuing. Both the letter and draft would need to be designated.
2. Draft Implementation Agreement to incorporate our proposal, including pricing. We'd like to be able to designate the draft IA as well as future drafts and, when and if executed, the final, executed IA.

With respect to the next documents, I would suggest essentially the same approach as was taken re the "TransCanada Potential Project Pricing and Terms Proposal" – describe the document – starting with the relevant draft and include and updates, amendments, future drafts, etc. of the document in the designation.

The drafts will need to be described.

On the Implementation Agreement, I'm content to either designate more generally – i.e. describing the draft and either expressly or by implication starting with the original draft (which according to my records is January 24, 2011) or begin with the draft (draft dated "XXX, 2011") that contains the pricing information.

If you need to speak, please contact Robert Godhue (he is cc'd on this email) and he will find a time that works.

Susan H. Kennedy
Director, Corporate/Commercial Law Group

From: John Cashin [mailto:john_cashin@transcanada.com]
Sent: February 24, 2011 12:01 PM
To: Susan Kennedy
Cc: John Mikkelsen
Subject: Re: FIPPA designation letter

Thanks Susan. I believe that John Mikkelsen will be calling Deb to discuss designating some material regarding pricing for the Cambridge project that was shown to Joanne this morning, as well as the back-up material for the Oakville sunk costs, which will be ready this week.

What I wanted to discuss with you is how best to handle some documents that would be circulated in a few weeks. In particular, there would be a letter from TCE to Colin, cc'd to the Ministry of Energy, setting out our proposal (including pricing); we will probably provide the OPA with a draft before formally issuing. Both the letter and draft would need to be designated.

In addition, we will be revising the draft Implementation Agreement to incorporate our proposal, including pricing. We'd like to be able to designate the draft IA as well as future drafts and, when and if executed, the final, executed IA.

I'd like to discuss how to best handle these designations.

Regards,

John Cashin
TransCanada

403-920-2157

From: Susan Kennedy [mailto:Susan.Kennedy@powerauthority.on.ca]
Sent: Thursday, February 24, 2011 09:37 AM
To: John Cashin
Subject: RE: FIPPA designation letter

I'm in and out of meetings – in one now, in fact.

If you provide a list of the records you are looking to have designated, I can have a look and call you with questions, if any, and sort out finalization.

It will also allow me to start the process. I'm confident of CEO access today and tomorrow. As far as I know he is around next week as well.

Susan H. Kennedy
Director, Corporate/Commercial Law Group

From: John Cashin [mailto:john_cashin@transcanada.com]
Sent: February 24, 2011 11:33 AM
To: Susan Kennedy
Subject: Re: FIPPA designation letter

Susan - are you available to chat by phone to discuss what we are considering? If so, what is your phone number?

Regards,

John Cashin
TransCanada

403-920-2157

From: Susan Kennedy [mailto:Susan.Kennedy@powerauthority.on.ca]
Sent: Thursday, February 24, 2011 09:20 AM
To: John Cashin
Cc: Michael Killeavy <Michael.Killeavy@powerauthority.on.ca>; Deborah Langelaan <Deborah.Langelaan@powerauthority.on.ca>; JoAnne Butler <joanne.butler@powerauthority.on.ca>; Terry Bennett
Subject: RE: FIPPA designation letter

I just need a description of the document/documents that are intended to be covered by the designation.

Susan H. Kennedy
Director, Corporate/Commercial Law Group

From: JoAnne Butler
Sent: February 24, 2011 11:16 AM
To: 'Terry Bennett'
Cc: John Cashin; Michael Killeavy; Susan Kennedy; Deborah Langelaan
Subject: RE: FIPPA designation letter

Terry, I talked with Michael and Susan...yes, please carry on with John talking directly to Susan on this.

Thanks...

JCB

JoAnne C. Butler
Vice President, Electricity Resources
Ontario Power Authority

120 Adelaide Street West, Suite 1600
Toronto, Ontario M5H 1T1

416-969-6005 Tel.
416-969-6071 Fax.
joanne.butler@powerauthority.on.ca

From: Terry Bennett [mailto:terry_bennett@transcanada.com]
Sent: Jueves, 24 de Febrero de 2011 10:46 a.m.
To: JoAnne Butler
Cc: John Cashin
Subject: FIPPA designation letter

JoAnne, we were thinking it may be more efficient to have John Cashin talk to Susan Kennedy on the FIPPA designation letter so they can deal with it directly. We are hoping to be able to cover not just the proposal we shared with you today, but the next draft of the Implementation Agreement and possibly a draft of Alex's letter to Colin. As discussed, we hope to send those items to you over the next week or so.

Let me know if you agree and if so, John will call Susan.

Regards,

Terry

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Aleksandar Kojic

From: Deborah Langelaan
Sent: March 4, 2011 11:22 AM
To: Michael Killeavy
Subject: RE: Reminder - Board Presentations Today
Attachments: OGS_BOD_CM_(JB)_20110224.ppt

You must be reading my mind....

Deb

Deborah Langelaan | Manager, Natural Gas Projects|OPA | Suite 1600 - 120 Adelaide St. W. |
Toronto, ON M5H 1T1 |
T: 416.969.6052 | F: 416.967.1947 | deborah.langelaan@powerauthority.on.ca |

-----Original Message-----

From: Michael Killeavy
Sent: March 4, 2011 11:16 AM
To: Derek Leung; Viviana von Bertoldi; Bonnie Hiltz; Perry Cecchini; Deborah Langelaan; Catherine Forster; Jaideep Nagpal
Subject: Fw: Reminder - Board Presentations Today

I don't have the agenda handy, but if we have an item, the slides are due today.

Deb, we're on with OGS so can you send me the final version of what you did last time and I'll update them after lunch.

Thanks

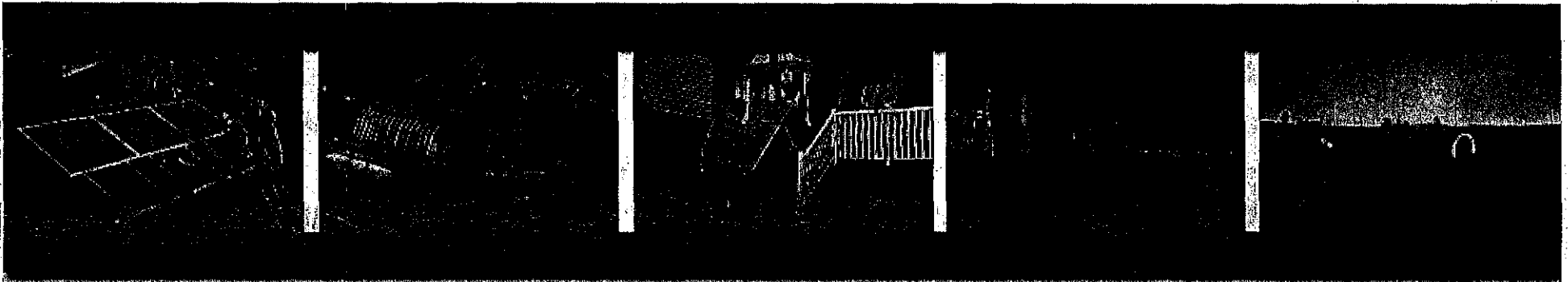
Michael Killeavy, LL.B., MBA, P.Eng.
Director, Contract Management
Ontario Power Authority
120 Adelaide St. West, Suite 1600
Toronto, Ontario, M5H 1T1
416-969-6288 (office)
416-969-6071 (fax)
416-520-9788 (cell)
Michael.killeavy@powerauthority.on.ca

----- Original Message -----

From: JoAnne Butler
Sent: Friday, March 04, 2011 11:07 AM
To: Michael Killeavy; Barbara Ellard; Shawn Cronkwright; Kevin Dick
Cc: Manuela Moellenkamp; John Zych
Subject: Reminder - Board Presentations Today

Please have your draft presentations to John/Colin by the end of the day for Colin to have a look at first. We can then finalize them on Monday. Better to have dated information than no information....we can always update verbally, including confidential information.

Thanks...



Winding Up of the Oakville Generating Station (OGS) Contract

Board of Directors

February 24, 2011

Privileged and Confidential – Prepared in Contemplation of Litigation

OGS Update

- OPA/TransCanada Energy (TCE) negotiating team has met 5 times since January's Board update.
- Discussions continue to be productive with respect to the "winding-up" of the Contract.
- TCE planning to deliver proposal, implementation agreement and letter to Colin over next few weeks.
- We have completed our due diligence, as much as we can at this point until site is chosen, on capital costs. Still contain large risk premiums.
- We are doing our own due diligence on commercial factors and hiring third party expert.
- OPA continues to work with the Ministry of Energy on the drafting of the Directive to authorize negotiations with TCE for the replacement project.
- Ministry warming up to the idea of including language that references the inclusion of the financial value of the OGS Contract into the net revenue requirement of the replacement project.

Next Steps

- Continue discussions with TCE to achieve the following:
 - Counter offer based on commercial review;
 - Finalize technical design requirements;
 - Siting of replacement facility;
 - Negotiation and execution of the Implementation Agreement;
 - TCE plan for handling First Nations issues.

Inform MO/PO and get buy in to disclose and move forward.

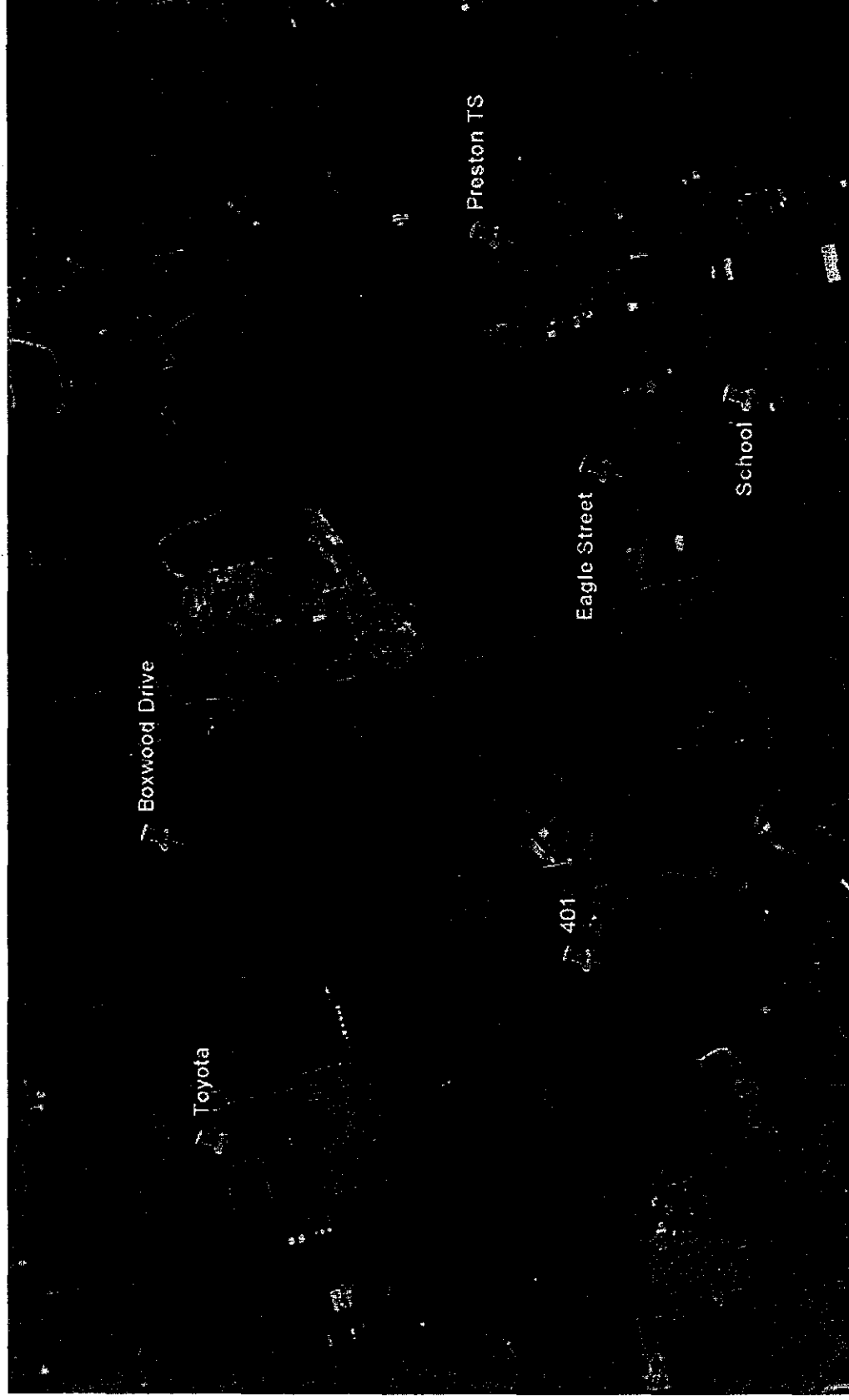
OGS Update

- Excerpt from TCE's 2010 Annual Report:
 - In September 2009, the OPA awarded TransCanada a 20-year Clean Energy Supply contract to build, own and operate a 900 MW power generating station in Oakville, Ontario. TransCanada expected to invest approximately \$1.2 billion in the natural gas-fired, combined-cycle plant. In October 2010, the Government of Ontario announced that it would not proceed with the Oakville generating station. TransCanada is negotiating a settlement with the OPA that would terminate the Clean Energy Supply contract and compensate TransCanada for the economic consequences associated with the contract's termination.

Replacement Generation Project

- TCE still leaning toward development of the Boxwood Industrial Park site.
- TCE and OPA continue to wait for Ministry of Energy authorization to contact the City of Cambridge about the proposed project.
- The continued delay in contacting the City of Cambridge is becoming extremely problematic as word is starting to leak out about the replacement project.
- **“Focus is on Cambridge site for power plant”**
headline of Toronto Star article dated February 18th

Boxwood Site



Aboriginal Relations and TransCanada

- TransCanada has begun high level consultation with Aboriginal communities in the Kitchener Waterloo Cambridge area, as they await an announcement from the OPA with respect to the project.
- TransCanada has engaged the elected officials and community at the Mississauga of New Credit, as well as the Elected Council and Confederacy Chiefs at Six Nations of the Grand River on the KWC project.
- In 2008, TransCanada entered into a community agreement with the Mississauga of New Credit First Nation to deal with projects in their territory. There continues to be a positive working relationship between the community and TransCanada.
- TransCanada recently offered to enter into community agreements with each of the Elected Council and Confederacy Chiefs as it relates to TransCanada's operations and projects throughout their traditional territory. Both groups have expressed openness to developing such an agreement.

Mitsubishi (MPS) Gas Turbines (GT's)

- GT's originally purchased for OGS were designed for a Combined Cycle generation plant.
- Fall 2010 TCE suspended MPS contract until January 31, 2011.
- January 28, 2011 TCE released MPS from suspension and directed them to commence work on converting the GT's to Fast Start.
- Fast Start option will meet the requirements of a Peaking generation plant in Cambridge.
- Fixed the suspension costs that TCE had been incurring under terms of MPS ESA.

Price of Peaking Plant Conversion

- The incremental estimated price for the conversion remains \$33 MM (US) +/- 25%.
- MPS revised the price to convert the GT's to Fast Start from \$3 MM to \$6 MM.
- MPS revised the price to convert from Combined Cycle to Simple Cycle from \$15 MM to \$12 MM.
- Delayed delivery and suspension costs remain \$15 MM.
- TCE expects to receive MPS final price for Peaking plant conversion on February 28, 2011 and price is not to exceed 125% of the estimated price (US \$41.25 MM).
- If the final price is higher the OPA will pass the risk onto TCE in the commercial negotiations since TCE believes they have a cap on the price.

Cambridge Capital Costs

- TCE has provided the OPA with its estimated capital cost for Cambridge.
- OPA review has concluded that TCE has included large premiums for risk.
- Site uncertainty has prevented TCE from firming up many of its capital costs.

Aleksandar Kojic

From: Michael Killeavy
Sent: March 4, 2011 2:11 PM
To: Deborah Langelaan; JoAnne Butler
Subject: RE: Reminder - Board Presentations Today
Attachments: OGS_BOD_CM_20110316.ppt

Importance: High

Deb and JoAnne,

Have a look at what I've done as an OGS update. Are you both alright with it?

Michael

Michael Killeavy, LL.B., MBA, P.Eng.
Director, Contract Management
Ontario Power Authority
120 Adelaide St. West, Suite 1600
Toronto, Ontario, M5H 1T1
416-969-6288 (office)
416-969-6071 (fax)
416-520-9788 (cell)
Michael.killeavy@powerauthority.on.ca

-----Original Message-----

From: Deborah Langelaan
Sent: Fri 04-Mar-11 11:21 AM
To: Michael Killeavy
Subject: RE: Reminder - Board Presentations Today

You must be reading my mind....

Deb

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Toronto, ON M5H 1T1 |
T: 416.969.6052 | F: 416.967.1947 | deborah.langelaan@powerauthority.on.ca |

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416-969-6071 (fax)
416-520-9788 (cell)
Michael.killeavy@powerauthority.on.ca

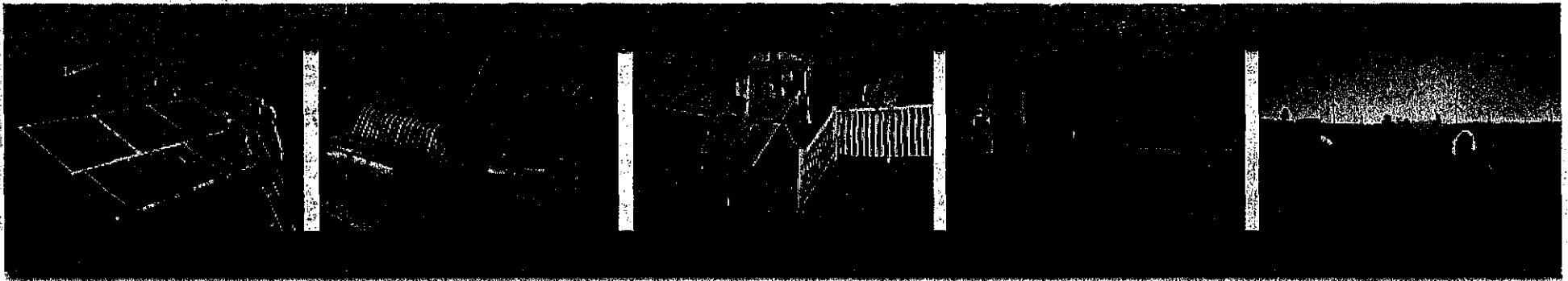
----- Original Message -----

From: JoAnne Butler
Sent: Friday, March 04, 2011 11:07 AM
To: Michael Killeavy; Barbara Ellard; Shawn Cronkwright; Kevin Dick
Cc: Manuela Moellenkamp; John Zych
Subject: Reminder - Board Presentations Today

Please have your draft presentations to John/Colin by the end of the day for Colin to have a look at first. We can then finalize them on Monday. Better to have dated information than no information....we can always update verbally, including confidential information.

Thanks...

JCB



Winding Up of the Oakville Generating Station (OGS) Contract

Board of Directors

March 16, 2011

Privileged and Confidential – Prepared in Contemplation of Litigation

OGS Update

- This presentation is for the Board's information.
- OPA/TransCanada Energy (TCE) negotiating team has met once since February's Board update.
- Discussions continue to be productive with respect to the "winding-up" of the Contract.
- TCE planning to deliver a proposal, implementation agreement and letter to Colin on 7 March 2011.
- MPS has provided its fixed price proposal to TCE for the fast-start GT option, scope of work for the conversion from combined-cycle to simple cycle, and delay/suspension costs. The cost increased by about 10% from \$33M to \$36M.
- TCE presented also us with commercial parameters for the proposed peaking plant, along with the revisions to the NYR contract that it needs.
- We are continuing to do our due diligence on commercial parameters/contract changes and will be hiring a financial consultant to assist us.
- OPA continues to work with the Ministry of Energy on the drafting of the Directive to authorize negotiations with TCE for the replacement project.

Privileged and Confidential – Prepared in Contemplation of Litigation

Next Steps

- Continue discussions with TCE to achieve the following:
 - An understanding of TCE's commercial position;
 - Finalize technical design requirements;
 - Siting of replacement facility;
 - Negotiation and execution of the Implementation Agreement;
 - TCE plan for handling First Nations issues.

Inform MO/PO and get buy in to disclose and move forward.

Replacement Generation Project

- TCE still leaning toward development of the Boxwood Industrial Park site.
- Colin has indicated that the MO has no issues with TCE approaching the City of Cambridge.
- There was a mention of the OGS contract cancellation in the 3 March 2011 edition of the Toronto Star – **“Oakville wins nearly \$500,000 in legal costs”**

Mitsubishi (MPS) Gas Turbines (GT's)

- GT's originally purchased for OGS were designed for a Combined Cycle generation plant.
- Fall 2010 TCE suspended MPS contract until January 31, 2011.
- January 28, 2011 TCE released MPS from suspension and directed them to commence work on converting the GT's to Fast Start.
- Fast Start option will meet the requirements of a Peaking generation plant in Cambridge.
- Fixed the suspension costs that TCE had been incurring under terms of MPS ESA.

Price of Peaking Plant Conversion

- The incremental estimated price for the conversion was \$33 MM (US) +/- 25%.
- MPS revised the price to convert the GT's to Fast Start from \$3 MM to \$6 MM.
- MPS revised the price to convert from Combined Cycle to Simple Cycle from \$15 MM to \$12 MM.
- Delayed delivery and suspension costs remain \$15 MM.
- TCE received the MPS final price for Peaking plant conversion on February 28, 2011 and price was \$36 MM, which was within the 25% range indicated above by MPS

TCE Commercial Proposal

- TCE has provided the OPA with its proposed costs for the peaking plant, along with a listing of changes it requires to the NYR Peaking Contract.
- TCE indicates that the plant needs to have a NRR of \$16,900/MW-month, which is slightly lower than its NRR for OGS of \$17,277/MW-month.
- Using TCE's CAPEX figure and indicated OGS rate of return we have come up with an NRR that is about \$15,000/MW-month

TCE Commercial Proposal

- We are continuing to review our estimate in light of theirs.
- We have requested more information from TCE to understand how it has arrived at its NRR figure.
- TCE has also asked for a number of changes to the NYR Peaking Contract, the contract upon which we would base the K-W contract.
- We continue to review these proposed changes.

Aleksandar Kojic

From: Deborah Langelaan
Sent: March 4, 2011 2:39 PM
To: 'John Mikkelsen'
Cc: Michael Killeavy
Subject: RE:

John;

Based on your comments below the OPA understands that TCE would like to provide direction to MPS on the New Scope today. At this point in time the OPA is not in a position to provide you with our comments on the New Scope firm price proposal. OPA's counsel received MPS's firm pricing proposal on the evening of February 28th and we require more time to (i) receive and review MPS responses to the questions OPA provided to TCE on March 3rd and (ii) complete our review the proposal.

Kind Regards,
Deb

Deborah Langelaan | Manager, Natural Gas Projects| OPA |
Suite 1600 - 120 Adelaide St. W. | Toronto, ON M5H 1T1 |
T: 416.969.6052 | F: 416.967.1947 | deborah.langelaan@powerauthority.on.ca |

From: John Mikkelsen [mailto:john_mikkelsen@transcanada.com]
Sent: February 25, 2011 10:26 AM
To: Deborah Langelaan; Michael Killeavy
Cc: Terry Bennett; Geoff Murray; John Cashin; Terri Steeves
Subject:

Dear Deborah,

Attached please find Letter Agreement #4 between TransCanada Energy Ltd. and MPS Canada, Inc.

Further to our e-mail on January 31st, 2011 where we indicated our rationale to release MPS to start the fast start conversion, we need to provide further direction to MPS by early March 4, 2011 with respect to the New Scope as this term is defined in the attached agreement.

Specifically, we need to determine whether to include the New Scope in the amended Contract or to exclude it now and issue direction to MPS for the New Scope at a future date. Firm pricing for the New Scope is to be provided by MPS by February 28, 2011. Please note that in the event TransCanada employs the MPS gas turbines in simple cycle configuration, MPS has exclusivity surrounding the New Scope.

If we were to release MPS to construct the new Scope we believe the benefits to be as follows:

1. This action will provide additional cost certainty on the scope as the currently defined. Given the level of engineering completed to date on the project it is very likely that further changes will be required and facilitated through change orders but it would lock down a baseline. Otherwise assuming we finalize an agreement to develop a potential project with the OPA, we are at risk to future price increases by MPS where they have the exclusivity to supply that scope.
2. The release of MPS provides performance certainty as the entire power island scope is wrapped in a single guarantee from MPS. Again there may be modifications to the performance guarantees as a consequence of changes but at least we would have a strong baseline.
3. The release of MPS will enable the generation of additional engineering information to facilitate the design of the balance of the plant and improve the cost estimate for the balance of plant for the project. There would be fewer gaps in the design between engineer's scope and that of MPS.
4. Lastly the release of MPS will reduce the exposure to risks as we will have completed a greater level of definition by the time of our contract execution and we will be able to close any gaps that might exist (e.g. noise mitigation).

In the event that we are unable to provide direction to MPS on the New Scope in by March 4, our proposal would be to get the New Scope written into the MPS contract as an option. We would attempt to get the terms and conditions to include the scope and guarantees for the option, a date by which the option would need to be exercised, and how the final price would be determined.

We ask the OPA to carefully consider the above and advise us of your views concerning direction on the New Scope. Please do not hesitate to contact me should you have any questions or concerns surrounding the foregoing.

Best regards,

John Mikkelsen, P.Eng.

Director, Eastern Canada, Power Development

TransCanada

Royal Bank Plaza
200 Bay Street
24th Floor, South Tower
Toronto, Ontario M5J 2J1

Tel: 416.869.2102

Fax: 416.869.2056

Cell: 416.559.1664

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Aleksandar Kojic

From: Michael Killeavy
Sent: March 4, 2011 2:46 PM
To: Deborah Langelaan
Subject: Re:

This is fine. Thanks.

Michael Killeavy, LL.B., MBA, P.Eng.
Director, Contract Management
Ontario Power Authority
120 Adelaide St. West, Suite 1600
Toronto, Ontario, M5H 1T1
416-969-6288 (office)
416-969-6071 (fax)
416-520-9788 (cell)
Michael.killeavy@powerauthority.on.ca

From: Deborah Langelaan
Sent: Friday, March 04, 2011 02:39 PM
To: 'John Mikkelsen' <john_mikkelsen@transcanada.com>
Cc: Michael Killeavy
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Aleksandar Kojic

From: JoAnne Butler
Sent: March 7, 2011 4:10 PM
To: Michael Killeavy; Deborah Langelaan
Subject: FW: Board of Directors' OGS Contract Wind Up Update Presentation - 16 March 2011 ...
Attachments: OGS_BOD_CM_20110316.ppt

Importance: High

Can you please revamp in light of what we talked about today...also, we should be able to do this in about four slides. They have already seen the detail on the turbines, please just highlight that we have a final price and have capped the interest exposure. Thanks...

JCB

JoAnne C. Butler
Vice President, Electricity Resources
Ontario Power Authority

120 Adelaide Street West, Suite 1600
Toronto, Ontario M5H 1T1

416-969-6005 Tel.
416-969-6071 Fax.
joanne.butler@powerauthority.on.ca

-----Original Message-----

From: Michael Killeavy
Sent: Viernes, 04 de Marzo de 2011 03:37 p.m.
To: Colin Andersen
Cc: John Zych; Deborah Langelaan; JoAnne Butler
Subject: Board of Directors' OGS Contract Wind Up Update Presentation - 16 March 2011 ...
Importance: High

*** PRIVILEGED AND CONFIDENTIAL - PREPARED IN CONTEMPLATION OF LITIGATION ***

Colin,

Attached is the OGS Contract update presentation for the next Board meeting.

Michael

Michael Killeavy, LL.B., MBA, P.Eng.
Director, Contract Management
Ontario Power Authority
120 Adelaide St. West, Suite 1600
Toronto, Ontario, M5H 1T1
416-969-6288 (office)
416-969-6071 (fax)
416-520-9788 (cell)
Michael.killeavy@powerauthority.on.ca



Winding Up of the Oakville Generating Station (OGS) Contract

Board of Directors

March 16, 2011

Privileged and Confidential – Prepared in Contemplation of Litigation

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Privileged and Confidential – Prepared in Contemplation of Litigation

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- We continue to review these proposed changes.

Aleksandar Kojic

From: Sebastiano, Rocco [RSebastiano@osler.com]
Sent: March 8, 2011 12:22 PM
To: Michael Killeavy
Cc: Smith, Elliot
Subject: FW: New Matter

Michael,

I just got off the phone with Gene. He is very interested in this project. He does not think that he has a conflict as he is not aware of any work they are doing for TCE. He is going to complete his conflict search and then send me an email confirming his interest, hour rates, form of engagement letter, etc. I also asked him whether he would be available to get going quickly on this as we have an internal meeting scheduled for Thursday at 1 pm and he said that he has the time to devote to this and if required, he can participate on Thursday's conference call.

If we can get this all sorted out this afternoon, then Elliot and I can perhaps send out to Gene some relevant documents to start looking at, but we'll need to get him to sign a CA similar to the one that SMS Engineering signed, before we can send over some of the TCE materials.

Regards, Rocco

From: Meehan, Gene [mailto:Gene.Meehan@NERA.com]
Sent: Tuesday, March 08, 2011 10:11 AM
To: Sebastiano, Rocco
Subject: RE: New Matter

Rocco

Just left a voice mail. Give me a call anytime. I am in office at 202 466 9287 and cell will also work.

Best,
Gene

From: Sebastiano, Rocco [mailto:RSebastiano@osler.com]
Sent: Monday, March 07, 2011 5:55 PM
To: Meehan, Gene
Subject: RE: New Matter

Tomorrow morning would be just great. Thanks, Rocco

From: Meehan, Gene [mailto:Gene.Meehan@NERA.com]
Sent: Monday, March 07, 2011 5:51 PM
To: Sebastiano, Rocco
Subject: Re: New Matter

Rocco

Thanks. I am very interested. We don't have Trans Canada conflicts that I can think of I will call tomorrow AM if

that is soon enough. If not let me know I am on granddaughter duty today with two five month old twins with colds

Gene

From: Sebastiano, Rocco
To: Meehan, Gene
Cc: Smith, Elliot
Sent: Mon Mar 07 17:26:28 2011
Subject: New Matter
Gene,

I just left you a voice mail about a new matter where we'd like to retain you on behalf of the Ontario Power Authority (OPA). It relates to the cancellation by the Province of TransCanada Energy's Oakville Generating Station which had been awarded a CES contract through a competitive procurement process on 2009. We are advising the OPA on the termination of this contract and a potential new project where we'd like to get your financial/economic advice. Please call me as soon as you so that we can discuss whether you would be interested and available to take on this new matter.

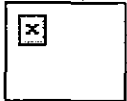
Regards, Rocco



Rocco Sebastiano
Partner

416.862.5859 DIRECT
416.862.6666 FACSIMILE
rsebastiano@osler.com

Osler, Hoskin & Harcourt LLP
Box 50, 1 First Canadian Place
Toronto, Ontario, Canada M5X 1B8



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Aleksandar Kojic

From: Michael Killeavy
Sent: March 9, 2011 10:32 AM
To: 'Meehan, Gene'
Subject: RE: TCE Matter
Attachments: Matter Description - TCE.pdf

I'll be joined by two colleagues: Deb Langelann and Anshul Mathur.

The attached matter description may be of interest.

Michael Killeavy, LL.B., MBA, P.Eng.
Director, Contract Management
Ontario Power Authority
120 Adelaide Street West, Suite 1600
Toronto, Ontario
M5H 1T1
416-969-6288
416-520-9788 (CELL)
416-967-1947 (FAX)

From: Meehan, Gene [<mailto:Gene.Meehan@NERA.com>]
Sent: March 9, 2011 10:05 AM
To: Michael Killeavy
Subject: RE: TCE Matter

I will be here.

From: Michael Killeavy [<mailto:Michael.Killeavy@powerauthority.on.ca>]
Sent: Wednesday, March 09, 2011 10:03 AM
To: Meehan, Gene
Subject: Re: TCE Matter

Great. We'll you at about 10:30am.

Michael Killeavy, LL.B., MBA, P.Eng.
Director, Contract Management
Ontario Power Authority
120 Adelaide St. West, Suite 1600
Toronto, Ontario, M5H 1T1
416-969-6288 (office)
416-969-6071 (fax)
416-520-9788 (cell)
Michael.killeavy@powerauthority.on.ca

From: Meehan, Gene [<mailto:Gene.Meehan@NERA.com>]
Sent: Wednesday, March 09, 2011 09:19 AM
To: Michael Killeavy
Subject: Re: TCE Matter

Michael

I am looking forward to working with you again. I will be in the DC office (direct dial 202 466 9287 and free any time after 10 am.

Best
Gene

----- Original Message -----

From: Michael Killeavy <Michael.Killeavy@powerauthority.on.ca>
To: Meehan, Gene
Cc: RSebastiano@osler.com <RSebastiano@osler.com>; ESmith@osler.com <ESmith@osler.com>; Deborah Langelan
<Deborah.Langelan@powerauthority.on.ca>
Sent: Wed Mar 09 06:59:24 2011
Subject: TCE Matter

Gene,

I'm very pleased to hear from Rocco that you'll be helping out on this file. If it's convenient for you, I could call you this morning to fill you in on some of the details, the status of our discussions with TCE, and where we're planning on going in the next few weeks and how you can assist us. Please let me know if you're free and if you are, at what telephone number I can reach you?

Thank you,
Michael

Michael Killeavy, LL.B., MBA, P.Eng.
Director, Contract Management
Ontario Power Authority
120 Adelaide St. West, Suite 1600
Toronto, Ontario, M5H 1T1
416-969-6288 (office)
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Michael.killeavy@powerauthority.on.ca

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information contained herein. Please inform us of the erroneous delivery by return e-mail. Thank you for your cooperation.

**ONTARIO POWER AUTHORITY
REQUEST FOR SUBMISSIONS**

Matter Description

Legal Services – Litigation Counsel

CONFIDENTIAL

On 9 October 2009 the Ontario Power Authority ("OPA") and TransCanada Energy Ltd. ("TransCanada") entered into the Southwest GTA Clean Energy Supply Contract (the "Contract"). On 7 October 2010, the province announced that the Contract was cancelled. The OPA may be exposed to potential liability from TransCanada as a result of this cancellation of the Contract by the province. No action has yet been commenced by TransCanada. The OPA and TransCanada have had several preliminary meetings to discuss the cancellation of the Contract, including costs incurred to date by TransCanada.

Questions

Questions should be directed to:

Michael Killeavy
Director, Contract Management
Ontario Power Authority
120 Adelaide Street West, Suite 1600
Toronto, Ontario, M5H 1T1
Direct: 416-969-6288
Fax: 416-969-6071
Email: michael.killeavy@powerauthority.on.ca

Please reference: Legal Services – Litigation Counsel (TransCanada Energy Ltd.) in your question.

Aleksandar Kojic

From: Michael Killeavy
Sent: March 9, 2011 1:53 PM
To: 'Meehan, Gene'; 'Sebastiano, Rocco'
Cc: 'Smith, Elliot'; Deborah Langelaan; Anshul Mathur
Subject: TCE Matter
Attachments: Oakville Unlevered Economics July 8, 2009.pdf; Base Oakville Generating Station Unlevered Economics_OPA.xls; MISC_110218_KWC TransCanada Direction.docx; OGS_BOD_CM_20101209.ppt; OGS_BOD_CM_20101123 FINAL.ppt; OGS_BOD_CM_20110224 v2.ppt; OGS_BOD_CM_24_Jan_2011.ppt; Letter to TransCanda Energy Ltd. - October 7, 2010.pdf; IA Cambridge (draft Jan 24, 2011 v3).doc; IA Schedule B NRR (Feb 24 11)_OPA.doc; IA Schedule C NRR (Feb 24 11)_OPA.doc; TCE Value Proposition Analysis 4 Mar 2011.doc

Importance: High

**** PRIVILEGED AND CONFIDENTIAL – PREPARED IN CONTEMPLATION OF LITIGATION ****

Here are some background materials:

1. TCE purported unlevered economics for the Oakville GS;
2. Draft Ministerial Directive pertaining to development of a peaking plant in Kitchener-Waterloo (K-W), which will be sited in Cambridge;
3. OPA Board of Director presentations that summarize the status of the discussions with TCE
4. Letter dated 7 October 2010 from the OPA to TCE communicating the government decision not to proceed with the Oakville GS;
5. The draft Implementation Agreement ("IA"), including Schedules B and C, which contain the TCE proposal to develop the K-W peaking plant. The IA is an agreement that sets out the parameters for negotiating the substantive peaking generation contract. I have included a preliminary analysis of the "value propositions" set out in Schedule B;

I will send the pro forma NYR peaking generation contract in a separate email, since it is referred to in the IA and some of these other documents.

Michael

Michael Killeavy, LL.B., MBA, P.Eng.
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Ontario Power Authority
120 Adelaide Street West, Suite 1600
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416-969-6288
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TransCanada

In business to deliver

Thursday, December 16, 2010

Ontario Power Authority
120 Adelaide Street West, Suite 1600
Toronto, Ontario
M5H 1T1

TransCanada Energy Ltd.
Royal Bank Plaza
200 Bay Street, South Tower
Suite 2400, P.O. Box 43
Toronto, ON M5J 2J1

tel 416-869-2102
fax 416-869-2056
email john_mikkelsen@transcanada.com
web www.transcanada.com

Attention: Michael Killeavy, Director, Contract Management

Re: TransCanada Base Oakville Generation Station Unlevered Economics

Dear Michael,

In accordance with our discussions concerning a methodology for the determination of the *anticipated financial value of the Contract* as such term is used in the letter of October 7, 2010 from Colin Andersen to TransCanada, please find attached a Microsoft Excel spreadsheet named "Base Oakville Generation Station Unlevered Economics_OPA.xls". This spreadsheet and the information that it contains are highly confidential and are provided to you on the basis that the OPA has designated them and any resulting work product pursuant to Section 25.13(3) of the Electricity Act, 1998 as confidential or highly confidential for the purposes of Section 17 of the Freedom of Information and Protection of Privacy Act.

This spreadsheet is a summary of the cash flow associated with the Oakville Generating Station and is an accurate representation of the cash flow that was presented to the TransCanada Board of Directors on June 17, 2009 to support Board approval of TransCanada's bid submission to the Ontario Power Authority's Southwest GTA RFP. The net present value calculation shown at the bottom of the spreadsheet uses a discount rate of 5.25% consistent with TransCanada's cost of capital.

As we have discussed, the provision of this spreadsheet is for the express purposes of determining the anticipated financial value of the Contract. The spreadsheet and information contained is not to be used for the purposes of evaluating future projects nor is it a representation of TransCanada economics on other past or future project developments.

TransCanada looks forward to continuing discussions with the Ontario Power Authority to find alternative mutually beneficial projects which can compensate us for the termination of the Oakville Generating Station project while providing value for the ratepayers of Ontario.

Yours truly,

John Mikkelsen
Director, Eastern Canada, Power Development
TransCanada

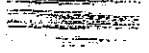
TransCanada Oakville GS - Unlevered Economics (July 8, 2009)



Note: All Values in \$M CAD
Pricing & Index Assumptions

	2011	2015	2016	2017	2018	2019	2020	2021
	7/1/2011	7/1/2015	7/1/2016	7/1/2017	7/1/2018	7/1/2019	7/1/2020	7/1/2021
Capital Spending, IDC & LTSA Costs								
Initial Capital including Land	\$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land sale (after tax amount)	\$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Expenditure	\$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
IDC Calculation								
Opening Balance	\$	\$ 149.0	\$ 149.0	\$ 149.0	\$ 149.0	\$ 149.0	\$ 149.0	\$ 149.0
Current Period Spending	\$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ending Balance	\$	\$ 149.0	\$ 149.0	\$ 149.0	\$ 149.0	\$ 149.0	\$ 149.0	\$ 149.0
LTSA Costs								
	\$	\$ 16.1	\$ 19.9	\$ 20.7	\$ 20.6	\$ 21.4	\$ 22.5	\$ 22.0
Calculation of Cash Margin								
Calculated NRR	\$	\$ 187.0	\$ 187.8	\$ 188.5	\$ 189.3	\$ 190.2	\$ 191.0	\$ 191.8
Imputed Net Revenue	\$	\$ 22.8	\$ 45.5	\$ 45.3	\$ 44.4	\$ 51.9	\$ 54.4	\$ 38.6
Contingency Support Payment	\$	\$ 164.2	\$ 142.3	\$ 143.2	\$ 145.0	\$ 138.3	\$ 136.6	\$ 153.2
Revenues								
Actual Gross Market Revenues	\$	\$ 171.9	\$ 271.0	\$ 281.6	\$ 268.2	\$ 296.1	\$ 332.9	\$ 290.9
Contingency Support Payments (CSP)	\$	\$ 164.2	\$ 142.3	\$ 143.2	\$ 145.0	\$ 138.3	\$ 136.6	\$ 153.2
Revenue Sharing Payment (RSP)								
Total Revenues	\$	\$ 336.2	\$ 413.3	\$ 424.9	\$ 413.2	\$ 434.4	\$ 469.5	\$ 444.1
Expenses								
Fuel Costs	\$	\$ 139.8	\$ 213.1	\$ 223.1	\$ 213.0	\$ 233.8	\$ 264.3	\$ 236.2
Variable Energy Costs	\$	\$ 3.5	\$ 5.4	\$ 5.6	\$ 5.3	\$ 5.8	\$ 6.7	\$ 5.9
Fixed Costs	\$	\$ 25.0	\$ 26.2	\$ 26.8	\$ 27.1	\$ 27.6	\$ 28.3	\$ 28.4
Total Expenses	\$	\$ 168.3	\$ 244.7	\$ 255.5	\$ 245.4	\$ 267.3	\$ 299.3	\$ 270.5
EBITDA / Cash Margin	\$	\$ 167.8	\$ 168.6	\$ 169.4	\$ 167.8	\$ 167.1	\$ 170.3	\$ 173.5
Income Tax Calculations								
Capital Taxes	\$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Taxable Income	\$	\$ 167.83	\$ 168.60	\$ 169.39	\$ 167.81	\$ 167.13	\$ 170.26	\$ 173.51
Cash Margin (EBITDA)	\$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ont Capital Taxes	\$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capitalized Interest	\$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA Allowance	\$	\$ 114.47	\$ 105.55	\$ 96.09	\$ 85.72	\$ 79.49	\$ 73.60	\$ 66.95
Taxable Income	\$	\$ 53.36	\$ 62.85	\$ 73.30	\$ 81.08	\$ 87.64	\$ 96.67	\$ 106.55
Tax Pooling								
Opening Balance	\$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Additions	\$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Loss Realized	\$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Closing Balance	\$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Taxable Income after Pooling		53.36	62.85	73.30	81.08	87.64	96.67	106.55
Tax Rate		25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Cash Taxes		13.34	15.66	18.33	20.27	21.91	24.17	26.64
Unlevered Free Cash Flow								
Cash Margin	\$	\$ 167.8	\$ 168.6	\$ 169.4	\$ 167.8	\$ 167.1	\$ 170.3	\$ 173.5
- Capital Expenditure	\$	\$ 16.1	\$ 19.9	\$ 20.7	\$ 20.6	\$ 21.4	\$ 22.5	\$ 22.0
- Cash Taxes + Capital Taxes	\$	\$ 13.3	\$ 15.7	\$ 18.3	\$ 20.3	\$ 21.9	\$ 24.2	\$ 26.6
Net Cash Flow After Tax	\$	\$ 138.4	\$ 133.0	\$ 130.3	\$ 126.9	\$ 123.8	\$ 123.6	\$ 124.9
NPV								
Discount Rate								

Highly Confidential: This record contains information provided to the OPA that is designated by the OPA as highly confidential and it and all resulting work product is intended, for the purpose of section 17 of the *Freedom of Information and Protection of Privacy Act*, to be a record that reveals a trade secret or scientific, technical, commercial, financial or labour relations information, supplied in confidence implicitly or explicitly, the disclosure of which could reasonably be expected to prejudice significantly the competitive position or interfere significantly with the contractual or other negotiations of a person, group of persons, or organization."



~~February~~January , 2011

Mr. Colin Andersen
Chief Executive Officer
Ontario Power Authority
Suite 1600
120 Adelaide Street West
Toronto, ON M5H 1T1

Dear Mr. Andersen,

Re: Kitchener-Waterloo-Cambridge Area New Supply

I write in connection with my authority as the Minister of Energy in order to exercise the statutory power of ministerial direction that I have in respect of the Ontario Power Authority (the "OPA") under section 25.32 of the *Electricity Act, 1998* (the "Act").

Background

The 2007 proposed Integrated Power System Plan forecasted need for a gas plant in Kitchener-Waterloo-Cambridge (the "KWC Area"). Building on the needs identified in the 2007 plan, in our Long Term Energy Plan, the Government identified the value of natural gas generation for peak needs where it can address local and system reliability issues. The Government confirmed the continued need for a clean, modern natural gas-fired plant in the KWC Area.

The Government has determined with input and advice from the OPA that it is prudent and necessary to build a simple cycle natural gas-fired power plant that has contract capacity of approximately 450 up to 500 MW for deployment in the KWC Area by the spring of 2015 (the "KWC Project") to meet local system needs. In the KWC Area, demand is growing at more than twice the provincial rate.

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Pursuant to a direction dated August 18, 2008 (the "2008 Direction"), the OPA procured from TransCanada Energy Ltd. ("TransCanada") the design, construction and operation of a 900MW natural gas generating station in Oakville (the "Oakville Generating Station"). On October 7, 2010, I announced that the Oakville Generating Station would not proceed as changes in demand and supply have made the Oakville Generating station no longer necessary.

In light of the foregoing, together with the OPA, the Government has discussed with TransCanada the termination of the contract for the Oakville Generating Station and a project that would meet the KWC Area supply requirement.

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Direction

Therefore, pursuant to my authority under subsection 25.32(4) of the Act, I direct the OPA to assume responsibility for discussions with TransCanada to procure a gas plant with contract

capacity of 450MW in the KWC Area to address the reliability needs described above, including the negotiation and execution of an interim implementation agreement to address the costs of and work on the KWC Project before a definitive agreement is executed. To best protect electricity rate payers, the OPA should, if it deems appropriate, combine such negotiations with negotiations in respect of the mutual termination of the contract for the Oakville Generating Station, looking for opportunities to reprofile investments already made by TransCanada and minimize overall costs.

It is anticipated that the OPA will complete the contract for the KWC Project by June 30, 2011 having regard to a reasonable balance of risk for TransCanada, the mutual termination of the contract for the Oakville Generation Project and the needs and interests of Ontario electricity customers. It is further expected that the contract provide for an in service date of no later than spring of 2015 to meet the demand needs of the community.

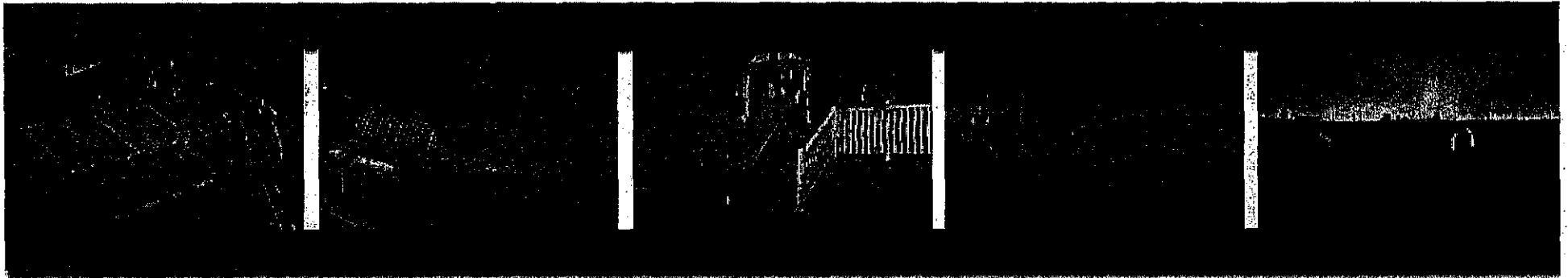
As with all electricity generation projects procured by the OPA, the KWC Project shall be required to undergo all applicable municipal and environmental approvals to ensure it meets or exceeds regulated standards, including those for air quality, noise, odour and vibration. Any duty to consult and accommodate Aboriginal communities on the KWC Project must be fulfilled.

For greater clarity, the OPA is not required by this direction to enter into a contract with TransCanada if it is unable to reach agreement with TransCanada on terms that satisfy the requirements of this direction and fully consider rate payers' interests. In such event, the OPA may seek to recover its costs, if any, relating to the implementation agreement in accordance with its statutory authority.

I further direct that the 2008 Direction is hereby revoked.

This direction shall be effective and binding as of the date hereof.

Brad Duguid
Minister of Energy



Winding Up of the Oakville Generating Station (OGS) Contract

Board of Directors

December 9, 2010

Privileged and Confidential – Prepared in Contemplation of Litigation

OGS Update

- We have met TCE twice since the last Board update.
- Discussions surrounding the “winding-up” of the Contract have been productive.
- TCE claims that it has nearly concluded a settlement agreement with Ford.
- TCE is in the process of finalizing a settlement for legal costs with the Town of Oakville.

Letter of Intent

- TCE indicated to us that its Treasury Department needed a letter from the OPA that stated that there was a replacement project to which the OGS costs could be applied so that it didn't have to write them off at year end.
- We are in receipt of a draft of this letter (now called an MOU), however, the letter proposed by TCE goes well beyond stating that there is a future project, and purports to include settlement terms.
- We will be discussing this letter at tomorrow's meeting with TCE.

Turbine Cancellation Indemnity

- TCE wants the OPA to provide an indemnity to it in the event that the Turbine Supply Agreement (“TSA”) with Mitsubishi is cancelled.
- We have not yet seen the proposed indemnity agreement.
- We have still not seen the TSA for which we are to provide an indemnity. Mitsubishi only wants to provide a redacted copy of the TSA to our counsel.

Turbine Cancellation Indemnity

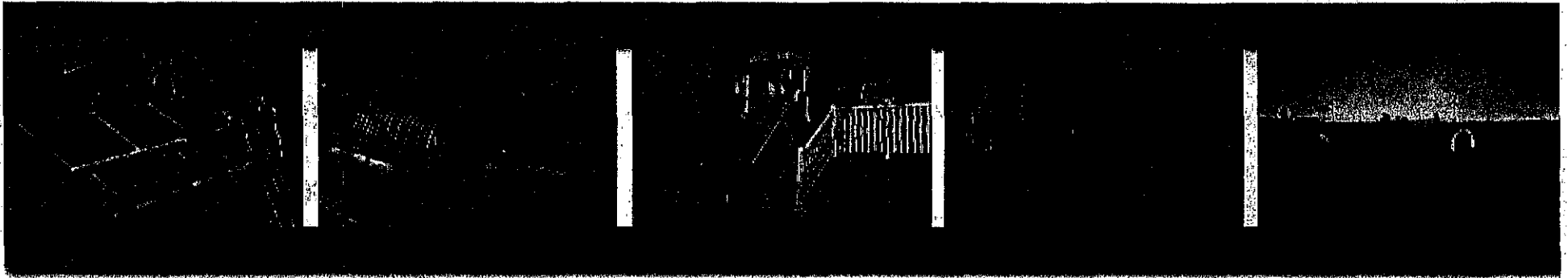
- We will be discussing this proposed indemnity at tomorrow's meeting.
- Counsel has advised that there is risk in providing an indemnity for an agreement that's not been disclosed to us in its entirety.

Replacement Generation Project

- TCE is leaning towards development of the Boxwood site next to the Toyota plant.
- It is waiting for government authorization to contact the City of Cambridge about the proposed project.
- Tx connection will be longer than 2 km, so Leave to Construction from the OEB will be required. This may take some time to accomplish.
- We want a targeted COD of late-Q1 2014.

Next Steps

- Continue discussions with TCE to achieve the following:
 - Decision with respect to gas turbines (i.e., conversion to fast start or cancellation of contract)
 - Type and Capacity of replacement facility
 - Location of replacement facility
 - Letter of Intent or Memorandum of Understanding by mid-January 2011
 - Disposition of the Indemnity for Turbine Cancellation



Cancellation of Oakville Generating Station (OGS)

Board of Directors

November 24, 2010

Privileged and Confidential – Prepared in Contemplation of Litigation

OGS Update

- Through competitive RFP, Osler, Hoskin & Harcourt LLP retained as litigation counsel
- SMS Energy-Engineering providing technical consulting services
- Kick-off meeting between OPA and TransCanada Energy (TCE) occurred on October 15, 2010
- Discussions surrounding “wind-up” of the Contract have been productive
- TCE claims that its contract with Ford requires it to continue to pursue legal actions against Town of Oakville

Mutual Termination of SWGTA Contract

- October 7th OPA letter to TCE expresses OPA's desire to begin negotiations to reach mutual agreement to terminate the Contract
- The parties could mutually agree to terminate the Contract ("mutually agreeable termination")
- Termination discharges a contract as to future performance but certain existing contractual rights and obligations survive (e.g., exclusion of indirect or consequential damages, confidentiality covenants)

Mutual Termination of SWGTA Contract

- The terms of the mutual agreement to terminate, including any indemnity or reimbursement of costs or damages, would be subject to negotiation
- As a minimum, the OPA may have to reimburse TCE for costs that are reasonably incurred on the project up to the point in time of the termination
- TCE's preliminary estimate of costs incurred on the project to the end of October is ~\$74 MM
- If the turbine supply contract were to be terminated by end of November, cost estimate increases to ~\$145 MM
- TCE's position is that it needs to be kept whole on the "financial value of the Contract" which includes its anticipated profits
- Preliminary estimate of potential liability for lost profits is ~\$450 MM
- Preliminary estimate of potential total liability (including lost profits) is in the range of \$600 MM to \$700 MM

Repudiation of SWGTA Contract

- November 8th TCE letter to OPA asserts, and purports to confirm TCE's acceptance of, OPA's alleged repudiation of the Contract
- Repudiation occurs when it is evident from a party's words or conduct that they are unwilling or unable to perform the contract according to its terms
- OPA's repudiation of the Contract would discharge TCE from further performance of the Contract and as a result:
 - Permits TCE to recover the Completion and Performance Security
 - allows TCE to immediately sue for damages for loss of the benefit of the Contract without any obligation to negotiate further with the OPA on the terms of a mutual termination
- November 11th OPA letter to TCE refutes OPA's alleged repudiation of the Contract

TCE Concerns

- Gas Turbines
 - 2 Mitsubishi 501GAC Combustion Turbine Generators have been ordered
 - Cost ~\$190 MM and TCE has expended ~\$42 MM (to end of October)
 - Cancellation fee of 55% of turbine price if contract is terminated by year-end (and increase to 75% in January)
- Disclosure Requirements
 - If reimbursement of costs not resolved by year-end TCE will need to report a write down on the project
- Alternate Opportunity in Ontario
 - TCE's preference is to move OGS to another location
- TCE requires resolution on costs or some form of binding commitment on alternate opportunity by year-end

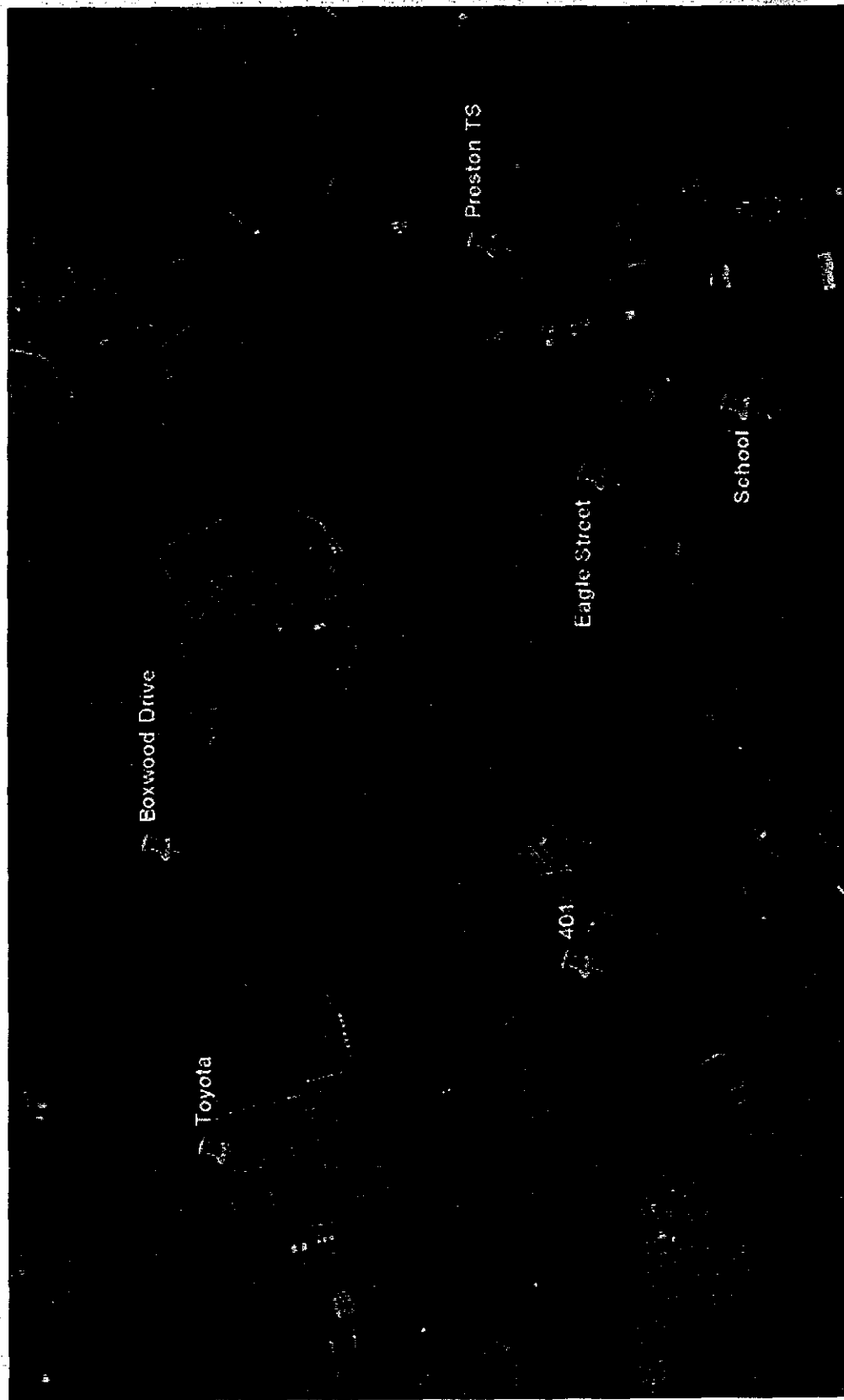
Government Participation

- Premier's Office staff advised TCE that Ontario has other needs for gas-fired generation
- OPA staff working closely with Government staff
- OPA staff advised that Province would be pleased if the following or a combination of the following criteria were achieved:
 - Negotiated solution does not exceed \$1.2 B
 - No cheque issued to TCE
 - Good location for replacement facility (i.e. rural and meets setback requirements of Bill 8)
 - Per unit cost close to that of similar generation technology
 - Capacity of replacement facility similar to that identified in IPSP and LTEP

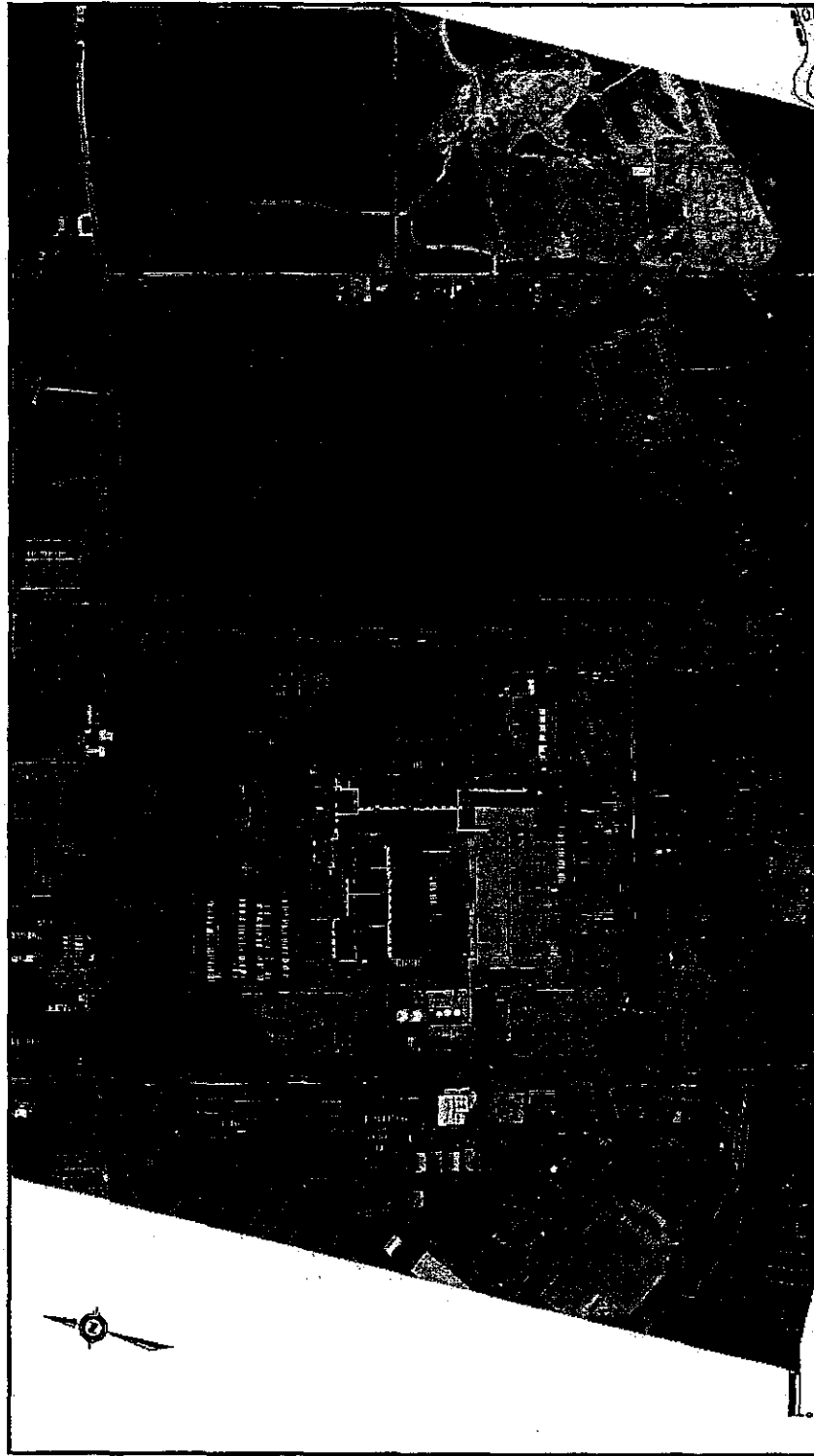
Replacement Facility Option

- IPSP identified need for 450 MW peaking facility in Kitchener-Waterloo area
- Higher priority than SWGTA
- TCE has identified several possible locations in Cambridge
- Discussions have focused on Boxwood Drive location
 - Owned by the municipality
 - Zoned for industrial
 - Rural location
 - Adjacent to Toyota facility
- TCE conducted focus group in Cambridge on November 16, 2010

Potential Cambridge Locations



Boxwood Drive



BOXWOOD INDUSTRIAL SUBDIVISION SERVICING CLASS ENVIRONMENTAL ASSESSMENT, CITY OF CAMBRIDGE



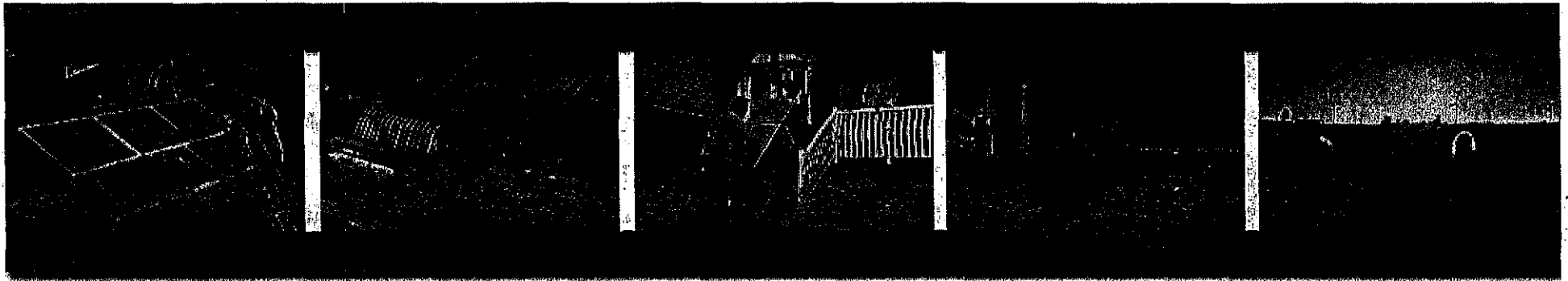
EXHIBIT 1: PROJECT LOCATION AND EXISTING CONDITIONS

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.



Next Steps

- Continue discussions with TCE to achieve the following:
 - Implement a confidentiality agreement to acknowledge confidential and without prejudice nature of ongoing discussions
 - Decision with respect to gas turbines (i.e., conversion to fast start or cancellation of contract)
 - Type and Capacity of replacement facility
 - Location of replacement facility
 - Letter of Intent or Memorandum of Understanding by December 31



Winding Up of the Oakville Generating Station (OGS) Contract

Board of Directors

February 24, 2011

Privileged and Confidential – Prepared in Contemplation of Litigation

OGS Update

- OPA/TransCanada Energy (TCE) negotiating team has met 5 times since January's Board update.
- Discussions continue to be productive with respect to the "winding-up" of the Contract.
- TCE planning to deliver proposal, implementation agreement and letter to Colin over next few weeks.
- We have completed our due diligence, as much as we can at this point until site is chosen, on capital costs. Still contain large risk premiums.
- We are doing our own due diligence on commercial factors and hiring third party expert.
- OPA continues to work with the Ministry of Energy on the drafting of the Directive to authorize negotiations with TCE for the replacement project.
- Ministry warming up to the idea of including language that references the inclusion of the financial value of the OGS Contract into the net revenue requirement of the replacement project.

Next Steps

- Continue discussions with TCE to achieve the following:
 - Counter offer based on commercial review;
 - Finalize technical design requirements;
 - Siting of replacement facility;
 - Negotiation and execution of the Implementation Agreement;
 - TCE plan for handling First Nations issues.

Inform MO/PO and get buy in to disclose and move forward.

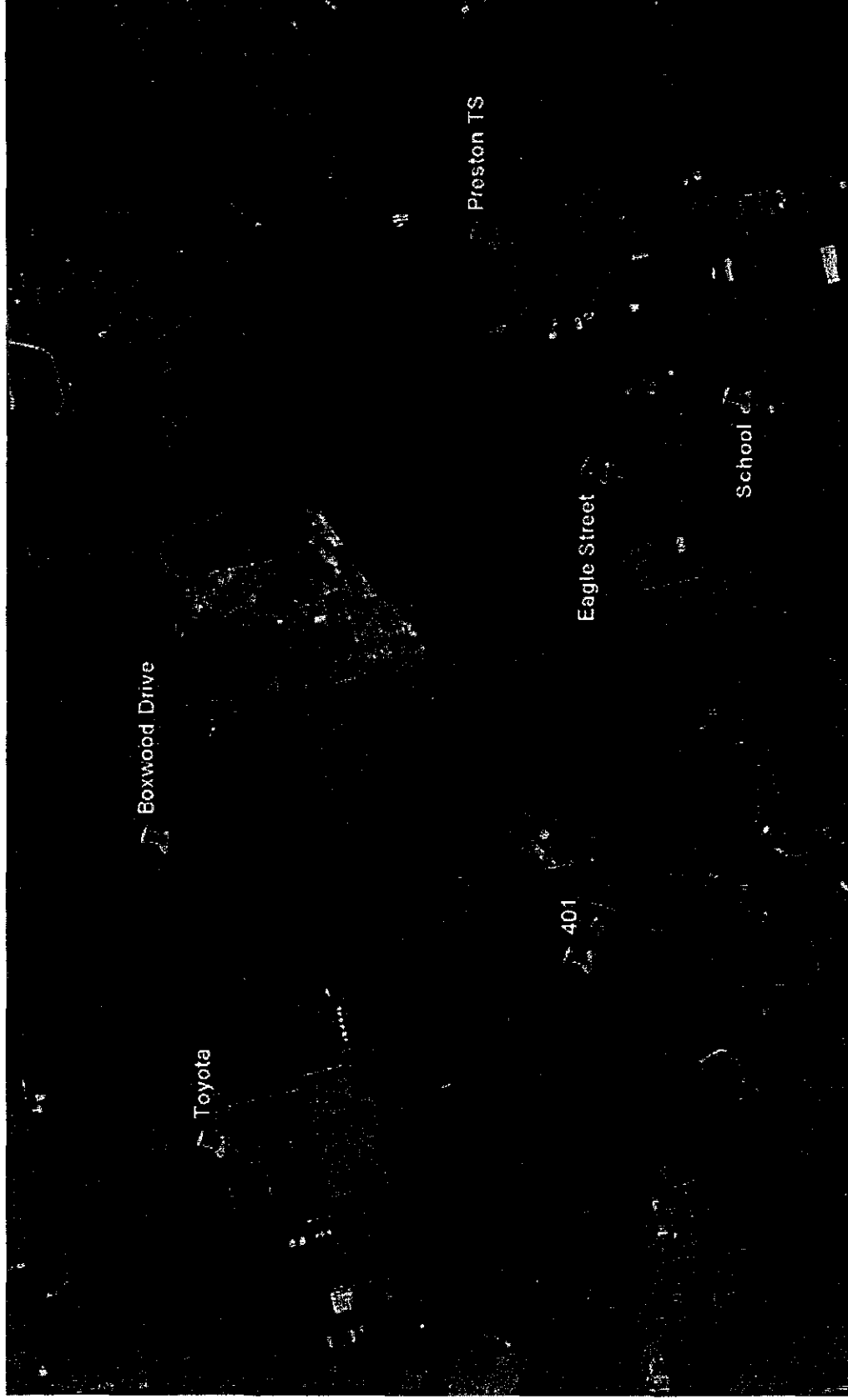
OGS Update

- Excerpt from TCE's 2010 Annual Report:
 - In September 2009, the OPA awarded TransCanada a 20-year Clean Energy Supply contract to build, own and operate a 900 MW power generating station in Oakville, Ontario. TransCanada expected to invest approximately \$1.2 billion in the natural gas-fired, combined-cycle plant. In October 2010, the Government of Ontario announced that it would not proceed with the Oakville generating station. TransCanada is negotiating a settlement with the OPA that would terminate the Clean Energy Supply contract and compensate TransCanada for the economic consequences associated with the contract's termination.

Replacement Generation Project

- TCE still leaning toward development of the Boxwood Industrial Park site.
- TCE and OPA continue to wait for Ministry of Energy authorization to contact the City of Cambridge about the proposed project.
- The continued delay in contacting the City of Cambridge is becoming extremely problematic as word is starting to leak out about the replacement project.
- **“Focus is on Cambridge site for power plant”**
headline of Toronto Star article dated February 18th

Boxwood Site



Aboriginal Relations and TransCanada

- TransCanada has begun high level consultation with Aboriginal communities in the Kitchener Waterloo Cambridge area, as they await an announcement from the OPA with respect to the project.
- TransCanada has engaged the elected officials and community at the Mississauga of New Credit, as well as the Elected Council and Confederacy Chiefs at Six Nations of the Grand River on the KWC project.
- In 2008, TransCanada entered into a community agreement with the Mississauga of New Credit First Nation to deal with projects in their territory. There continues to be a positive working relationship between the community and TransCanada.
- TransCanada recently offered to enter into community agreements with each of the Elected Council and Confederacy Chiefs as it relates to TransCanada's operations and projects throughout their traditional territory. Both groups have expressed openness to developing such an agreement.

Mitsubishi (MPS) Gas Turbines (GT's)

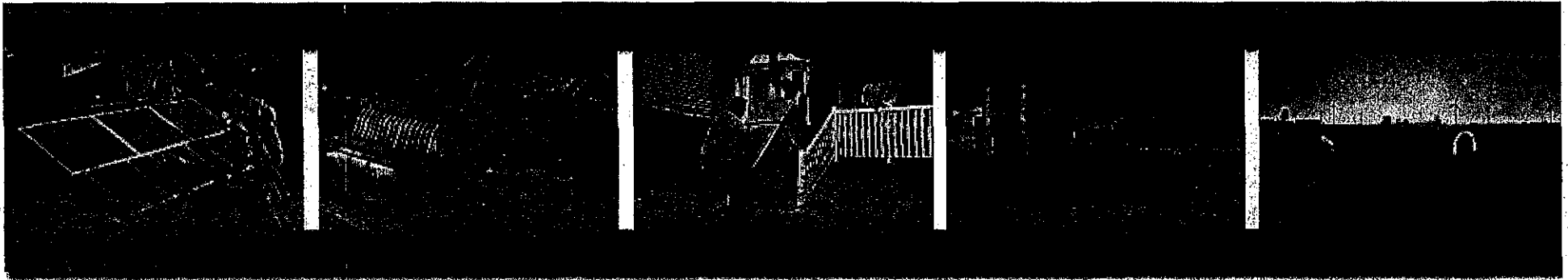
- GT's originally purchased for OGS were designed for a Combined Cycle generation plant.
- Fall 2010 TCE suspended MPS contract until January 31, 2011.
- January 28, 2011 TCE released MPS from suspension and directed them to commence work on converting the GT's to Fast Start.
- Fast Start option will meet the requirements of a Peaking generation plant in Cambridge.
- Fixed the suspension costs that TCE had been incurring under terms of MPS ESA.

Price of Peaking Plant Conversion

- The incremental estimated price for the conversion remains \$33 MM (US) +/- 25%.
- MPS revised the price to convert the GT's to Fast Start from \$3 MM to \$6 MM.
- MPS revised the price to convert from Combined Cycle to Simple Cycle from \$15 MM to \$12 MM.
- Delayed delivery and suspension costs remain \$15 MM.
- TCE expects to receive MPS final price for Peaking plant conversion on February 28, 2011 and price is not to exceed 125% of the estimated price (US \$41.25 MM).
- If the final price is higher the OPA will pass the risk onto TCE in the commercial negotiations since TCE believes they have a cap on the price.

Cambridge Capital Costs

- TCE has provided the OPA with its estimated capital cost for Cambridge.
- OPA review has concluded that TCE has included large premiums for risk.
- Site uncertainty has prevented TCE from firming up many of its capital costs.



Winding Up of the Oakville Generating Station (OGS) Contract

Board of Directors

January 24, 2011

Privileged and Confidential – Prepared in Contemplation of Litigation

Implementation Agreement

- TCE indicated that it wants a project implementation agreement to cover its costs for the replacement project in Cambridge (“Implementation Agreement”).
- The Implementation Agreement will set out the approach for developing the final project agreement between TCE and the OPA.
- It will also contain a project budget and TCE wants the OPA to indemnify it for its costs to develop if no agreement is concluded (“break fee”).

Implementation Agreement

- Deadline for execution is 31 January 2011.
- TCE is drafting it based on the agreement used for Portlands Energy Centre (“PEC”).
- We are scheduled to see a first draft of this agreement today.

Ministry Directive

- We are working with the Ministry on the drafting of a Directive to authorize negotiations with TCE for the replacement plant.
- We need this Directive to execute the Implementation Agreement.
- Ministry wants the Directive to be silent on including the financial value of the OGS Contract into any net revenue requirement for the replacement facility.

Turbine Cancellation Indemnity

- TCE still wants the OPA to provide an indemnity to it in the event that the Equipment Supply Agreement (“ESA”) with Mitsubishi is cancelled.
- Our legal advice is that the OPA has no power to provide any such indemnity, even if it were directed to do so by the Minister.
- When this first arose in December, we provided a letter that TCE could rely upon to sue the OPA for the cancellation fee in the event that the ESA is cancelled.

Turbine Cancellation Indemnity

- We very likely will need to do the same thing again.
- We cannot contract for something we don't have the power to do.

Fast Start Conversion

- It has been determined that the replacement plant will be a peaking generation plant with a capacity of 450 MW.
- The two (2) gas turbines (“GT”) purchased and intended for the Oakville GS are Mitsubishi Power Systems (“MPS”) M501GAC machines. These have a start time of 43 minutes.

Fast Start Conversion

- The 43 minute start up time is too slow for a peaking generation plant, which ideally ought to be within 10 minutes, but has to be within 30 minutes to qualify for the 30-minute Operating Reserve (“OR”) that the IESO has.
- It is highly desirable to use the already-purchased GTs in order to minimize the cost to the ratepayer.
- The two (2) M501GAC GT can be converted to start faster, i.e., M501GAC Fast Start GTs. The faster start time is 18 minutes. There is an incremental cost involved in doing this.

GT Technical Analysis

- We have reviewed certain technical information about the M501GAC and M501GAC Fast Start GT provided by TCE and MPS.
- Our technical expert retained for this file confirms that original M501GAC cannot be de-rated, or otherwise modified, to start faster to qualify the GT for 30-minute OR and still achieve emissions of 15 ppm Nox.
- Consequently, to re-use the GTs we need to have TCE purchase the Fast Start conversion package.

Price of Fast Start Conversion

- The incremental price for this conversion is estimated at \$33 million (US).
- The conversion of the GTs is only \$3 million.
- Conversion from combined-cycle to simple cycle for a peaking plant is \$15 million.
- MPS has tacked on an additional \$15 million for delayed delivery and suspension costs.

Price of Fast Start Conversion

- The incremental price for GT fast start conversion and simple cycle conversion look reasonable.
- We do not agree on why the delay and suspension costs amount to \$15 million and we will attempt to have this substantiated or excluded from any negotiated NRR or break fee.
- MPS has tacked on an additional \$15 million for delayed delivery and suspension costs.

Price of Fast Start Conversion

- The incremental price for this conversion is estimated at \$33 million (US).
- MPS indicated to TCE that the final price will be no more than 25% higher than this estimated price. The wording of this not-to-exceed price guarantee from MPS to TCE is not the most comforting, as it is somewhat conditional.
- We will in any event pass this risk on to TCE in the commercial negotiations since they believe they have a cap on the price.

Next Steps

- Continue discussions with TCE to achieve the following:
 - Agreement to proceed with fast-start conversion proposal for the GTs so that they can be reused;
 - Location of replacement facility;
 - Execution of the Implementation Agreement;
 - Disposition of the Indemnity for Turbine Cancellation;
 - TCE plan for handling First Nations issues.



120 Adelaide Street West
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Toronto, Ontario M5H 1T1
T 416-967-7474
F 416-967-1947
www.powerauthority.on.ca

October 7, 2010

TransCanada Energy Ltd.
450-1st Street
Calgary, AB T2P 5H1

Attn: Alex Pourbaix,
President,
Energy and Oil Pipelines

Dear Mr. Pourbaix :

Re: Southwest GTA Clean Energy Supply Contract (the "Contract") between TransCanada Energy Ltd. and Ontario Power Authority (the "OPA") dated October 9, 2009

As you are no doubt aware, the Minister of Energy today announced that your Oakville gas plant will not proceed. This announcement is supported by the OPA's planning analysis of the current circumstances in southwest GTA.

The OPA will not proceed with the Contract. As a result of this, the OPA acknowledges that you are entitled to your reasonable damages from the OPA, including the anticipated financial value of the Contract. We would like to begin negotiations with you to reach mutual agreement to terminate the Contract.

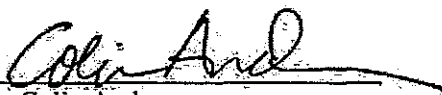
Given Ontario's ongoing need for power generation projects and your desire to generate power in Ontario, we wish to work with you to identify other projects and the extent to which such projects may compensate you for termination of the Contract while appropriately protecting the interests of ratepayers.

You are hereby directed to cease all further work and activities in connection with the Facility (as defined in the Contract), other than anything that may be reasonably necessary in the circumstances to bring such work or activities to a conclusion.

We undertake that we will not disclose this letter without giving you prior notice and we request that you do the same.

Sincerely,

ONTARIO POWER AUTHORITY

Per: 
Name: Colin Andersen
Title: Chief Executive Officer

TCE Draft – January 24, 2011

WITH PREJUDICE

IMPLEMENTATION AGREEMENT

between

TRANSCANADA ENERGY LTD.

and

ONTARIO POWER AUTHORITY

This IMPLEMENTATION AGREEMENT (the "**Agreement**"), effective as of ●, 2011, is by and between (a) TransCanada Energy Ltd. ("**TCE**"), a Canadian corporation, and (b) the Ontario Power Authority, a statutory corporation established under Part II.1 and Part II.2 of the *Electricity Act, 1998* (Ontario) (the "**OPA**"), which are sometimes collectively referred to herein as the "**Parties**" or singularly as a "**Party**".

WHEREAS the OPA and TCE executed the Southwest GTA Clean Energy Supply (CES) Contract (the "**Original Contract**") dated October 9, 2009 for a power generation facility (the "**Facility**") to be built and operated by TCE in Oakville, Ontario;

AND WHEREAS TCE had entered into contracts and expended funds to develop the Facility;

AND WHEREAS by letter dated October 7, 2010, the OPA advised TCE that it would not proceed with the Original Contract and directed TCE to cease all further work and activities in connection with the Facility;

AND WHEREAS the OPA and TCE entered into a Confidentiality Agreement dated effective as of October 8, 2010 (the "**Confidentiality Agreement**") (a copy of which is attached as Exhibit I);

AND WHEREAS in accordance with the OPA's letter of October 7, 2010, the OPA and TCE have been working cooperatively to identify other generation projects;

AND WHEREAS in its 18-Month Outlook Update (December 3, 2010), the Independent Electricity System Operator ("**IESO**") confirmed the need for a peaking natural gas-fired power plant in the Kitchener-Waterloo-Cambridge area;

AND WHEREAS the OPA and TCE have been discussing the potential development of a simple cycle natural gas-fired power generation project in the Kitchener-Waterloo-Cambridge area having an approximate Season 3 (as defined in the Original Contract) contract capacity of 450 MW (the "**Potential Project**");

AND WHEREAS the OPA has delivered to TCE and MPS Canada Inc. an Acknowledgement dated December 17, 2010 and has delivered to TCE an Acknowledgement dated • (copies of which are attached as Exhibit II), and may at a future date designate specified information as confidential or highly confidential for the purposes of Section 17 of the *Freedom of Information and Protection of Privacy Act*

and provide additional acknowledgements of such designations (existing and future acknowledgements collectively referred to as the "Acknowledgements");

AND WHEREAS the OPA and TCE entered into a letter agreement dated December 21, 2010 regarding the Potential Project (the "MOU") (a copy of which is attached as Exhibit III);

AND WHEREAS on ●, 2011, the Minister of Energy of Ontario issued a directive (the "Directive") to the OPA (a copy of which is attached as Exhibit IV) to continue negotiations with TCE related to the Potential Project, with the view to concluding and executing a definitive contract for the Potential Project by June, 2011, which will address the system needs described above;

[NTD: TCE and the OPA to discuss what the expectation is *vis a vis* the timing and content of the Directive.]

AND WHEREAS the OPA and TCE desire to enter into an agreement setting forth the process for expediting TCE's development and construction of the Potential Project prior to finalizing the Contract (as defined herein);

NOW THEREFORE, in consideration of the agreements, premises and mutual covenants contained herein and other good and valuable consideration (the receipt and sufficiency of which are hereby acknowledged), TCE and the OPA agree as follows:

ARTICLE I TERM OF AGREEMENT

- 1.1 Unless extended by mutual written agreement of the Parties, and subject to earlier termination as set forth in Sections 1.2, the term of this Agreement (the "Term") shall be from the effective date hereof until the earlier of (i) 5:00 PM (Toronto time) on June 30, 2011 and (ii) execution and delivery by the Parties of the Contract.
- 1.2 This Agreement may be terminated at any time by mutual agreement of the Parties.
- 1.3 Notwithstanding termination of this Agreement by effluxion of time or otherwise as provided herein, the provisions of Sections 2.3, 2.4, 2.5, 3.3(a), 3.3(b), 6.1 and 6.2 and Articles V and VII shall survive if the Contract is not executed and delivered by the Parties; whereas if the Contract is executed and delivered by the Parties, only Sections 6.1 and 6.2 shall survive, unless otherwise set forth in the Contract.

ARTICLE II COMMITMENTS

- 2.1 TCE hereby covenants and agrees to proceed during the Term with the development of the Potential Project, with a target of achieving commercial operation by [December 31, 2015] and being registered and available as a dispatchable facility with the IESO by [December 31, 2015]. [NTD; to be discussed re permit risk.]
- 2.2 During the Term, the Parties covenant and agree to negotiate in good faith and to use their commercially reasonable efforts to execute an agreement (the "Contract") on the basis described in the Directive, the MOU and this Agreement for the development, construction and operation of the Potential Project and on terms and conditions acceptable to each of the Parties, acting reasonably. The Parties further covenant and agree that upon the execution and delivery of the

Contract, they will terminate the Original Contract. For greater certainty and without limiting the generality of the foregoing, the Parties acknowledge and agree that:

- (a) The Potential Project shall meet the Technical Design Requirements set out in Schedule A;
- (b) The Contract shall be based on the form of the Northern York Region Peaking Generation Contract (the "**NYR Contract**") and shall include the additional terms set out in Schedule B and such other terms as may be required by this Agreement;
- (c) The process for the good faith negotiations is set out in Schedule C;

provided that if, after negotiating in good faith, the Parties cannot agree on the appropriate amount to be the "Net Revenue Requirement", the O&M payment or any other variable to be included in Exhibit B of the Contract or any changes that should be made to the NYR Contract, the Parties shall be deemed to have negotiated the terms of the Contract in good faith and used commercially reasonable efforts.

2.3 In the event that the Parties do not enter into the Contract prior to the end of the Term, unless such event is the result of TCE not having negotiated the terms of the Contract in good faith or TCE not having used its commercially reasonable efforts to execute and deliver a Contract in the form that was negotiated and agreed by the Parties' respective negotiating teams, subject to Section 3.1(a), the OPA hereby indemnifies and holds TCE harmless against, and agrees to reimburse TCE for, all costs and expenses TCE reasonably incurs in undertaking its obligations pursuant to this Agreement as set forth in Schedule D hereto (as such Schedule may be revised from time to time in accordance with Section 3.1, all as more particularly described in Article III hereof), except that TCE shall not be entitled to indemnification for any particular costs and expenses incurred in terminating any commitments included in Schedule D to the extent that TCE has not used its commercially reasonable efforts to mitigate such costs and expenses following the end of the Term. At the request of the OPA, TCE shall,

- (a) provide copies of all work product, the cost and expense for which the OPA has reimbursed TCE or its affiliates pursuant to the indemnity herein (the "**Indemnified Work Product**");
- (b) grant to the OPA a license to use that portion of the Indemnified Work Product that does not constitute confidential information of TCE or any third party or is not otherwise proprietary with respect to the Potential Project;
- (c) upon the future productive use by TCE of any portion of the Indemnified Work Product, reimburse the OPA for the indemnified cost related to that portion of the Indemnified Work Product; and
- (d) to the extent that Indemnified Tangible Goods (as defined below) are assignable, transfer, assign or deliver Indemnified Tangible Goods to the OPA, without further liability of the OPA save and except for its assumption of any liabilities associated with such Indemnified Tangible Goods after the date of such transfer, assignment or delivery; for the purposes hereof "**Indemnified Tangible Goods**" includes TCE's or its affiliates' right, title and interest in and to any tangible goods, materials and equipment, the costs and expenses relating to which the OPA has reimbursed TCE or its affiliates pursuant to the indemnity herein.

For greater certainty, the Parties acknowledge and agree that (A) there is no intention that pursuant hereto TCE would transfer to the OPA any real property, intellectual property, processes, copyright, licences, permits or approvals or confidential proprietary information and work product; and (B) the OPA's obligation to indemnify TCE shall not exceed the aggregate of the Cap Amount, as hereafter defined.

The OPA also acknowledges that the Indemnified Work Product and Indemnified Tangible Goods are being prepared specifically for TCE as part of the Potential Project, and that they are not intended or represented to be suitable for reuse by the OPA in respect of any other project or for any other purpose. The transfer, assignment or delivery of the Indemnified Work Product and Indemnified Tangible Goods is made without any representation or warranty by TCE or the provider of the Indemnified Work Product or Indemnified Tangible Goods, including as to fitness for use, accuracy, quality or merchantability. Any use thereof by the OPA will be without any representation or warranty by TCE or the provider of the Indemnified Work Product or Indemnified Tangible Goods and at the OPA's sole risk and without liability or legal recourse to TCE or the provider of the Indemnified Work Product or Indemnified Tangible Goods.

- 2.4 If for any reason the Parties do not enter into the Contract prior to the end of the Term, then TCE shall be entitled to pursue all of its legal remedies against the OPA for claims arising out of the decision by the OPA not to proceed with the Original Contract, including for the repudiation of the Original Contract.
- 2.5 Notwithstanding any other provision of this Agreement, neither Party shall have any obligation or liability to the other for any indirect, special or consequential damages resulting from a breach of this Agreement. For greater certainty, no provision of this Agreement will in any way affect, limit or interfere with TCE's rights and remedies in respect of the Original Contract.

ARTICLE III BREAK-UP COSTS

- 3.1 (a) Schedule D attached hereto, as it may be revised and replaced from time to time in accordance with the procedure set forth in this Article III, sets forth the aggregate and the categories of the costs and expenses relating to the Potential Project for which the OPA agrees to indemnify TCE. The OPA acknowledges and agrees that the consent or approval of the OPA is not required if the allocations of the aggregate costs amongst the categories are changed by TCE provided that the OPA's obligations to indemnify TCE for its costs and expenses in accordance with the provisions of Section 2.3 at any given point shall not exceed the aggregate dollar amount of the costs and expenses set forth in Schedule D for that point in time plus \$1,000,000 (the "**Cap Amount**").
- (b) During the Term, with respect to any individual expenditure or commitment by TCE in excess of \$1,000,000 for which the OPA may be liable pursuant to Section 2.3, TCE shall provide written notice (as provided in Section 7.1 hereof) together with a brief explanation of the nature of the expenditure or commitment within five (5) Business Days of TCE having executed a written agreement to incur such expenditure. The OPA acknowledges that TCE has already made the expenditures or commitments identified in Schedule D as non recoverable costs for the Facility or owing to MPS Canada, Inc. and that no written notice of such expenditures or commitments is required.

(c) During the Term, if there occurs

- (i) any change in an expenditure or commitment provided for on Schedule D, or
- (ii) any new expenditure not included on Schedule D which TCE would intend to claim pursuant to Section 2.3,

which change or new expenditure would cause the total potential liability of the OPA under Section 2.3 to exceed the aggregate amount set forth in Schedule D at that point in time by an amount greater than \$1,000,000 and provided that such change or new expenditure is reasonably required to maintain the schedule to achieve the commercial operation milestone dates set forth in Section 2.1, TCE shall seek the consent of the OPA to such change or new expenditure, as set forth in Section 3.1(d) hereof.

- (d) In case of the occurrence of any event described in Section 3.1(c), TCE shall propose a revised Schedule D reflecting such expenditure or commitment or change in expenditure or commitment, together with a brief explanation thereof, including an explanation as to the impact on achieving the commercial operation milestone dates set forth in Section 2.1 if such expenditure, commitment or change is not made, and obtain the OPA's written consent to the revision prior to incurring such expenditure or making such commitment. In the event that the OPA does not respond to such proposed revision within five (5) Business Days of receipt of notice thereof from TCE as provided above, the OPA shall be deemed to have refused its consent. If the OPA provides its written consent to such revisions, then the revised Schedule D proposed by TCE and accepted by the OPA shall become the operative Schedule D for the purposes hereof until replaced in accordance with the terms hereof.

3.2 In the event the OPA does not consent to a revision to Schedule D proposed by TCE within five (5) Business Days of receipt of notice thereof from TCE, or is deemed not to have consented, the commercial operation milestone dates set forth in Section 2.1 may be adjusted by mutual agreement of the Parties.

3.3 (a) In the event that (i) this Agreement is terminated as provided in Section 1.2, or (ii) the Parties have not executed the Contract and terminated the Original Contract prior to the end of the Term, TCE shall, within thirty (30) Business Days of such termination or the end of the Term, as the case may be, submit to the OPA an invoice for the amounts for which it claims indemnification pursuant to Section 2.3, together with reasonable documentation in support of the invoice. The OPA may, acting reasonably, request additional supporting documentation. The OPA shall notify TCE of any dispute with any amounts so claimed within fifteen (15) Business Days of receipt thereof, in which case the provisions of Article V shall apply.

(b) All amounts not subject to dispute shall be paid by the OPA to TCE within thirty (30) calendar days of the date of the invoice and all amounts settled pursuant to the dispute resolution provisions hereof shall be paid within ten (10) Business Days of their resolution. All amounts not paid when due shall bear interest from the date due hereunder to the date of payment at a rate equal to the annual rate of interest quoted by, published and commonly known as the "prime rate" of the Royal Bank of Canada at its main office in Toronto Ontario as the reference rate then in effect for interest rates on commercial demand loans made by it in Canadian dollars to its Canadian borrowers plus four percent (4%) per annum.

ARTICLE IV REPRESENTATIONS AND WARRANTIES

- 4.1 TCE represents and warrants to the OPA and acknowledges and confirms that the OPA is relying on such representations and warranties in connection with the transactions contemplated herein:
- (a) TCE is a corporation incorporated under the laws of the Canada and has the corporate power and authority to enter into and perform its obligations under this Agreement.
 - (b) The execution and delivery and performance by TCE of this Agreement and the consummation of the transactions contemplated hereby have been duly authorized by all necessary corporate action on the part of TCE.
 - (c) The execution and delivery of and performance by TCE of this Agreement:
 - (i) do not and will not (or would not with the giving of notice, the lapse of time or the happening of any other event or condition) constitute or result in a violation or breach of, or conflict with any of the terms or provisions of the constating documents or by-laws of TCE, as applicable;
 - (ii) do not and will not (or would not with the giving of notice, the lapse of time or the happening of any other event or condition) constitute or result in a breach or violation of, or conflict with or allow any other person or entity to exercise any rights under, any of the terms or provisions of any contract, agreement or instrument to which TCE is a party; and
 - (iii) do not and will not result in the violation of any applicable (x) laws, statutes, codes, ordinances, principles of common law and equity, orders, decrees, rules and regulations or (y) judicial, arbitral, administrative, ministerial, departmental and regulatory judgments, orders, writs, injunctions, decisions, and awards of any governmental entity, in each case binding on or affecting TCE.
 - (d) This Agreement has been duly executed and delivered by TCE and constitutes legal, valid and binding agreements of TCE (excluding any agreements to agree set forth in this Agreement), enforceable against it in accordance with their respective terms subject only to any limitation under applicable laws relating to (i) bankruptcy, winding-up, insolvency, arrangement, fraudulent preference and conveyance, assignment and preference and other similar laws of general application affecting creditors' rights, and (ii) the discretion that a court may exercise in the granting of equitable remedies such as specific performance and injunction.
- 4.2 The OPA represents and warrants to TCE and acknowledges and confirms that TCE is relying on such representations and warranties in connection with the transactions contemplated herein:
- (a) The OPA is a statutory corporation incorporated and existing under Parts II.1 and II.2 of the *Electricity Act, 1998* (Ontario) and has the corporate power and authority to enter into and perform its obligations under this Agreement.
 - (b) The execution and delivery of and performance by the OPA of this Agreement and the consummation of the transactions contemplated hereby have been duly authorized by all necessary corporate action on the part of the OPA.

- (c) The execution and delivery of and performance by the OPA of this Agreement:
- (i) do not and will not (or would not with the giving of notice, the lapse of time or the happening of any other event or condition) constitute or result in a violation or breach of, or conflict with any of the terms or provisions of its constating documents or by-laws;
 - (ii) do not and will not (or would not with the giving of notice, the lapse of time or the happening of any other event or condition) constitute or result in a breach or violation of, or conflict with or allow any other person or entity to exercise any rights under, any of the terms or provisions of any contract, agreement or instrument to which it is a party; and
 - (iii) do not and will not result in the violation of any applicable (x) laws, statutes, codes, ordinances, principles of common law and equity, orders, decrees, rules and regulations or (y) judicial, arbitral, administrative, ministerial, departmental and regulatory judgments, orders, writs, injunctions, decisions, and awards of any governmental entity, in each case binding on or affecting the OPA.
- (d) This Agreement has been duly executed and delivered by the OPA and constitutes legal, valid and binding agreements of the OPA (excluding any agreements to agree set forth in this Agreement), enforceable against it in accordance with their respective terms subject only to any limitation under applicable laws relating to (i) bankruptcy, winding-up, insolvency, arrangement, fraudulent preference and conveyance, assignment and preference and other similar laws of general application affecting creditors' rights, and (ii) the discretion that a court may exercise in the granting of equitable remedies such as specific performance and injunction.

[NTD: OPA to confirm that this is a "procurement contract" for the purposes of the *Electricity Act, 1998*.]

- (e) This Agreement is a "procurement contract" for the purposes of Section 25.31 of the *Electricity Act, 1998* (Ontario).

ARTICLE V DISPUTE RESOLUTION

- 5.1 If any dispute, claim, question or difference (each a "**Dispute**") arises with respect to this Agreement, including Schedule D and the amounts owing by the OPA to TCE pursuant to Section 2.3 hereof, one senior executive of TCE and one from the OPA will use their reasonable best efforts to settle the Dispute. Notwithstanding the foregoing, the Parties agree that the provisions of this Article V shall not apply to any disputes relating to the negotiation of the terms and conditions of the Contract.
- 5.2 If the Parties do not reach a solution pursuant to Section 5.1 within five (5) Business Days following receipt of the notice of the Dispute by either Party to the other, then either Party can deliver a written notice to the other Party requiring the Dispute to be finally settled by arbitration in accordance with the provisions of the *Arbitration Act, 1991* (Ontario) and the national arbitration rules of the ADR Institute of Canada, based upon the following:

- (a) The arbitration tribunal shall consist of one arbitrator appointed by mutual agreement of the Parties. In the event of failure to agree within three (3) Business Days following delivery of the written notice to arbitrate, each of the Parties to the Dispute shall designate an arm's-length third party within a further three (3) Business Days who together shall agree upon and appoint an arbitrator. In the event such third parties fail to appoint the arbitrator within three (3) Business Days after their appointment, either Party may apply to a judge of the Ontario Superior Court of Justice to appoint an arbitrator.
- (b) The arbitrator shall be instructed that time is of the essence in the arbitration proceeding and, in any event, the arbitration award must be made within fifteen (15) Business Days after the arbitrator has been appointed.

[NTD: These timelines are extremely tight. This may be limiting the pool of arbitrators to people who do not get a lot of arbitration work.]

- (c) The arbitration shall take place in Toronto, Ontario and shall be conducted in English.
- (d) The arbitration award shall be given in writing and shall be final and binding on the Parties, not subject to any appeal (other than those limited rights of appeal set forth in the *Arbitration Act, 1991* (Ontario)), and shall deal with the question of costs of arbitration and all related matters. The costs of arbitration include the arbitrators' fees and expenses, the provision of a reporter and transcripts, reasonable legal fees and reasonable costs of preparation of the Parties.
- (e) Judgment upon any award may be entered in any Court having jurisdiction or application may be made to the Court for a judicial recognition of the award or an order of enforcement, as the case may be.

- 5.3 After written notice is given to refer any Dispute to arbitration, the Parties will meet within five (5) Business Days of delivery of the notice and will negotiate in good faith any changes to these arbitration provisions or the rules of arbitration which are herein adopted, in an effort to expedite the process and otherwise ensure that the process is appropriate given the nature of the Dispute and the values at risk.

ARTICLE VI CONFIDENTIALITY, ANNOUNCEMENTS AND DEALING WITH THE OPA

- 6.1 The Parties acknowledge that this Agreement is confidential and is subject to the terms of the Confidentiality Agreement.
- 6.2 **[TCE acknowledges that the OPA is subject to the Freedom of Information and Protection of Privacy Act (Ontario) ("FIPPA") and that FIPPA applies to and governs all confidential information in the custody or control of the OPA ("FIPPA Records") and may, subject to FIPPA, require the disclosure of such FIPPA Records to third parties. TCE agrees to provide a copy of any FIPPA Records that it previously provided to the OPA if TCE continues to possess such FIPPA Records in a readily deliverable form at the time of the OPA's request. Information stored in any computer archive shall not be considered to be in a readily deliverable form. If TCE does possess such FIPPA Records in a readily deliverable form, it shall provide the same within a reasonable time after being directed to do so by the OPA. The OPA acknowledges that FIPPA Records do not include any**

document or information provided to the OPA or its representatives pursuant to the Acknowledgements. The provisions of this Section 6.2 shall prevail over, and in lieu of, any other applicable provisions in this Agreement.]

[NTD: The foregoing provision to be discussed with the OPA.]

- 6.3 No press release, public statement, announcement or other public disclosure (a "Public Statement") with respect to this Agreement, the Contract or the transactions contemplated in this Agreement may be made by either Party unless with the prior written consent and joint approval of the other Party except as may be required by law or a governmental entity. Where the Public Statement is required by law or by a governmental entity, the Party required to make the Public Statement will use its best effort to obtain the approval of the other Party as to the form, nature and extent of the disclosure.
- 6.4 Either Party shall be free to communicate, or initiate any discussions or exchanges of information, with the Ministry of Energy (Ontario) ("OME") or any other ministry of the Province of Ontario regarding any role the OME or such other ministry may have with respect to the Potential Project, including in respect of any required regulatory approvals.

ARTICLE VII MISCELLANEOUS

- 7.1 Any notice, direction or other communication (each a "Notice") given regarding the matters contemplated by this Agreement must be in writing, sent by personal delivery, courier or facsimile, along with a copy by electronic mail, and addressed:

to the OPA at:

120 Adelaide St. W.
Suite 1600
Toronto, ON M5H 1T1

Attention: •

Telephone: •

Facsimile: •

e-mail: •

with a copy to:

Osler, Hoskin & Harcourt LLP P.O. Box 50, 61st Floor
1 First Canadian Place
Toronto, ON M5X 1B8

Attention: Rocco Sebastiano

Telephone: 416-862-5859

Facsimile: 416-862-6666

e-mail: rsebastiano@osler.com

to TCE at:

Royal Bank Plaza
200 Bay Street
24th Floor, South Tower
Toronto, ON M5J 2J1

Attention: Terry Bennett, Vice-President, Power Generation Development

Telephone: 416-869-21330
Facsimile: 416-869-2056
e-mail: terry_bennett@transcanada.com

A Notice is deemed to be delivered and received (i) if sent by personal delivery, on the date of delivery if it is a Business Day and the delivery was made prior to 4:00 p.m. (Toronto time) and otherwise on the next Business Day, (ii) if sent by same-day courier service, on the date of delivery if sent on a Business Day and delivery was made prior to 4:00 p.m. (Toronto time) and otherwise on the next Business Day, (iii) if sent by overnight courier, on the next Business Day, or (iv) if sent by facsimile, on the Business Day following the date of confirmation of transmission by the originating facsimile. A Party may change its address for service from time to time by providing a Notice in accordance with the foregoing. Any subsequent Notice must be sent to the Party at its changed address. Any element of a Party's address that is not specifically changed in a Notice will be assumed not to be changed. Sending a copy of a Notice to a Party's legal counsel as contemplated above is for information purposes only and does not constitute delivery of the Notice to that Party. The failure to send a copy of a Notice by electronic mail or to legal counsel does not invalidate delivery of that Notice to a Party.

- 7.2 Time is of the essence in this Agreement.
- 7.3 The Parties intend that this Agreement will not benefit or create any right or cause of action in favour of, any person or entity, other than the Parties to this Agreement. The Parties acknowledge and agree that at the conclusion of good faith negotiations of a Contract, the approval of their respective boards of directors (in such boards' sole discretion) will be required for execution and delivery of such Contract.
- 7.4 Except as otherwise expressly provided in this Agreement, each Party shall be responsible for its own costs and expenses incurred in connection with the negotiation, execution and performance of this Agreement and the Contract.
- 7.5 This Agreement may only be amended, supplemented or otherwise modified by written agreement executed by the Parties. Subject to Section 1.3, if the Contract is executed and delivered by the Parties, the terms of the Contract shall supersede and govern over the terms of this Agreement.
- 7.6 No waiver of any of the provisions of this Agreement will constitute a waiver of any other provision (whether or not similar). No waiver will be binding unless executed in writing by the Party to be bound by the waiver. A Party's failure or delay in exercising any right under this Agreement will not operate as a waiver of that right. A single or partial exercise of any right will not preclude a Party from any other or further exercise of that right or the exercise of any other right it may have.

- 7.7 This Agreement shall enure to the benefit of and be binding upon the Parties hereto and their permitted successors and assigns. TCE shall be entitled to assign this Agreement, in whole or in part, with notice to the OPA, to one or more corporations, limited or general partnerships and/or other entities of which TCE or its affiliates retain control. Upon TCE giving notice to the OPA of any such assignment, all references herein to TCE shall to the extent appropriate be deemed to be and include such assignee or assignees. For the purposes hereof "**control**" shall have the meaning given thereto in the *Business Corporations Act* (Ontario).
- 7.8 If any provision of this Agreement is determined to be illegal, invalid or unenforceable by an arbitrator or any court of competent jurisdiction from which no appeal exists or is taken, that provision will be severed from this Agreement and the remaining provisions will remain in full force and effect.
- 7.9 This Agreement will be governed by, interpreted and enforced in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable therein.
- 7.10 For purposes of this Agreement, "**Business Day**" means any day of the year other than a Saturday, Sunday or any day on which major banks are closed for business in Toronto, Ontario.
- 7.11 This Agreement may be executed in any number of counterparts (including counterparts by electronic mail) and all such counterparts taken together will be deemed to constitute one and the same instrument.
- 7.12 This Agreement, along with Exhibits I, II, III, and IV and Schedules A, B, C and D hereto, together constitute the entire agreement between the Parties pertaining to the subject matter of this Agreement. Any conflict or inconsistency between the Agreement and the Exhibits or Schedules shall be resolved by interpreting such documents in the following order, from highest to lowest priority, namely: **[NTD: To be confirmed.]**
- (i) the Agreement;
 - (ii) Exhibit II;
 - (iii) Exhibit III;
 - (iv) Exhibit IV;
 - (v) Exhibit I;
 - (vi) Schedule D;
 - (vii) Schedule B;
 - (viii) Schedule C; and
 - (ix) Schedule A.

where a document of a higher priority shall govern over a document of a lower priority to the extent of any conflict or inconsistency.

IN WITNESS WHEREOF, the Parties have executed this Implementation Agreement

TRANSCANADA ENERGY LTD.

By: _____
Name:
Title:

By: _____
Name:
Title:

ONTARIO POWER AUTHORITY

By: _____
Name:
Title:

EXHIBIT I
CONFIDENTIALITY AGREEMENT

EXHIBIT II
ACKNOWLEDGEMENTS

EXHIBIT III
MOU

EXHIBIT IV
MINISTER'S DIRECTIVE

SCHEDULE A TECHNICAL DESIGN REQUIREMENTS

[NTD: Further discussion required.]

Potential Project

The Potential Project will:

- (a) be a dispatchable facility.
- (b) be a simple cycle configuration generating facility.
- (c) utilize gas (which has been defined as natural gas supplied by pipeline) as the fuel.
- (d) have a minimum Ramp Rate, over a single five minute interval, of a least 20 MW/minute, and will be capable of responding to market prices at its specified Ramp Rate, both increasing and decreasing output.

Contract Capacity

The Potential Project will be a single generating facility and will

- (a) be able to provide a minimum of 125 MW at 35 °C under both N-1 System Conditions and N-1 Generating Facility Conditions simultaneously. For further clarity, the Potential Project must be designed to supply either transmission circuit (M20D or M21D) at all times. Each unit must be able to supply either transmission circuit at all times;
- (b) be able to provide a minimum of [450] MW at 35 °C under N-2 System Conditions;
- (c) have a Season 3 Contract Capacity of no less than 250 MW; and
- (d) have a Contract Capacity of no more than [550] MW in any Season.

Electrical Connection

The Potential Project will be connected directly to the IESO-Controlled Grid via new double circuit 230 kV transmission lines. The Potential Project will have a direct connection to the Hydro One circuits M20D and M21D with a connection point located at or near the Preston TS.

Emissions Requirements

The Potential Project will not emit:

- (i) Nitrogen Oxides (NO_x) in a concentration that exceeds 15 ppmv (based upon Reference Conditions and 15% O₂ in the exhaust gases on a dry volume basis) as measured using the KWCG Emissions Measurement Methodology, and all as more particularly set out in the Contract; or
- (ii) Carbon Monoxide (CO) in a concentration that exceeds 15 ppmv (based upon Reference Conditions and 15% O₂ in the exhaust gases on a dry volume basis) as measured using the KWCG Emissions Measurement Methodology, and all as more particularly set out in the Contract.

The Contract will require that the emission limits for NO_x and CO pursuant to this Section, be (i) incorporated into the Potential Project's Environmental Review Report prepared as part of its environmental assessment process or otherwise reflected in its completed environmental assessment, and (ii) ultimately reflected in the Potential Project's application to the Ministry of the Environment for a Certificate of Approval (Air & Noise) Operating Permit, together with a request that such limits be imposed as a condition in such certificate of approval.

The emission limits for NO_x and CO stated in the Contract will form the basis of an ongoing operating requirement. For greater certainty, the OPA is not requiring TCE to adopt any specific facility design or utilize any particular control equipment with respect to air emissions, provided, however, that the Potential Project must comply with the NO_x and CO limits set out above

Fuel Supply

The Potential Project will obtain gas distribution services from Union Gas Limited, and TCE cannot by-pass Union Gas Limited.

Equipment

The Potential Project will be designed utilizing (2) Mitsubishi heavy Industries M501GAC Fast Start gas gas-fired combustion turbine generators (the "Generators"), with evaporative cooling and emission reduction equipment as purchased under Equipment Supply Agreement NO. 6519 dated July 7, 2009 between MPS Canada, Inc. ("MPS") and TransCanada Energy Ltd. ("TCE") as amended by letter agreements dated October 29, 2010 November 19, 2010 and December 31, 2010 and as may be further amended from time to time. Each Generator shall be nominally rated at [250] MW (measured at the Generator's output terminals) new and clean, at ISO conditions.

**SCHEDULE B
ADDITIONAL CONTACT TERMS**

[NTD: details to follow.]

NRR

Permits and Approvals

Gas Delivery and Management Services Costs

Interconnection Costs

Operating Reserve

Option to Extend Term

Future Changes – Risk Mitigation

\

**SCHEDULE C
PROCESS**

[NTD: to be provided separately.]

**SCHEDULE D
PROJECTED COSTS AND EXPENSES
DURING THE TERM**

[NTD: The following is preliminary and subject to change.]

	Cancellation Schedule	January 2011	February 2011	March 2011	April 2011	May 2011	June 2011
		Values are in millions and are cumulative month to month					
	Non-Recoverable costs for the Facility	\$33.6	\$33.6	\$33.6	\$33.6	\$33.6	\$33.6
	MPS Canada, Inc. ESA US\$	\$108.5	\$130.2	\$137.5	\$143.3	\$144.7	\$144.7
	Hedging Costs US\$ to Cdn\$	\$12.4	\$12.4	\$12.4	\$12.4	\$12.4	\$12.4
	MPS Canada, Inc. ESA f/s Option	\$34.6	\$34.6	\$34.6	\$34.6	\$34.6	\$34.6
	MPS Canada, Inc. LTSA	\$4.1	\$4.1	\$4.1	\$4.1	\$4.1	\$4.1
	MPS Canada, Inc. TRA	\$7.5	\$7.5	\$7.5	\$7.5	\$7.5	\$7.5
	TransCanada Business Development		\$0.1	\$0.1	\$0.2	\$0.3	\$0.3
	TransCanada Development Engineering	\$0.2	\$0.3	\$0.6	\$0.7	\$1.0	\$1.1
	External Detailed Design Engineering	\$-	\$0.8	\$1.7	\$2.6	\$3.3	\$4.0
	Other Engineering Consulting	\$0.1	\$0.3	\$0.5	\$0.7	\$0.8	\$0.9
	Consultant Environmental		\$0.1	\$0.2	\$0.3	\$0.4	\$0.5
	Land Options Costs and Real Estate			\$0.5	\$0.5	\$0.5	\$0.5

	Community and Public Relations		\$0.0	\$0.1	\$0.1	\$0.1	\$0.1
	External Legal		\$0.0	\$0.0	\$0.0	\$0.0	\$0.1
	Union Gas		\$0.0	\$0.0	\$0.0	\$0.0	\$0.1
	Other		\$0.1	\$0.1	\$0.2	\$0.2	\$0.3
	Total	\$200.9	\$224.1	\$233.4	\$240.7	\$243.5	\$244.7

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**SCHEDULE B1
PRICING**

Net Revenue Requirement	\$ 16,900 / MW-month
Net Revenue Requirement Indexing Factor	50 %
Annual Average Contract Capacity (from and after the Contract Facility COD)	* MW
Nameplate Capacity	* MW
Start-Up Gas for the Contract Facility	1,500 MMBTU/start-up
Start-Up Maintenance Cost	\$ 51,000 / start-up
O&M Costs	\$ 5.75 / MWh
OR Cost	\$ 0.50 / MWh

	<u>Season 1</u>	<u>Season 2</u>	<u>Season 3</u>	<u>Season 4</u>
<u>Contract Heat Rate</u>	10,420 MMBTU/MWh (HHV)	10,550 MMBTU/MWh (HHV)	10,660 MMBTU/MWh (HHV)	10,580 MMBTU/MWh (HHV)
<u>Contract Capacity</u>	510.0 MW	481.5 MW	455.9 MW	475.0 MW
<u>10nORCC</u>	0 MW	0 MW	0 MW	0 MW

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**SCHEDULE B2
VALUE PROPOSITIONS**

VP#1 - Permits and Approvals

In light of the cancellation of the Facility and the Original Contract, and the change in risk profile that this has created for developers since that decision, the Contract will provide that if TCE is unable to secure a permit or approval for the construction or operation of the Potential Project or any level of government otherwise prevents the construction or operation of the Potential Project then TCE will be able to terminate the Contract and, upon such termination, recover from the OPA its reasonable costs incurred with respect to the Facility and the Potential Project and TCE's anticipated financial value of the Original Contract [Defined as a Number for the IA]. In addition to TCE's relief from Force Majeure, TCE would also recover from the OPA its reasonable costs as a result of delays arising from Force Majeure relating to permitting.

VP#2 – Oakville Sunk Costs

The Contract will provide that sunk costs associated the development of the Facility totaling [\$37 million] will be paid immediately to TCE at time of executing the Contract. These sunk costs [have/have not] been reviewed by the OPA and further due diligence and review [will/will not] be required.

VP#3 – Interconnection Costs

As a result of the compressed time for development of the Potential Project TCE will be unable to determine the costs associated with electrical and natural gas interconnections to the same level of detail as associated with the Facility. Accordingly, the Contract will provide a mechanism whereby the OPA will directly pay for all costs associated with the electrical and natural gas interconnections in a manner that will not subject TCE to carrying costs. For the gas connection this will include all costs paid to the local gas distribution company ("LDC") that is associated with the connection to the Potential Project from the LDC including a contribution in aid to construction ("CIAC") and terminating at the demarcation between the Potential Project and the LDC on the Potential Project site. For the electrical connection this will include all costs associated with the design engineering, construction and commissioning of the electrical facilities between the high voltage side of the Potential Project switchyard and the point of connection to the Hydro One transmission system including land and easements if applicable.

VP#4 - Gas Delivery and Management Services Costs

The Contract will provide that all gas delivery and management services costs will be excluded from the NRR and that such costs will be paid for by the OPA in a manner consistent with the Portlands ACES and Halton Hills CES Contracts.

VP#5 – Net Revenue Requirement Indexing Factor ("NRRIF") set at 50%

As a result of utilizing the MPS gas turbines in this Potential Project service, operating cost is a materially larger part of the economic picture and accordingly significantly more of TCE's costs are escalating. The portion of TCE's costs subject to escalation is approximately 50% as opposed to the current maximum of 20%. Accordingly the Contract will be modified to reflect this higher proportion subject to escalation by incorporating a NRRIF of 50%. Specifically in Section 1.1 of Exhibit J of the Contract the NRRIF definition will be modified to remove the words "between 0.00 and 0.20".

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VP#6 - Option to Extend Term

As a mechanism for recovery of Potential Project costs, the costs incurred by TCE with respect to the Facility and TCE's anticipated financial value of the Original Contract, the Contract will be premised on a 30 year term or premised on a 20 year term with a unilateral option for TCE to extend the term of the Contract, on the same terms, conditions and prices, for an additional 10 years.

VP#7 – Capacity Check Test

In an effort to more accurately reflect the actual capacity delivered to the Province of Ontario Section 15.6 (b) of the Contract will be modified to reflect average ambient temperatures during each season. Specifically in Section 15.6 (b) (i) replace "7.0" with "-5.8", in Section 15.6 (b) (ii) replace "21.0" with "5.7", in Section 15.6 (b) (iii) replace "30.0" with "18.6", and in Section 15.6 (b) (iv) replace "24.0" with "8.3".

VP#8 – Potential One Hour Run

Maintenance costs associated with the Mitsubishi Heavy Industries M501GAC Fast Start engine are significant and predominantly driven by number of starts. The logic contained Section 3 of Exhibit J to the NYR Contract can result in Imputed Production Intervals one hour in duration whereas the associated recovery of start costs is assumed to be over two hours. In an effort to recognize the unique attributes of these engines the Contract will be modified to ensure the plant is only deemed on when power prices provide for full recovery of start charges within an hour. Specifically Section 3.1.1 (ii) (a) A of Exhibit J of the Contract will be modified to remove the words "50% of".

SCHEDULE B3
NYR CONTRACT CLEAN UP

Value Proposition Incorporation

The Value Propositions outlined in Schedule B2 will be incorporated.

GD&M Partial Recovery

The NYR Contract included a provision for a portion of the Gas Distribution and Management costs to be recovered via NRR and the rest to be recovered via a side agreement. The contract for the Potential Project will be premised on all costs being recovered via the side agreement as per VP# 4. There are references throughout the NYR Contract that will require clean up to reflect this situation.

Schedule A

There may be items in Schedule A of this Implementation Agreement that need to be incorporated into the NYR Contract including, but not limited to, the Emissions Limits and Emission Measurement Methodology.

**SCHEDULE C
PROCESS**

Schedule B1 provides TCE's currently proposed contract parameters for eventual incorporation into the Contract. This Schedule C describes the mechanism by which the NRR set out in Schedule B1 will be adjusted between the effective date of this Agreement and the execution and delivery by the Parties of the Contract.

The following contract parameters outlined in Schedule B1 will not be adjusted from the values contained in Schedule B1 (the "Fixed Parameters"): the Contract Heat Rates (MMBTU/MWh HHV) for Seasons 1, 2, 3 and 4; the Contract Capacities (MW) for Seasons 1, 2, 3 and 4; the Annual Average Contract Capacity (MW); Start-Up Gas for the Contract Facility (MMBTU/start-up); Nameplate Capacity (MW) and Net Revenue Requirement Indexing Factor ("NRRIF")(%); Start-Up Maintenance Costs (\$/start-up); O&M Costs (\$/MWh), and OR Cost (\$/MWh).

The only parameter in Schedule B1 that may be adjusted prior to being incorporated into the Contract is Net Revenue Requirement ("NRR").

Upon execution of this Agreement, TCE will begin development work on the Potential Project including siting, stakeholder outreach, engineering design, contracts for equipment procurement, and contracts for construction. The development work will be undertaken in order to ascertain final estimates of capital costs, operating costs, plant performance and schedule prior to execution of the Contract.

Adjustments to NRR will be based on changes in the following capital cost elements (the "Adjustment Capital Cost Elements"):

Adjustment Capital Cost Elements	Value at Time of Implementation, Agreement Execution	Category
Gas Turbine Fast Start (Additional Scope, stacks, coolers)	\$12,600,000	Soft
Gas Turbine Technical Assistance	\$3,622,500	Estimated
Gas Turbine Transportation	\$7,380,680	Estimated
Engineering	\$20,738,776	Soft
Major Equipment	\$24,349,133	Soft
Construction	\$89,927,715	Hard
Engineering and Construction Risk	\$6,552,116	Soft
IBL Allowances (EPC, CTG, Noise, Grounding)	\$18,607,205	Soft
Landscaping	\$2,000,000	Estimated
HV Switching Station / Tap Station	\$1,850,000	Estimated
Interconnects Excluding gas and electrical (Potable Water Supply, Waste Water Discharge / Sewer , Construction Power, Telco Interconnects)	\$700,000	Estimated
Storm Water Pond	\$4,394,750	Estimated
Net Start-Up Energy (Fuel Cost + Back Feed Power - Power Revenue)	\$6,234,172	Estimated
Fuel Gas Delivery & Mgmt Charges for start-up and commissioning	\$3,000,000	Estimated
Capital & Operational Spares (excluding MPS GT Spares)	\$1,824,375	Soft

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Land Purchase	\$29,250,000	Hard
Community Benefits and Contribution	\$20,000,000	Soft
Development Charges, Park's Fee, Permit & Development Fee (Site Plan Approval), Aboriginal Community Contribution	\$2,990,000	Estimated
Escalation	\$9,372,568	Estimated
TOTAL	\$265,393,990	

OPA Review

Once the development work is complete TCE will provide the OPA with a final estimate for the Adjustment Capital Cost Elements and associated supporting documentation.

Costs for which TCE will obtain contracts, binding quotes or other firm commitments prior to execution of the Contract (the "Hard Capital Costs") are categorized as such in the table above. TCE will provide the OPA, on a confidential basis, with copies of the contracts, binding quotes or other firm commitments as supporting documentation for the Hard Capital Costs. The OPA's review will be limited to ensuring TCE's final estimate is congruent with the supporting documentation.

Costs that will be based on non-binding estimates, discussions or agreements with third parties at the time of execution of the Contract (the "Soft Capital Costs") are categorized as such in the table above. TCE will provide the OPA with copies or summaries of the non-binding estimates, discussions or agreements. The OPA's review will be limited to ensuring TCE's final estimate is congruent with the supporting documentation.

Costs that are estimated, built-up or provided as allowances for development and risk at the time of execution of the Contract (the "Estimated Capital Costs") are categorized as such in the table above. TCE will provide the OPA a break down of such estimates and the OPA's review will be limited to ensuring such estimates are in line with good utility practice.

It is possible that some costs may not fall into the predicted categories (Hard, Soft or Estimated) by the end of the development work. TCE will indicate to the OPA any changes in category and be held to the due diligence standard of the new category.

Once the Parties have completed the above review the final estimate for the Adjustment Capital Cost Elements shall used to modify the NRR for inclusion in the Contract.

Conversion Mechanism

The final estimates for the Adjustment Capital Cost Elements will be used to adjust NRR, provided that the adjusted NRR incorporated in the Contract will not exceed \$17,277/MW-Month, as follows:

- For each Adjustment Capital Cost Element there is an estimated value at the time of executing this agreement, which is contained in the table above (the "ACCE IA Value")
- For each Adjustment Capital Cost Element there will be a final estimated value provided by TCE to the OPA and agreed to through the OPA Review described above (the "ACCE

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Final Value”)

- For each Adjustment Capital Cost Element there will be a difference between the ACCE IA Value and the ACCE Final Value determined as the arithmetic difference between the ACCE IA Value and the ACCE Final Value (the “ACCE Difference”). For clarity the ACCE Difference will be the ACCE Final Value minus the ACCE IA Value. By way of example, if the ACCE Final Value for a given element is higher than the ACCE IA Value then the ACCE Difference will be a positive number, demonstrating an increase in that element.
- These differences will be summed for all Adjustment Capital Cost Elements (the “Total ACCE Difference”)
- The Total ACCE Difference will be multiplied by 0.0000126813 (the “NRR Conversion Rate”) to give the adjustment to the NRR (the “NRR Adjustment Value”).
- The NRR that will be entered into the Contract will be the NRR indicated in Schedule B1 plus the NRR Adjustment Value (the “Final NRR”).

The development of this Schedule C is constructed on the basis of a set of assumptions and engineering at a very preliminary stage of the development process. For example, there were no technical design criteria available (Schedule A) at the time of this work and TCE was not able to determine the availability or suitability of the proposed site for the Potential Project. As such there is a risk that the more detailed engineering and development identifies issues or costs that may impact this Schedule C.

PRIVILEGED AND CONFIDENTIAL – PREPARED IN CONTEMPLATION OF LITIGATION

ANALYSIS OF TCE PROPOSED SCHEDULE B TO THE IMPLEMENTATION AGREEMENT

#	TCE Value Proposition	Analysis	Cost	Recommendation
1	<i>“... the Contract will provide that if TCE is unable to secure a permit or approval for the construction or operation of the Potential Project or any level of government otherwise prevents the construction or operation of the Potential Project then TCE will be able to terminate the Contract and ... recover from the OPA its reasonable costs incurred with respect to the Facility and the Potential Project and TCE’s anticipated financial value of the Original Contract [Defined as a Number for the IA]. In addition to TCE’s relief from Force Majeure, TCE would also recover from the OPA its reasonable costs as a result of delays arising from Force Majeure relating to permitting.” (emphasis added)</i>	<p>This provision significantly reduces the development risk for TCE since if it encounters any regulatory approval problem, it can exit the contract and receive reimbursement for its development costs and financial value of the contract.</p> <p>This risk profile is inconsistent with the SWGTA Contract and with all other OPA gas-fired generation contracts.</p> <p>Recovery of force majeure-related costs is inconsistent with the common law position on force majeure and other OPA contracts <u>[NTD: Counsel to confirm this]</u></p>	<p>This is difficult to value. It is presumably the present value of the foregone profits under the SWGTA Contract, which may range from \$268M to \$503M plus whatever costs TCE incurs in developing the peaking plant. This latter component depends on when the permitting road block occurs in the project development timeline.</p>	<p>The OPA rejects this TCE Value Proposition.</p>

PRIVILEGED AND CONFIDENTIAL – PREPARED IN CONTEMPLATION OF LITIGATION

ANALYSIS OF TCE PROPOSED SCHEDULE B TO THE IMPLEMENTATION AGREEMENT

#	TCE Value Proposition	Analysis	Cost	Recommendation
2	<i>"The Contract will provide that sunk costs associated the development of the Facility totaling (sic) [\$37 million] will be paid immediately to TCE at time of executing the Contract. These sunk costs [have/have not] been reviewed by the OPA and further due diligence and review [will/will not] be required. "</i> (emphasis added)	<p>The OPA is likely liable for these sunk costs if the matter were ever to be litigated.</p> <p><u>[NTD: Counsel to comment on this]</u></p> <p>The mechanism for direct and immediate payment has to be considered. Can we do this within the scope of the draft directive? The draft directive is silent on this right now.</p>	<p>We have been told that these costs would be approximately \$33M, and would not exceed \$35M. TCE now indicates that these are \$37M. We have been given substantiating information from TCE on these sunk costs and we are reviewing this information now.</p>	<p>The OPA can agree to reimburse TCE for its sunk costs, provided they can be substantiated.</p>
3	<i>"... the Contract will provide a mechanism whereby the OPA will directly pay for all costs associated with the electrical and natural gas interconnections in a manner that will not subject TCE to carrying costs. For the gas connection this will include all costs paid to the local gas distribution company ("LDC") that is associated with the connection to the Potential Project from the LDC including a contribution in aid to construction ("CIAC") and terminating at the demarcation between the Potential Project and the</i>	<p>These costs are hard to quantify at this point in time. If we include them in the NRR, TCE will add an addition risk premium, which will be paid for by the ratepayer. Even if we include the cost in the NRR, if the estimate is overrun we will likely face a claim anyway, so we'd pay</p>	<p>TCE has estimated \$100M for these costs. <u>[NTD: check with PSP to see if the K-W peaking plant working group has any better information?]</u></p>	<p>OPA should agree to pay these costs, but we need to investigate and land on a mechanism for doing so.</p>

ANALYSIS OF TCE PROPOSED SCHEDULE B TO THE IMPLEMENTATION AGREEMENT

#	TCE Value Proposition	Analysis	Cost	Recommendation
	<i>LDC on the Potential Project site. For the electrical connection this will include all costs associated with the design engineering, construction and commissioning of the electrical facilities between the high voltage side of the Potential Project switchyard and the point of connection to the Hydro One transmission system including land and easements if applicable.” (emphasis added)</i>	<p>for the risk premium and the overrun.</p> <p>The cheapest option for the ratepayer is to pay for these costs directly.</p> <p>The “no carrying cost” language suggests a direct payment by the OPA and not a pass-through cost. We need to confirm this with TCE. Can the OPA make such a direct cost?</p>		
4	<i>“The Contract will provide that all gas delivery and management services costs will be excluded from the NRR and that such costs will be paid for by the OPA in a manner consistent with the Portlands ACES and Halton Hills CES Contracts.”</i>	<p>This transfers all gas risk to the OPA. OPA is not the best placed to manage this risk.</p>	<p>We estimate that this is worth about \$2,000/MW-month based on NYR information.</p>	<p>OPA should reject this proposition since it is not the plant operator and therefore not the best placed to manage this risk.</p>
5	<i>“... The portion of TCE’s costs subject to escalation is approximately 50% as opposed to the current maximum of 20%. Accordingly the Contract will be modified to reflect this higher proportion subject to</i>	<p>It’s unclear that 50% of the NRR is related to the fixed OPEX.</p> <p>This is quite a departure from</p>	<p><u>INTD: Need to do some modelling on this. We’ve not indexed anything in the models to date to keep them simple. We could</u></p>	<p>OPA should reject this proposition since it is (a) inconsistent with our other contracts and (b) doesn’t seem to reflect the proportion that fixed</p>

PRIVILEGED AND CONFIDENTIAL – PREPARED IN CONTEMPLATION OF LITIGATION

ANALYSIS OF TCE PROPOSED SCHEDULE B TO THE IMPLEMENTATION AGREEMENT

#	TCE Value Proposition	Analysis	Cost	Recommendation
	<i>escalation by incorporating a NRRIF of 50% ..."</i>	all other OPA contracts, which either do not permit indexing or cap it at 20% of the contract price or NRR. We see no justification for this this.	<u><i>very simply modify the NYR Evaluation model to permit 50% indexing and let's see what the effect is on evaluated cost?</i></u>	OPEX has in the NRR.
6	<i>"... the Contract will be premised on a 30 year term or premised on a 20 year term with a unilateral option for TCE to extend the term of the Contract, on the same terms, conditions and prices, for an additional 10 years."</i>	Extending the terms is a means of spreading the costs out over more years to reduce the \$/MW-month value of NRR. It is also a means for TCE to earn more since there are more contract years of contract revenue.	<u><i>[NTD: Let's do some modelling to determine what value the extra 10 years has on a \$/MW-month basis over the standard 20-year term. This is relatively easy to do for a range of NRRs from say \$15,000/MW-month and \$17,000/MW-month]</i></u>	OPA can agree to a longer than 20 year term, but we need to make certain that the return to TCE is consistent with what we've agreed to is the "financial value" of the OGS Contract.
7	<i>"... the Contract will be modified to reflect average ambient temperatures during each season ..."</i>	Plan output is inversely related to ambient temperature. The proposed changes in temperature seem odd, though. <u><i>[NTD: Can SMS Energy help with this?]</i></u>	<u><i>[NTD: Can SMS Energy help with this?]</i></u>	Provided that we can agree on the temperatures, the OPA can agree to this. <u><i>[NTD: Subject to technical advice from SMS Energy]</i></u>

ANALYSIS OF TCE PROPOSED SCHEDULE B TO THE IMPLEMENTATION AGREEMENT

#	TCE Value Proposition	Analysis	Cost	Recommendation
8	<i>"... the Contract will be modified to ensure the plant is only deemed on when power prices provide for full recovery of start charges within an hour ..."</i>	<p>TCE is attempting to tie physical operation of the plant with the financial contract means of imputing start up and earning market revenues.</p> <p>Could we just reimburse them for each start-up?</p>	<p><u><i>[NTD: We need to do some modelling to determine what the cost of this might be. We need to get into the dispatch logic of the NYR Evaluation model and modify the logic to see what the effect will be]</i></u></p>	<p>OPA position is undetermined.</p>

Aleksandar Kojic

From: Michael Killeavy
Sent: March 9, 2011 3:18 PM
To: Aaron Cheng
Cc: Terry Gabriele; Deborah Langelaan
Subject: SWGTA Sunk Cost Review ...

Aaron,

We're reviewing information from TransCanada Energy Ltd. related to its sunk costs for the Oakville GS project. As you know, the government announced last year that the project wasn't proceeding. This is rather labour intensive, and we were wondering if you might be able to loan us Maricel Ramos, or someone else, for a week or so to review the sunk cost information?

Thank you,
Michael

Michael Killeavy, LL.B., MBA, P.Eng.
Director, Contract Management
Ontario Power Authority
120 Adelaide St. West, Suite 1600
Toronto, Ontario, M5H 1T1
416-969-6288 (office)
416-969-6071 (fax)
416-520-9788 (cell)
Michael.killeavy@powerauthority.on.ca

Aleksandar Kojic

From: Deborah Langelaan
Sent: March 9, 2011 3:32 PM
To: Michael Killeavy
Subject: RE: SWGTA Sunk Cost Review ...

Thank you.

Deborah Langelaan | Manager, Natural Gas Projects | OPA | Suite 1600 - 120 Adelaide St. W. |
Toronto, ON M5H 1T1 |
T: 416.969.6052 | F: 416.967.1947 | deborah.langelaan@powerauthority.on.ca |

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416-969-6071 (fax)
416-520-9788 (cell)
Michael.killeavy@powerauthority.on.ca

Aleksandar Kojic

From: Aaron Cheng
Sent: March 9, 2011 4:24 PM
To: Michael Killeavy
Cc: Terry Gabriele; Deborah Langelaan
Subject: RE: SWGTA Sunk Cost Review ...

Maricel is currently doing inventory audit for us... do you need the analysis now or can it wait for a few weeks?

Aaron Cheng
Director, Information Technology
Ontario Power Authority
416-969-6345

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Michael.killeavy@powerauthority.on.ca

Aleksandar Kojic

From: Michael Killeavy
Sent: March 9, 2011 4:26 PM
To: Aaron Cheng
Cc: Terry Gabriele; Deborah Langelaan
Subject: RE: SWGTA Sunk Cost Review ...

It was now. I guess I will have to see if there are any other resources.

Michael Killeavy, LL.B., MBA, P.Eng.
Director, Contract Management
Ontario Power Authority
120 Adelaide Street West, Suite 1600
Toronto, Ontario
M5H 1T1
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416-520-9788 (CELL)
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416-520-9788 (cell)
Michael.killeavy@powerauthority.on.ca

Aleksandar Kojic

From: Aaron Cheng
Sent: March 9, 2011 4:29 PM
To: Michael Killeavy
Cc: Terry Gabriele; Deborah Langelaan
Subject: RE: SWGTA Sunk Cost Review ...

Sounds urgent - will redirect her to work on yours for the next 5 days provided she is capable to do the analysis.

Aaron Cheng
Director, Information Technology
Ontario Power Authority
416-969-6345

-----Original Message-----

From: Michael Killeavy
Sent: March-09-11 4:26 PM
To: Aaron Cheng
Cc: Terry Gabriele; Deborah Langelaan
Subject: RE: SWGTA Sunk Cost Review ...

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Michael Killeavy, LL.B., MBA, P.Eng.
Director, Contract Management
Ontario Power Authority
120 Adelaide Street West, Suite 1600
Toronto, Ontario
M5H 1T1
416-969-6288
416-520-9788 (CELL)
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Ontario Power Authority
416-969-6345

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Thank you,
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416-520-9788 (cell)
Michael.killeavy@powerauthority.on.ca

Aleksandar Kojic

From: Michael Killeavy
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Aleksandar Kojic

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Aleksandar Kojic

From: Michael Killeavy
Sent: March 10, 2011 9:17 AM
To: Maricel Ramos; Aaron Cheng
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Aleksandar Kojic

From: Michael Killeavy
Sent: March 10, 2011 10:57 AM
To: 'Sebastiano, Rocco'; 'Smith, Elliot'; 'Ivanoff, Paul'
Cc: Deborah Langelaan
Subject: FW: Letter to Colin Anderson
Attachments: Let_OPA.Colin Anderson_Mar 10.pdf

Attached is the long-awaited letter from TCE that sets out its proposal to the OPA. It is our understanding that the letter (without attachments) is to be set to the Ministry, too.

Michael Killeavy, LL.B., MBA, P.Eng.
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From: JoAnne Butler
Sent: March 10, 2011 10:52 AM
To: Michael Killeavy; Deborah Langelaan; Anshul Mathur
Subject: FW: Letter to Colin Anderson

JoAnne C. Butler
Vice President, Electricity Resources
Ontario Power Authority

120 Adelaide Street West, Suite 1600
Toronto, Ontario M5H 1T1

416-969-6005 Tel.
416-969-6071 Fax.
joanne.butler@powerauthority.on.ca

From: Irene Mauricette
Sent: Jueves, 10 de Marzo de 2011 10:17 a.m.
To: JoAnne Butler
Cc: Amir Shalaby
Subject: FW: Letter to Colin Anderson

JoAnne – as discussed
Amir – copied as CEO Delegate
Thanks - Irene

From: Linda Lee [mailto:linda_lee@transcanada.com]

Sent: March 10, 2011 10:14 AM

To: Colin Andersen

Subject: Letter to Colin Anderson

Dear Mr. Anderson,

Please see attached letter from Alex Pourbaix, President of Energy & Oil Pipelines. The original will be sent via courier today.

Thank you.

Kind regards,

Linda Lee

Linda Lee
Executive Assistant
TransCanada
450 - 1 Street, SW
Calgary, AB T2P 5H1
Ph: (403) 920-2106
Fx: (403) 920-2410

This electronic message and any attached documents are intended only for the named addressee(s). This communication from TransCanada may contain information that is privileged, confidential or otherwise protected from disclosure and it must not be disclosed, copied, forwarded or distributed without authorization. If you have received this message in error, please notify the sender immediately and delete the original message. Thank you.



TransCanada

In business to deliver

TransCanada Corporation
450 – 1 Street, SW
Calgary, AB T2P 5H1

tel (403) 920-2122

fax (403) 920-2410

email alex_pourbaix@transcanada.com

web www.transcanada.com

Alex Pourbaix
President, Energy & Oil Pipelines

March 10, 2011

CONFIDENTIAL AND WITHOUT PREJUDICE

Mr. Colin Andersen
Chief Executive Officer
Ontario Power Authority
120 Adelaide Street West, Suite 1600
Toronto, ON M5H 1T1

Dear Mr. Anderson:

Re: Negotiations with TransCanada Energy Ltd.

First, please accept my appreciation for your recent time taken to discuss our opportunity. As Ontario's largest private power investor, TransCanada continues to value its relationship with the Ontario Power Authority (OPA) and electricity ratepayers it serves.

As you are aware, we successfully responded to your SWGTA RFP and executed a contract with you to build, own and operate a 900MW combined cycle natural gas power plant. During the development and permitting phase of that project, the Minister of Energy announced that the project would not proceed due to significant changes in projected power system needs.

In your letter dated October 7th, 2010 you confirmed that the OPA would not proceed with the contract, acknowledged our entitlement to reasonable damages from the OPA and expressed your desire to identify other projects which could compensate us for the termination of the contract. While initially disappointed, we focused on the changing needs of the OPA as our customer and welcomed the opportunity to meet those needs.

Since last October our respective teams have been seeking a mutually satisfactory solution. The basis for these discussions was the desire of both sides to find an arrangement which ensured value to Ontario electricity rate payers and fairness to TransCanada shareholders. The purpose of this letter is for me to formally convey such a solution.

Ontario's Long Term Energy Plan states "As indicated in 2007 Plan, the procurement of a peaking natural gas fired plant in the Kitchener-Waterloo-Cambridge (KWC) area is still necessary. In that region, demand is growing at more than twice the provincial rate." This clear and consistent expression of electricity need became a natural focal point in our discussions. The plant described in the attached will meet the timing and reliability requirements of the KWC area as identified by the OPA and the Independent Electricity System Operator. We have identified potential sites more than 500 meters from residential neighborhoods and schools. The plant will of course meet or exceed all environmental standards related to emissions and noise.

Simply put, this plant is a smaller, less expensive and more responsive plant than the one originally contracted for in the SWGTA RFP. Its capacity of 515 megawatts compared to the SWGTA at 900 megawatts reflects today's demand forecasts and is the basis for tremendous savings to Ontario's electricity ratepayers. The capital cost is estimated at \$540 million where the SWGTA capital cost was \$1.2 billion, representing a \$660 million reduction. Acting now will allow us to use the \$200 million gas turbines purchased for the SWGTA plant, thus turning an OPA liability into a valuable asset. By switching from combined cycle to

Ontario Power Authority
Attn: Mr. Colin Anderson
March 10, 2011
Page 2

simple cycle the plant will be able to respond faster and more efficiently to sudden increases in regional power demand.

Our respective teams have worked diligently for five months to identify an efficient and cost effective project. The anticipated contingency support payment necessary to support this project is now actually lower than that which was contracted for in the SWGTA Clean Energy Supply contract. We have capped the anticipated NRR and offered shared savings in event cost efficiencies are identified prior to signing the CES contract.

TransCanada is confident it can develop, construct and operate a successful power project. Having built and operated power facilities across Ontario for over twenty years, TransCanada is deeply committed to consulting local stakeholders including First Nations, municipalities, local neighbors and environmental groups. We have had preliminary conversations with the Mayor and local First Nations and have committed to treating them as critical stakeholders in our development efforts.

In closing, I believe this project is an excellent alternative that will provide great value for Ontario electricity ratepayers and fairness to TransCanada shareholders. However, time is of the essence if we are to realize this potential value. In order to ensure the successful implementation of this project, including the technical scope, stakeholder outreach and permitting process, work needs to begin within the next several weeks.

I therefore request that the OPA seek formal approval and direction from its Board and the Minister of Energy to proceed with this project by March 31st on the terms outlined in the Implementation Agreement and schedules that have previously been provided to the OPA. Once that agreement is executed, we can begin the development work necessary to complete the CES contract in a timely manner.

I look forward to your earliest response and to concluding contractual arrangements on this great opportunity.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Alex Pourbaix', with a stylized, flowing script.

Alex Pourbaix
President, Energy & Oil Pipelines

c.c. David Lindsay, Deputy Minister of Energy
Craig MacLennan, Chief of Staff to the Minister of Energy

Aleksandar Kojic

From: Michael Killeavy
Sent: March 10, 2011 3:34 PM
To: 'RSebastiano@osler.com'; 'ESmith@osler.com'
Cc: Deborah Langelaan
Subject: Fw: Revised Letter to the OPA
Attachments: Let_OPA.Colin Anderson_Mar 10.pdf

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From: JoAnne Butler
Sent: Thursday, March 10, 2011 03:33 PM
To: Michael Killeavy; Deborah Langelaan
Subject: FW: Revised Letter to the OPA

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Vice President, Electricity Resources
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416-969-6005 Tel.
416-969-6071 Fax.
joanne.butler@powerauthority.on.ca

From: Irene Mauricette
Sent: Jueves, 10 de Marzo de 2011 01:58 p.m.
To: JoAnne Butler; Amir Shalaby
Cc: Manuela Moellenkamp; Amir Shalaby
Subject: FW: Revised Letter to the OPA

FYI – an updated version of this morning's letter – thanks - Irene

From: Linda Lee [mailto:linda_lee@transcanada.com]
Sent: March 10, 2011 1:01 PM
To: Colin Andersen
Subject: Revised Letter to the OPA

Hello Mr. Anderson,

Attached is a corrected version of a letter sent earlier today from Alex Pourbaix. Please note that a change was made to the 5th paragraph, 4th line to the sentence beginning with "The plant.....". A copy of the revised letter will be sent via courier.

Thank you.

Linda

Linda Lee
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March 10, 2011

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I look forward to your earliest response and to concluding contractual arrangements on this great opportunity.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Alex Pourbaix', with a stylized, flowing script.

Alex Pourbaix
President, Energy & Oil Pipelines

c.c. David Lindsay, Deputy Minister of Energy
Craig MacLennan, Chief of Staff to the Minister of Energy

Aleksandar Kojic

From: Deborah Langelaan
Sent: March 15, 2011 10:35 AM
To: Michael Killeavy
Subject: RE: Oakville Generating Station Info.

You're funny!

-----Original Message-----

From: Michael Killeavy
Sent: March 14, 2011 2:46 PM
To: Deborah Langelaan
Subject: Re: Oakville Generating Station Info.

Ok. Do it frast then.

Michael Killeavy, LL.B., MBA, P.Eng.
Director, Contract Management
Ontario Power Authority
120 Adelaide St. West, Suite 1600
Toronto, Ontario, M5H 1T1
416-969-6288 (office)
416-969-6071 (fax)
416-520-9788 (cell)
Michael.killeavy@powerauthority.on.ca

----- Original Message -----

From: Deborah Langelaan
Sent: Monday, March 14, 2011 02:42 PM
To: Michael Killeavy
Subject: Fw: Oakville Generating Station Info.

FYI

----- Original Message -----

From: Bonny Wong
Sent: Monday, March 14, 2011 02:34 PM
To: Deborah Langelaan
Subject: RE: Oakville Generating Station Info.

Hi Deborah,

Thanks for your info. I would appreciate if you could send me the invite for meetings with Linda Lim, FRAST division of Ministry of Finance. Our team will draft the terms of reference and will have discussion with FRAST in terms of audit process.

Regards,
Bonny Wong

-----Original Message-----

From: Deborah Langelaan
Sent: March 14, 2011 1:45 PM
To: Bonny Wong
Subject: Oakville Generating Station Info.

***Privileged and Confidential ***

Bonny;

As promised, attached is a generic version of the SW GTA contract the OPA executed with TransCanada Energy (TCE) for the Oakville Generating Station as well as a copy of the letter that was submitted along with TCE's sunk cost submission.

Please let me know if you require anything further.

Deb

The message is ready to be sent with the following file or link attachments:

OPA_ltr_fr_TCE_Sunk_Cost_20110228

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

Aleksandar Kojic

From: John Zych
Sent: March 17, 2011 9:31 AM
To: Michael Lyle; Michael Killeavy; Susan Kennedy; Deborah Langelaan; 'rsebastiano@osler.com'
Subject: TCE Board Resolution - Osler Review and Comment
Attachments: Minutes of Board of Directors Meeting - October 7, 2010 - Draft.doc

Last week, we had a meeting with Rocco Sebastiano on this matter and we (Michael Killeavy, Deborah Langelaan, Rocco Sebastiano and I) agreed to delete the word "reasonable" in front of the word "compensation" (see third page).

These minutes are now good to go to the Board for approval. Efficiency and practicality suggest that we take these minutes to the Board for approval at the same time that we approve any agreement with TCE, and that is what I will do.

John Zych
Corporate Secretary
Ontario Power Authority
Suite 1600
120 Adelaide Street West
Toronto, ON M5H 1T1
416-969-6055
416-967-7474 Main telephone
416-967-1947 OPA Fax
416-416-324-5488 Personal Fax
John.Zych@powerauthority.on.ca

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From: Sebastiano, Rocco [mailto:RSebastiano@osler.com]
Sent: February 23, 2011 5:13 PM
To: Deborah Langelaan
Cc: John Zych; Michael Killeavy; Ivanoff, Paul; Smith, Elliot
Subject: RE: TCE Board Resolution - Osler Review and Comment

We have reviewed the minutes, but am not sure what comments we would provide. One observation I would make is that the minutes state that the Board members reviewed the terms of a draft letter to TCE that instructed TCE to "cease all further work in connection with the Oakville gas plant and acknowledged that [TCE] was entitled to reasonable compensation". Did the Board members see the final draft of the letter which was sent to TCE which includes the reference to the "financial value" of the contract? I wouldn't want anyone to draw the inference that the language contained in the letter sent to TCE is the Board's view of what is reasonable compensation. Perhaps we can discuss further this in person when we next get together.

Thanks, Rocco

From: Deborah Langelaan [mailto:Deborah.Langelaan@powerauthority.on.ca]
Sent: Wednesday, February 23, 2011 10:48 AM
To: Sebastiano, Rocco
Cc: John Zych; Michael Killeavy
Subject: FW: TCE Board Resolution - Osler Review and Comment

Rocco;

Would you please review the attached Board meeting minutes and provide your comments?

Thanks,
Deb

Deborah Langelaan | Manager, Natural Gas Projects| OPA |
Suite 1600 - 120 Adelaide St. W. | Toronto, ON M5H 1T1 |
T: 416.969.6052 | F: 416.967.1947 | deborah.langelaan@powerauthority.on.ca |

From: John Zych
Sent: February 23, 2011 10:17 AM
To: Deborah Langelaan
Cc: Susan Kennedy
Subject: RE: TCE Board Resolution - Osler Review and Comment

Deborah,

The minutes of the October 7, 2010 mtg (attached).

John Zych
Corporate Secretary
Ontario Power Authority
Suite 1600
120 Adelaide Street West
Toronto, ON M5H 1T1
416-969-6055
416-967-7474 Main telephone
416-967-1947 OPA Fax
416-416-324-5488 Personal Fax
John.Zych@powerauthority.on.ca

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From: Susan Kennedy
Sent: February 23, 2011 9:26 AM
To: John Zych
Cc: Deborah Langelaan
Subject: FW: TCE Board Resolution - Osler Review and Comment

John,

Would you deal directly with Deb on this. I believe I can attest that it will be faster if I am not in the middle.

Susan H. Kennedy
Director, Corporate/Commercial Law Group

From: Deborah Langelaan
Sent: February 23, 2011 9:08 AM
To: Susan Kennedy
Subject: RE: TCE Board Resolution - Osler Review and Comment

Susan;

What minutes are you referring to?

Deb

Deborah Langelaan | Manager, Natural Gas Projects|OPA |
Suite 1600 - 120 Adelaide St. W. | Toronto, ON M5H 1T1 |
T: 416.969.6052 | F: 416.967.1947 | deborah.langelaan@powerauthority.on.ca |

From: Susan Kennedy
Sent: February 23, 2011 8:58 AM
To: Michael Killeavy; Deborah Langelaan
Cc: John Zych
Subject: TCE Board Resolution - Osler Review and Comment

I thought I'd seen Osler comments on the draft minutes; however, John says he hasn't seen anything and I can't seem to find a record of same. Am I imagining things?

If Osler's hasn't completed its review, could we get them to do so as it ideally should be finalized at next board meeting.

Thanks,

Susan H. Kennedy
Director, Corporate/Commercial Law Group
Ontario Power Authority
T: 416-969-6054
F: 416-969-6383
E: susan.kennedy@powerauthority.on.ca

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MEETING OF THE BOARD OF DIRECTORS

MINUTES of a meeting of the Board of Directors of the Ontario Power Authority held on Thursday, October 7, 2010, at 10:18 a.m., by teleconference

PRESENT

Colin Andersen
John Beck
Michael Costello
Rick Fitzgerald
Adèle Hurley
Ron Jamieson
Bruce Lourie

MEMBERS OF STAFF IN ATTENDANCE

Amir Shalaby, Vice President, Power System Planning
Michael Lyle, General Counsel and Vice President, Legal, Aboriginal and Regulatory Affairs
JoAnne Butler, Vice President, Electricity Resources
Kimberly Marshall, Vice President, Business Strategies and Solutions
Ben Chin, Vice President, Communications
Michael Killeavy, Director, Contract Management, Electricity Resources
John Zych, Corporate Secretary

1. Constitution of the Meeting

Mr. John Beck acted as Chair of the meeting and Mr. John Zych acted as Secretary.

Mr. Zych advised that, with notice having been given and a quorum of members being present, the meeting was properly called and duly constituted for the transaction of business. He also indicated that the absent members – Charles Bayless, Lyn McLeod and Patrick Monahan – had advised him in writing that they waived lack of sufficient notice of the meeting.

2. Southwest Greater Toronto Area project

Mr. Andersen advised the Board members that the government of Ontario had made the decision that a gas plant in Oakville was no longer needed and, as a result, the plant would not proceed. The announcement was planned to be made by Minister of Energy Brad Duguid in Oakville at 1:00 p.m. that day.

Mr. Andersen further advised that the Ontario Power Authority had concluded that the latest information gathered on the current status of the electricity system supported the decision. When the need for this plant was first identified four years ago, there were higher demand projections for electricity in the province. Since then, changes in demand and supply, including successful conservation efforts and more than 8,000 megawatts of new, cleaner power, had made it clear that the plant was no longer required. Local reliability remained a need and a transmission solution was required to address the need.

The Board members reviewed the terms of a draft letter to TransCanada Energy Ltd. that instructed TransCanada Energy Ltd. to cease all further work in connection with the Oakville gas plant and acknowledged that TransCanada Energy Ltd. was entitled to reasonable compensation. The letter also indicated the OPA's intention to enter into good faith negotiations with TransCanada Energy Ltd. to reach an agreement to terminate the contract.

On motion duly made, seconded and unanimously carried, it was RESOLVED THAT the Board of Directors approve the sending of a letter to TransCanada Energy Ltd. pertaining to the termination of plans to proceed with the Oakville gas plant and granting authority to the Chief Executive Officer to sign and send such a letter.

3. Termination

There being no further business to be brought before the meeting, the meeting terminated at 10:45 a.m.

Approved by the Board of Directors on
the 21st day of October, 2010

John Beck
Chair of the meeting

John Zych
Secretary of the meeting

Aleksandar Kojic

From: Michael Killeavy
Sent: March 23, 2011 8:47 AM
To: 'Smith, Elliot'; Susan Kennedy
Cc: Deborah Langelaan; 'Gene.Meehan@NERA.com'; Anshul Mathur; 'Safouh Soufi'
Subject: TCE Matter - OPA Counter-Proposal - Proposed Schedule B
Attachments: Schedule B.doc

*** PRIVILEGED & CONFIDENTIAL – PREPARED IN CONTEMPLATION OF LITIGATION ***

Elliot,

Based on our meeting yesterday, attached please find our proposed Schedule B.

Michael

Michael Killeavy, LL.B., MBA, P.Eng.
Director, Contract Management
Ontario Power Authority
120 Adelaide Street West, Suite 1600
Toronto, Ontario
M5H 1T1
416-969-6288
416-520-9788 (CELL)
416-967-1947 (FAX)

PRIVILEGED & CONFIDENTIAL – PREPARED IN CONTEMPLATION OF LITIGATION

February 24th, 23 March 2011

**SCHEDULE B1
PRICING**

Net Revenue Requirement	\$ 16,900 <u>12,839</u> / MW-month
Net Revenue Requirement Indexing Factor	50 <u>20</u> %
Annual Average Contract Capacity (from and after the Contract Facility COD)	* 500 MW
Nameplate Capacity	* MW
Start-Up Gas for the Contract Facility	1,500 \$ [•]MMBTU/start-up (please refer to the note below)
Start-Up Maintenance Cost	\$ [•] 51,000 / start-up (please refer to the note below)
O&M Costs	\$ [•] 5.75 / MWh (please refer to the note below)
OR Cost	\$ [•] 0.50 / MWh (please refer to the note below)

	<u>Season 1</u>	<u>Season 2</u>	<u>Season 3</u>	<u>Season 4</u>
<u>Contract Heat Rate</u>	10,420 MMBTU/MWh (HHV)	10,550 MMBTU/MWh (HHV)	10,660 MMBTU/MWh (HHV)	10,580 MMBTU/MWh (HHV)
<u>Contract Capacity</u>	510.0 MW	481.5 MW	455.9 MW	475.0 MW
<u>10nORCC</u>	0 MW	0 MW	0 MW	0 MW

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CONFIDENTIAL

February 24th, 2011

NOTE: Bulleted parameter will be determined upon disclosure of the unredacted Long-term Services Agreement between Mitsubishi Power System and TransCanada Energy Ltd. ("LTSA").

**SCHEDULE B2
VALUE PROPOSITIONS**

VP#1—Permits and Approvals

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In light of the cancellation of the Facility and the Original Contract, and the change in risk profile that this has created for developers since that decision, the Contract will provide that if TCE is unable to secure a permit or approval for the construction or operation of the Potential Project or any level of government otherwise prevents the construction or operation of the Potential Project then TCE will be able to terminate the Contract and, upon such termination, recover from the OPA its reasonable costs incurred with respect to the Facility and the Potential Project and TCE's anticipated financial value of the Original Contract [Defined as a Number for the IA]. In addition to TCE's relief from Force Majeure, TCE would also recover from the OPA its reasonable costs as a result of delays arising from Force Majeure relating to permitting.

VP#2—Oakville Sunk Costs

The Contract will provide that sunk costs associated the development of the Facility totaling [\$37 million] will be paid immediately to TCE at time of executing the Contract. These sunk costs [have/have not] been reviewed by the OPA and further due diligence and review [will/will not] be required.

VP#3—Interconnection Costs

As a result of the compressed time for development of the Potential Project TCE will be unable to determine the costs associated with electrical and natural gas interconnections to the same level of detail as associated with the Facility. Accordingly, the Contract will provide a mechanism whereby the OPA will directly pay for all costs associated with the electrical and natural gas interconnections in a manner that will not subject TCE to carrying costs. For the gas connection this will include all costs paid to the local gas distribution company ("LDC") that is associated with the connection to the Potential Project from the LDC including a contribution in aid to construction ("CIAC") and terminating at the demarcation between the Potential Project and the LDC on the Potential Project site. For the electrical connection this will include all costs associated with the design engineering, construction and commissioning of the electrical facilities between the high voltage side of the Potential Project switchyard and the point of connection to the Hydro One transmission system including land and easements if applicable.

CONFIDENTIAL

February 24th, 2011

~~VP#4 Gas Delivery and Management Services Costs~~

The Contract will provide that all gas delivery and management services costs will be excluded from the NRR and that such costs will be paid for by the OPA in a manner consistent with the Portlands ACES and Halton Hills CES Contracts.

~~VP#5 Net Revenue Requirement Indexing Factor ("NRRIF") set at 50%~~

As a result of utilizing the MPS gas turbines in this Potential Project service, operating cost is a materially larger part of the economic picture and accordingly significantly more of TCE's costs are escalating. The portion of TCE's costs subject to escalation is approximately 50% as opposed to the current maximum of 20%. Accordingly the Contract will be modified to reflect this higher proportion subject to escalation by incorporating a NRRIF of 50%. Specifically in Section 1.1 of Exhibit J of the Contract the NRRIF definition will be modified to remove the words "between 0.00 and 0.20".

~~VP#6 Option to Extend Term~~

As a mechanism for recovery of Potential Project costs, the costs incurred by TCE with respect to the Facility and TCE's anticipated financial value of the Original Contract, the Contract will be premised on a 30 year term or premised on a 20 year term with a unilateral option for TCE to extend the term of the Contract, on the same terms, conditions and prices, for an additional 10 years.

~~VP#7 Capacity Check Test~~

In an effort to more accurately reflect the actual capacity delivered to the Province of Ontario Section 15.6 (b) of the Contract will be modified to reflect average ambient temperatures during each season. Specifically in Section 15.6 (b) (i) replace "7.0" with "5.3", in Section 15.6 (b) (ii) replace "21.0" with "5.7", in Section 15.6 (b) (iii) replace "30.0" with "18.6", and in Section 15.6 (b) (iv) replace "24.0" with "8.3".

~~VP#8 Potential One Hour Run~~

CONFIDENTIAL
February 24th, 2011

Maintenance costs associated with the Mitsubishi Heavy Industries M501GAC Fast Start engine are significant and predominantly driven by number of starts. The logic contained Section 3 of Exhibit J to the NYR Contract can result in Imputed Production Intervals one hour in duration whereas the associated recovery of start costs is assumed to be over two hours. In an effort to recognize the unique attributes of these engines the Contract will be modified to ensure the plant is only deemed on when power prices provide for full recovery of start charges within an hour. Specifically Section 3.1.1 (ii) (a) A of Exhibit J of the Contract will be modified to remove the words "50% of".

CONFIDENTIAL
February 24th, 2011

SCHEDULE B3

NYR CONTRACT CLEAN UP

Value Proposition Incorporation

~~The Value Propositions outlined in Schedule B2 will be incorporated.~~

GD&M Partial Recovery

~~The NYR Contract included a provision for a portion of the Gas Distribution and Management costs to be recovered via NRR and the rest to be recovered via a side agreement. The contract for the Potential Project will be premised on all costs being recovered via the side agreement as per VP# 4. There are references throughout the NYR Contract that will require clean up to reflect this situation.~~

Schedule A

~~There may be items in Schedule A of this Implementation Agreement that need to be incorporated into the NYR Contract including, but not limited to, the Emissions Limits and Emission Measurement Methodology.~~

Aleksandar Kojic

From: Michael Killeavy
Sent: March 23, 2011 9:18 AM
To: 'Smith, Elliot'; Susan Kennedy
Cc: Deborah Langelaan; 'Gene.Meehan@NERA.com'; Anshul Mathur; 'Safouh Soufi'
Subject: RE: TCE Matter - OPA Counter-Proposal - Proposed Schedule B
Attachments: Schedule B - Revised.doc

*** PRIVILEGED & CONFIDENTIAL -- PREPARED IN CONTEMPLATION OF LITIGATION ***

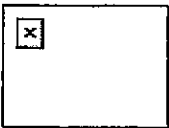
Revised Schedule B is attached.

Michael Killeavy, LL.B., MBA, P.Eng.
Director, Contract Management
Ontario Power Authority
120 Adelaide Street West, Suite 1600
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M5H 1T1
416-969-6288
416-520-9788 (CELL)
416-967-1947 (FAX)

From: Smith, Elliot [<mailto:ESmith@osler.com>]
Sent: March 23, 2011 8:51 AM
To: Michael Killeavy; Susan Kennedy
Cc: Deborah Langelaan; Gene.Meehan@NERA.com; Anshul Mathur; Safouh Soufi
Subject: RE: TCE Matter - OPA Counter-Proposal - Proposed Schedule B

Thanks Michael. On a quick skim, I have two questions. First, I noticed the Annual Average Contract Capacity doesn't correspond to the average of the seasonal Contract Capacities. Is this deliberate? Secondly, do we need to see the LTSA to determine an appropriate value for Start-Up Gas?

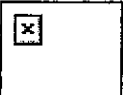
Thanks,
Elliot



Elliot Smith
Associate

416.862.6435 DIRECT
416.862.6666 FACSIMILE
esmith@osler.com

Osler, Hoskin & Harcourt LLP
Box 50, 1 First Canadian Place
Toronto, Ontario, Canada M5X 1B8



From: Michael Killeavy [<mailto:Michael.Killeavy@powerauthority.on.ca>]
Sent: Wednesday, March 23, 2011 8:47 AM
To: Smith, Elliot; Susan Kennedy
Cc: Deborah Langelaan; Gene.Meehan@NERA.com; Anshul Mathur; Safouh Soufi
Subject: TCE Matter - OPA Counter-Proposal - Proposed Schedule B

*** PRIVILEGED & CONFIDENTIAL – PREPARED IN CONTEMPLATION OF LITIGATION ***

Elliot,

Based on our meeting yesterday, attached please find our proposed Schedule B.

Michael

Michael Killeavy, LL.B., MBA, P.Eng.
Director, Contract Management
Ontario Power Authority
120 Adelaide Street West, Suite 1600
Toronto, Ontario
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416-969-6288
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PRIVILEGED & CONFIDENTIAL – PREPARED IN CONTEMPLATION OF LITIGATION

February 24th, 23 March 2011

**SCHEDULE B1
PRICING**

Net Revenue Requirement	\$ 16,900 <u>12,839</u> / MW-month
Net Revenue Requirement Indexing Factor	50 <u>20</u> %
Annual Average Contract Capacity (from and after the Contract Facility COD)	± <u>500</u> MW
Nameplate Capacity	* MW
Start-Up Gas for the Contract Facility	1,500 \$ <u>700</u> MMBTU/start-up
Start-Up Maintenance Cost	\$ [• <u>51,000</u> / start-up (please refer to the note below)
O&M Costs	\$ [• <u>5.75</u> / MWh (please refer to the note below)
OR Cost	\$ [• <u>10.50</u> / MWh (please refer to the note below)

	<u>Season 1</u>	<u>Season 2</u>	<u>Season 3</u>	<u>Season 4</u>
<u>Contract Heat Rate</u>	10,420 MMBTU/MWh (HHV)	10,550 MMBTU/MWh (HHV)	10,660 MMBTU/MWh (HHV)	10,580 MMBTU/MWh (HHV)
<u>Contract Capacity</u>	[• <u>510.0</u> MW	[• <u>481.5</u> MW	[• <u>455.9</u> MW	[• <u>475.0</u> MW
<u>10nORCC</u>	0 MW	0 MW	0 MW	0 MW

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February 24th, 2011

NOTE: Bulleted parameter will be determined upon disclosure of the unredacted Long-term Services Agreement between Mitsubishi Power System and TransCanada Energy Ltd. ("LTSA").

**SCHEDULE B2
VALUE PROPOSITIONS**

VP#1—Permits and Approvals

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In light of the cancellation of the Facility and the Original Contract, and the change in risk profile that this has created for developers since that decision, the Contract will provide that if TCE is unable to secure a permit or approval for the construction or operation of the Potential Project or any level of government otherwise prevents the construction or operation of the Potential Project then TCE will be able to terminate the Contract and, upon such termination, recover from the OPA its reasonable costs incurred with respect to the Facility and the Potential Project and TCE's anticipated financial value of the Original Contract ~~[Defined as a Number for the IA]~~. In addition to TCE's relief from Force Majeure, TCE would also recover from the OPA its reasonable costs as a result of delays arising from Force Majeure relating to permitting.

VP#2—Oakville Sunk Costs

The Contract will provide that sunk costs associated the development of the Facility totaling ~~[\$37 million]~~ will be paid immediately to TCE at time of executing the Contract. These sunk costs ~~[have/have not]~~ been reviewed by the OPA and further due diligence and review ~~[will/will not]~~ be required.

VP#3—Interconnection Costs

As a result of the compressed time for development of the Potential Project TCE will be unable to determine the costs associated with electrical and natural gas interconnections to the same level of detail as associated with the Facility. Accordingly, the Contract will provide a mechanism whereby the OPA will directly pay for all costs associated with the electrical and natural gas interconnections in a manner that will not subject TCE to carrying costs. For the gas connection this will include all costs paid to the local gas distribution company ("LDC") that is associated with the connection to the Potential Project from the LDC including a contribution in aid to construction ("CIAC") and terminating at the demarcation between the Potential Project and the LDC on the Potential Project site. For the electrical connection this will include all costs associated with the design engineering, construction and commissioning of the electrical facilities between the high voltage side of the Potential Project switchyard and the point of connection to the Hydro One transmission system including land and easements if applicable.

CONFIDENTIAL

February 24th, 2011

VP#4—Gas Delivery and Management Services Costs

The Contract will provide that all gas delivery and management services costs will be excluded from the NRR and that such costs will be paid for by the OPA in a manner consistent with the Portlands ACES and Halton Hills CES Contracts.

VP#5—Net Revenue Requirement Indexing Factor ("NRRIF") set at 50%

As a result of utilizing the MPS gas turbines in this Potential Project service, operating cost is a materially larger part of the economic picture and accordingly significantly more of TCE's costs are escalating. The portion of TCE's costs subject to escalation is approximately 50% as opposed to the current maximum of 20%. Accordingly the Contract will be modified to reflect this higher proportion subject to escalation by incorporating a NRRIF of 50%. Specifically in Section 1.1 of Exhibit J of the Contract the NRRIF definition will be modified to remove the words "between 0.00 and 0.20".

VP#6—Option to Extend Term

As a mechanism for recovery of Potential Project costs, the costs incurred by TCE with respect to the Facility and TCE's anticipated financial value of the Original Contract, the Contract will be premised on a 30 year term or premised on a 20 year term with a unilateral option for TCE to extend the term of the Contract, on the same terms, conditions and prices, for an additional 10 years.

VP#7—Capacity Check Test

In an effort to more accurately reflect the actual capacity delivered to the Province of Ontario Section 15.6 (b) of the Contract will be modified to reflect average ambient temperatures during each season. Specifically in Section 15.6 (b) (i) replace "7.0" with "5.8", in Section 15.6 (b) (ii) replace "21.0" with "5.7", in Section 15.6 (b) (iii) replace "30.0" with "18.6", and in Section 15.6 (b) (iv) replace "24.0" with "8.3".

VP#8—Potential One Hour Run

CONFIDENTIAL

February 24th, 2011

Maintenance costs associated with the Mitsubishi Heavy Industries M501GAC Fast Start engine are significant and predominantly driven by number of starts. The logic contained Section 3 of Exhibit J to the NYR Contract can result in Imputed Production Intervals one hour in duration whereas the associated recovery of start costs is assumed to be over two hours. In an effort to recognize the unique attributes of these engines the Contract will be modified to ensure the plant is only deemed on when power prices provide for full recovery of start charges within an hour. Specifically Section 3.1.1 (ii) (a) A of Exhibit J of the Contract will be modified to remove the words "50% of".

CONFIDENTIAL
February 24th, 2011

SCHEDULE B3

NYR CONTRACT CLEAN UP

Value Proposition Incorporation

The Value Propositions outlined in Schedule B2 will be incorporated.

GD&M Partial Recovery

The NYR Contract included a provision for a portion of the Gas Distribution and Management costs to be recovered via NRR and the rest to be recovered via a side agreement. The contract for the Potential Project will be premised on all costs being recovered via the side agreement as per VP# 4. There are references throughout the NYR Contract that will require clean up to reflect this situation.

Schedule A

There may be items in Schedule A of this Implementation Agreement that need to be incorporated into the NYR Contract including, but not limited to, the Emissions Limits and Emission Measurement Methodology.

Aleksandar Kojic

From: Deborah Langelaan
Sent: March 24, 2011 9:39 AM
To: Susan Kennedy
Cc: Michael Killeavy
Subject: FW: TransCanada OPA Replacement Project Negotiations - MPS Canada, Inc. - LTSA
Attachments: Earthquake Event MPS Canada 20110311.pdf

Hi Susan;

We need another designation letter and the description is as follows:

"Long Term Service Agreement No. 7011 between TransCanada Energy Ltd. And MPS Canada, Inc. Dated July 7, 2009."

Please let me know if you require more information.

Thanks,
Deb

Deborah Langelaan | Manager, Natural Gas Projects| OPA |
Suite 1600 - 120 Adelaide St. W. | Toronto, ON M5H 1T1 |
T: 416.969.6052 | F: 416.967.1947 | deborah.langelaan@powerauthority.on.ca |

From: John Mikkelsen [mailto:john_mikkelsen@transcanada.com]
Sent: March 23, 2011 3:17 PM
To: Deborah Langelaan
Cc: Terry Bennett; Geoff Murray
Subject: TransCanada OPA Replacement Project Negotiations - MPS Canada, Inc. - LTSA

Dear Deborah,

Further to my voicemail this afternoon, we have received a response from MPS Canada, Inc. regarding status of the LTSA. MPS believes they should be able to provide the document by Monday March 28, 2011. The document would be provided in accordance with our previously defined protocol through your counsel. MPS has also requested the Ontario Power Authority designate the materials to be provided as confidential pursuant to Section 25.13(3) of the Electricity Act.

The title on the LTSA is "

Would you please consider provision of this designation to allow the MPS materials to be provided as expeditiously as possible. Please let me know if this description is sufficient for the purpose of the designation.

Also please find attached Notice of Force Majeure from MPS Canada, Inc. with respect to the recent earthquake and tsunami that struck Japan on March 11, 2011. We have no additional information regarding the potential impact on our equipment or activities of MPS at this point in time.

Please do not hesitate to call me should you have any questions regarding the above request, the LTSA or the FM notice.

Best Regards,

John Mikkelsen, P.Eng.

Director, Eastern Canada, Power Development

TransCanada

Royal Bank Plaza
200 Bay Street
24th Floor, South Tower
Toronto, Ontario M5J 2J1

Tel: 416.869.2102

Fax: 416.869.2056

Cell: 416.559.1664

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MPS Canada, Inc.

a group company of MITSUBISHI HEAVY INDUSTRIES, LTD.

MPS Canada, Inc. • Royal Bank Plaza, South Tower, 200 Bay St., Suite 3220 • Toronto, ON M5J 2J1 • Tel 1-647-343-6238 • Fax 1-647-344-8246

March 11, 2011


RE: Catastrophic Earthquake in Japan, Force Majeure Event

To Our Valued Clients:

As many of you are aware, on the afternoon of March 11, 2011 in Japan an 8.9 magnitude earthquake struck the island nation north of the Tokyo area causing a catastrophic loss of life and property. This disaster, including the resultant tsunami, has resulted in a widespread shutdown of factories, power generation, processing facilities, and transportation systems. Mitsubishi facilities and personnel and those of our suppliers in Japan are among those affected. Our company's focus is now on assisting the employees and their families impacted by this tragedy. , We are also beginning the task of assessing the extent of damage to facilities and impacts to our operations, including the resultant effects on our deliverable goods and services to our clients.

As a result of this natural disaster, MPS Canada is notifying our clients of a Force Majeure event in accordance with the terms and conditions of our Contract. At this early stage, the extent of impacts to our commitments cannot be determined, however when enough information has been collected, we will provide our clients with specific impacts and requests for relief. We will strive to recover from this disaster and resume our normal operations as quickly as possible with the safety of personnel considered foremost. We kindly ask for your patience and cooperation as we move forward from this tragedy.

Sincerely,



Phil Prigge
Project Manager

Aleksandar Kojic

From: Deborah Langelaan
Sent: March 24, 2011 9:51 AM
To: Michael Killeavy; 'Elliot Smith (esmith@osler.com)'; 'Safouh Soufi'
Cc: 'Rocco Sebastiano (rsebastiano@osler.com)'; Anshul Mathur; JoAnne Butler
Subject: FW: TransCanada OPA Replacement Project Negotiations - MPS Canada, Inc. - LTSA
Attachments: Earthquake Event MPS Canada 20110311.pdf

It is expected that MPS will provide the OPA with a copy of the LTSA on Monday and they have requested that the OPA designate the document as confidential under Section 25.13(3) of the Electricity Act. I have asked Susan to prepare the letter. You will see in John's comments below that they have requested we follow the same protocol as we did with their pricing proposal. I have been told that the decision to redact the LTSA is solely up to MPS and TCE expects they will redact portions but are hopeful that the pricing information will be provided intact.

Also, MPS has provided TCE with a notice of force majeure resulting from the recent earthquake and tsunami. It's unclear what the effect of this will have on TCE since the manufacturing site of the turbines is at MPS's sole discretion.

Deb

Deborah Langelaan | Manager, Natural Gas Projects|OPA |
Suite 1600 - 120 Adelaide St. W. | Toronto, ON M5H 1T1 |
T: 416.969.6052 | F: 416.967.1947 | deborah.langelaan@powerauthority.on.ca |

From: John Mikkelsen [mailto:john_mikkelsen@transcanada.com]
Sent: March 23, 2011 3:17 PM
To: Deborah Langelaan
Cc: Terry Bennett; Geoff Murray
Subject: TransCanada OPA Replacement Project Negotiations - MPS Canada, Inc. - LTSA

Dear Deborah,

Further to my voicemail this afternoon, we have received a response from MPS Canada, Inc. regarding status of the LTSA. MPS believes they should be able to provide the document by Monday March 28, 2011. The document would be provided in accordance with our previously defined protocol through your counsel. MPS has also requested the Ontario Power Authority designate the materials to be provided as confidential pursuant to Section 25.13(3) of the Electricity Act.

The title on the LTSA is "Long Term Service Agreement No. 7011 between TransCanada Energy Ltd. And MPS Canada, Inc. Dated July 7, 2009."

Would you please consider provision of this designation to allow the MPS materials to be provided as expeditiously as possible. Please let me know if this description is sufficient for the purpose of the designation.

Also please find attached Notice of Force Majeure from MPS Canada, Inc. with respect to the recent earthquake and tsunami that struck Japan on March 11, 2011. We have no additional information regarding the potential impact on our equipment or activities of MPS at this point in time.

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Best Regards,

John Mikkelsen, P.Eng.

Director, Eastern Canada, Power Development

TransCanada

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March 11, 2011

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Sincerely,



Phil Prigge
Project Manager

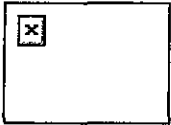
Aleksandar Kojic

From: Smith, Elliot [ESmith@osler.com]
Sent: March 24, 2011 11:58 AM
To: Deborah Langelaan; Michael Killeavy; gene.meehan@nera.com; Anshul Mathur; Susan Kennedy
Subject: RE: Agenda for this morning's conference call
Attachments: #20297127v4_LEGAL_1_ - Draft Response to A. Pourbaix Letter with Project Proposal.doc; Blackline - Draft Response to A. Pourbaix Letter with Project Proposal.pdf

All,

I have attached a revised draft of the letter to TCE along with a blackline to the version previously circulated. Please note that I only made a few conforming changes to the Schedule "A" provided, as I believe there are a number of points in that Schedule that we need to discuss. Also, Rocco is still in the process of reviewing this so I may have some further revisions to incorporate prior to finalization.

Elliot



Elliot Smith
Associate

416.862.6435 DIRECT
416.862.6666 FACSIMILE
esmith@osler.com

Osler, Hoskin & Harcourt LLP
Box 50, 1 First Canadian Place
Toronto, Ontario, Canada M5X 1B8



From: Smith, Elliot
Sent: Tuesday, March 22, 2011 9:27 AM
To: 'Deborah Langelaan'; Michael Killeavy; gene.meehan@nera.com; Anshul Mathur
Subject: RE: Agenda for this morning's conference call

Also for this morning's call, I have attached a first draft of the proposed letter to TCE.

Elliot

From: Deborah Langelaan [<mailto:Deborah.Langelaan@powerauthority.on.ca>]
Sent: Tuesday, March 22, 2011 9:15 AM
To: Michael Killeavy; Smith, Elliot; gene.meehan@nera.com; Anshul Mathur
Subject: Agenda for this morning's conference call

Gentlemen;

Please find attached the agenda for today's conference call.

Deb

This e-mail message is privileged, confidential and subject to copyright. Any unauthorized use or disclosure is prohibited.

Le contenu du présent courriel est privilégié, confidentiel et soumis à des droits d'auteur. Il est interdit de l'utiliser ou de le divulguer sans autorisation.

PRIVILEGED, CONFIDENTIAL AND WITHOUT PREJUDICE

Dear Mr. Pourbaix:

Southwest GTA Clean Energy Supply Contract (the "Contract") between TransCanada Energy Ltd. ("TCE") and the Ontario Power Authority ("OPA") dated October 9, 2009

We are writing to you in response to your letter to Colin Andersen, dated March 10, 2011. As stated in Colin's October 7, 2010 letter to you, we wish to work with you to identify projects and the extent to which such projects may compensate TCE for termination of the Contract while appropriately protecting the interests of ratepayers. We have reviewed the proposal contained in the draft implementation agreement and schedules TCE provided to us, and find that it does not meet this requirement. We would like to suggest an alternative proposal which we believe meets this requirement.

The Government of Ontario's Long-Term Energy Plan has identified a need for a peaking natural gas-fired plant in the Kitchener-Waterloo-Cambridge area. We believe such a plant is a project that could compensate TCE for the termination of the Contract and at the same time protect the interests of ratepayers. We have set out in Schedule "A" to this letter a technical description of the requirements of such a project.

We would propose to enter into a contract with TCE for TCE to construct, own, operate and maintain this replacement project as compensation for the termination of the Contract. The contract for this project (the "Replacement Contract") would be based on the final form of contract (the "NYR Contract") included as part of the Northern York Region Peaking Generation Request for Proposals, subject to the changes set out below and necessitated by Schedule "A". The financial parameters of the Replacement Contract would be as set out in Schedule "B" to this letter. In consideration of the uncertainties in this proposed replacement project, we would include a mechanism in the Replacement Contract to adjust the NRR upon commercial operation, on the basis set out in Schedule "C" to this letter. If this proposal is acceptable to you, we will prepare the necessary documentation for your review.

The following sets out the changes to the NYR Contract that would be applicable to the Replacement Contract:

1. **Permits and Approvals.** With respect to the approvals required pursuant to the *Planning Act* to construct the replacement project, the OPA would work with TCE, the host municipality and the Province of Ontario to ensure that once all of the requirements for the *Planning Act* approvals have been satisfied, the approvals are issued in a timely manner, or if they are not issued in a timely manner, that so long as the replacement project has been approved under Part II or Part II.1 of the *Environmental Assessment Act* or is the subject of (i) an order under section 3.1 or a declaration under section 3.2 of that Act, or (ii) an exempting regulation made under that Act, such *Planning Act* approvals do not impede the development of the project.

If this did not occur and as a result the project were to be delayed by the delays TCE encountered in the issuance of such *Planning Act* approvals, such delay would be considered an event of Force Majeure, and TCE would be entitled to recover its reasonable, out-of-pocket costs resulting from such delay, by way of a corresponding

increase in the Net Revenue Requirement (NRR). The amount of the increase in the NRR would be based on the same factor used in Schedule "C" to amortize capital cost over the term. In addition, the OPA would not have the right to terminate the Replacement Contract for such event of Force Majeure, unless the event of Force Majeure resulted in a delay that was greater than two years and the OPA paid TCE a termination amount of \$50,000,000. TCE would be solely responsible for all other permits and approvals required for the project, subject to the standard Force Majeure provisions set out in the NYR Contract.

2. **Oakville Sunk Costs.** The Replacement Contract would provide that verified, non-recoverable sunk costs (net of any residual value) associated with the development of the Oakville Generating Station would be paid to TCE immediately upon its execution, provided that such amount shall not in any case exceed \$37,000,000.
3. **Interconnection Costs.** The Replacement Contract would provide that all out-of-pocket costs incurred by TCE for the electrical and natural gas interconnection of the replacement project would be reimbursed by the OPA. Such costs would be reimbursed on terms that are substantially the same as the terms set out in Section 1 of Exhibit S of the Accelerated Clean Energy Supply Contract between the OPA and Portland Energy Centre L.P. with the necessary conforming changes being made, provided that (i) there shall be no "Budgeted Costs" included in the NRR on account of such costs, (ii) references to the "Simple Cycle Operation Date" shall be replaced with references to the "Commercial Operation Date", and (iii) there shall be no "Excess H1 Amount".
4. **Gas Delivery and Management Services Costs.** Unlike the NYR Contract, the NRR for the Replacement Contract would take into account all gas delivery and management services costs, and TCE would be responsible for managing natural gas delivery and management services, consistent with the approach taken in the Contract.
5. **Net Revenue Requirement Indexing Factor (NRRIF).** As set out in Schedule "B", the NRRIF would be equal to 20%. In the course of finalizing the Replacement Contract, the OPA would be willing to consider accepting a higher NRRIF, so long as there was a corresponding reduction in the NRR.
6. **Term of Replacement Contract.** The term of the replacement contract would be 25 years. For greater certainty, this would be the definitive length of the term and not an option.
7. **Capacity Check Test.** The Capacity Check Test provisions of the Replacement Contract would be modified so that as long as the demonstrated capacity was not less than [90]% of the applicable Seasonal Contract Capacity, the failure to achieve the required Seasonal Contract Capacity would not be an event of default. If the demonstrated capacity was greater than [90]% but less than 100% of the applicable Seasonal Contract Capacity, a Capacity Reduction Factor would apply in accordance with the provisions of Exhibit J. [NTD: Appropriate threshold to be confirmed by SMS.]
8. **Potential One Hour Runs.** Because of the absence of the "NINRR" term in Exhibit J to the NYR Contract, we do not believe that the potential for single hour imputed production intervals would be detrimental to TCE. We are not proposing any change to

Exhibit J but would be willing to discuss any valid concerns TCE may have in this regard.

If this proposal is acceptable to you, we will prepare the necessary documentation for your review. For greater certainty, although this proposal is made in good faith, it remains subject to internal OPA approvals and does not constitute an offer capable of acceptance.

Yours very truly,

JoAnne Butler

- c. Colin Andersen, *Ontario Power Authority*
Michael Killeavy, *Ontario Power Authority*
Rocco Sebastiano, *Osler, Hoskin & Harcourt LLP*

Draft & Privileged

SCHEDULE "A" – TECHNICAL REQUIREMENTS

Replacement Project

The replacement project shall:

- (a) be a dispatchable facility designed for maximum operational flexibilities;
- (b) be a simple cycle configuration generating facility with fast start capability;
- (c) utilize natural gas supplied by pipeline as the fuel; and
- (d) comply with Section 6 (Generation Connection Criteria), as specified in the 'Ontario Resources and Transmission Assessment Criteria' document published by the IESO. **[NTD: Is this not covered by the obligation to comply with applicable laws and regulations?]**

Contract Capacity

The replacement project will be a single generating facility and will:

- (a) be able to provide a minimum of 250 MW at 35 °C under both N-1 System Conditions and N-1 Generating Facility Conditions simultaneously. For further clarity, the replacement project must be designed to supply either transmission circuit (M20D or M21D) at all times. Each unit must be able to supply either transmission circuit at all times;
- (b) **[be able to provide a minimum of 500 MW at 35 °C under N-2 System Conditions;]**
- (c) have a Season 3 Contract Capacity of no less than 480 MW;
- (d) have a Contract Capacity of no more than 550 MW in any Season; and
- (e) have a Nameplate MVA Rating of no more than **[650] MVA [NTD: There are no short circuit issues due to connection at 230 kV, so this item can be omitted.]**

Electrical Connection

The replacement project will be connected directly to the IESO-Controlled Grid via new double circuit 230 kV transmission lines. **[Notwithstanding the foregoing, a replacement project may also connect to a Local Distribution System for the purpose of providing Islanding Capability and still be eligible.]**

The replacement project will have a connection point located with a direct connection to the Hydro One circuits M20D and M21D between the [●]th transmission tower (Tower #●) leaving the Preston TS connecting to the Galt TS. **[NTD: This assumes TCE builds the transmission line to Boxwood.]**

Operation Following a N-2 Contingency (Load Restoration)

For load restoration, the replacement project will comply with the load restoration criteria stipulated under Section 7 of the Ontario Resource and Transmission Assessment Criteria. The criteria are as follows:

- all load to be restored within 8 hours
- amount of load in excess of 150 MW must be restored within 4 hours
- amount of load in excess of 250 MW must be restored within 30 minutes.

Operational Flexibilities

1. **Fast Start Capability.** The replacement project must be such that each combustion turbine must be capable of fast start-up.
2. **Ramp Rate Requirement.** The replacement project must be such that each combustion turbine is capable of ramping at a rate of 8%/min or more of its Base Load. **[A Contract Ramp Rate will be agreed on by the parties to form part of the Replacement Contract. Ramp rate stipulated in the Replacement Contract will be subject to annual verification and shall form part of a capacity check test.]**
3. **Turnaround Time Requirement.** To be discussed.
4. **Black Start Capability.** The IESO advised that replacement project is not required to include black-start capability since the generators can be run-up (following a N-2 contingency of the Preston Tap) using the Preston auto-transformer to maintain a synchronous connection to the system.
5. **Emissions Requirements.** The replacement project shall be such that its emissions shall not exceed the following:
 - (a) Nitrogen Oxides (NOx) in a concentration not exceeding 15 ppmv (based upon Reference Conditions and 15% O2 in the exhaust gases on a dry volume basis) as measured using the KWCG Emissions Measurement Methodology, and all as more particularly set out in the Contract; and
 - (b) Carbon Monoxide (CO) in a concentration not exceeding 10 ppmv (based upon Reference Conditions and 15% O2 in the exhaust gases on a dry volume basis) as measured using the KWCG Emissions Measurement Methodology, and all as more particularly set out in the Contract. **[NTD: What is the KWCG Emissions Measurement Methodology? What "Contract" is it set out in?]**
 - (c) TCE will provide evidence **[NTD: when?]** to support the stated emission levels of NOx and CO in the form of a signed certificate by an authorized representative of any of: (1) the original equipment manufacturer of the replacement project's turbines, (2) the supplier or manufacturer of any post combustion emission control equipment utilized by the replacement project, or (3) the engineering company responsible for the design of the replacement project, which certificate must state

that the replacement project, as designed, will operate within these stated limits for NOx and CO.

- (d) The Replacement Contract will require that the emission limits for NOx and CO be (i) incorporated into the replacement project's Environmental Review Report prepared as part of its environmental assessment process or otherwise reflected in its completed environmental assessment, and (ii) ultimately reflected in the replacement project's application to the Ministry of the Environment for a Certificate of Approval (Air & Noise) Operating Permit, together with a request that such limits be imposed as a condition in such certificate of approval.
 - (e) The emission limits for NOx and CO stated in the Replacement Contract will form the basis of an ongoing operating requirement. For greater certainty, the OPA is not requiring TCE to adopt any specific facility design or utilize any particular control equipment with respect to air emissions, provided, however, that the replacement project must comply with the NOx and CO limits set out above.
6. **Fuel Supply.** The replacement project will obtain gas distribution services from Union Gas Limited, and TCE cannot by-pass Union Gas Limited.
7. **Equipment.** The replacement project will be designed utilizing (2) Mitsubishi heavy Industries M501GAC Fast Start gas-fired combustion turbine generators (the "Generators"), with evaporative cooling and emission reduction equipment. Each Generator shall be nominally rated at [250] MW (measured at the Generator's output terminals) new and clean, at ISO conditions. TCE shall negotiate the purchase contract for the Generators with the Generator vendor. [NTD: Is TCE negotiating a new contract with MPS?]

SCHEDULE "B" – FINANCIAL PARAMETERS

Net Revenue Requirement	\$ 12,839 / MW-month
Net Revenue Requirement Indexing Factor	20 %
Annual Average Contract Capacity	500 MW
Nameplate Capacity	[●] MW
Start-Up Gas for the Contract Facility	700 MMBTU/start-up
Start-Up Maintenance Cost	\$ [30,000]/start-up (* please refer to the note below)
O&M Costs	\$ [●]/ MWh (* please refer to the note below)
OR Cost	\$ [●]/ MWh (* please refer to the note below)

	<u>Season 1</u>	<u>Season 2</u>	<u>Season 3</u>	<u>Season 4</u>
<u>Contract Heat Rate</u>	10.42 MMBTU/MWh (HHV)	10.55 MMBTU/MWh (HHV)	10.66 MMBTU/MWh (HHV)	10.58 MMBTU/MWh (HHV)
<u>Contract Capacity</u> Note: Subject to Schedule "A", TCE to determine Seasonal Contract Capacities so long as the AACC is 500 MW.	[●] MW	[●] MW	[●] MW	[●] MW
<u>10nORCC</u>	0 MW	0 MW	0 MW	0 MW

* NOTE: These parameters will be determined following the OPA's review of the unredacted Long-Term Services Agreement between Mitsubishi Power System and TransCanada Energy Ltd. ("LTSA").

SCHEDULE "C" – ADJUSTMENT METHODOLOGY

1. The Net Revenue Requirement set out in Schedule "B" is based on an assumption that the capital cost to design and build the replacement project will be \$425,000,000 (the "Target Capex"). So long as the actual cost to design and build the replacement project (the "Actual Capex") is within 3% higher or lower than the Target Capex, there shall be no adjustment in the NRR. If the Actual Capex is more than 3% higher or lower than the Target Capex, the NRR shall be adjusted on the following basis. For greater certainty, none of the other parameters set out in Schedule "B" is subject to adjustment.

- (i) The OPA's share of any difference between the Target Capex and the Actual Capex shall be determined as follows:

OPA Share = (Actual Capex – Target Capex) × 0.50, provided that the OPA Share shall not exceed \$37,500,000

- (ii) The adjusted capital cost ("Adjusted Capex") shall be equal to the OPA Share plus the Target Capex. For greater certainty, if the OPA Share is a negative number, the Adjusted Capex shall be less than the Target Capex.
 - (iii) The adjusted NRR shall be equal to 4626.968162 plus 1.93219×10^{-5} multiplied by the Adjusted Capex.
 - (b) The determination of the Actual Capex shall not include: (i) any costs being reimbursed by the OPA, including, without limitation, "Interconnection Costs" and "Oakville Sunk Costs", as set out above, (ii) any costs incurred by TCE that were not reasonably required to be incurred in order for TCE to fulfill its obligations under the Replacement Contract or that were not incurred in accordance with "Good Engineering and Operating Practices" (as such term is defined in the Contract), or (iii) any costs not substantiated to the reasonable satisfaction of the OPA. **[NTD: This test should provide some measure of comfort about TCE's spending without the need for close oversight and approvals by the OPA.]**
 - (c) The following costs shall be considered fixed components of the Target Capex not subject to change in determining the Actual Capex:

<u>Cost</u>	<u>Fixed Price</u>
Main Turbine Original Costs (excluding change orders)	\$156,274,358
Main Turbine Additional Scope (excluding change orders)	\$39,198,860
[●]	

- (d) The determination of the Actual Capex shall be done through an "open book" process, such that all costs incurred by TCE in designing and building the replacement project shall be transparent to the OPA and fully auditable. Any

dispute relating to the determination of the Actual Capex shall be resolved in accordance with the dispute resolution provisions of the Replacement Contract.

- (e) All dollar amounts referenced in this letter are in Canadian dollars, unless otherwise specified.
- (f) **[NTD: Michael, in your memo you state that the included cost components for Actual Capex are to mirror those of Target Capex. Is this intended to limit recovery to certain elements of Capex?]**

Draft & Privileged

PRIVILEGED, CONFIDENTIAL AND WITHOUT PREJUDICE

Dear Mr. Pourbaix:

Southwest GTA Clean Energy Supply Contract (the "Contract") between TransCanada Energy Ltd. ("TCE") and the Ontario Power Authority ("OPA") dated October 9, 2009

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The Government of Ontario's Long-Term Energy Plan has identified a need for a peaking natural gas-fired plant in the Kitchener-Waterloo-Cambridge area. We believe such a plant is a project that could compensate TCE for the termination of the Contract and at the same time protect the interests of ratepayers. We have set out in Schedule "A" to this letter a technical description of the requirements of such a project.

We would propose to enter into a contract with TCE for TCE to construct, own, operate and maintain this replacement project as compensation for the termination of the Contract. The contract for this project (the "Replacement Contract") would be based on the final form of contract (the "NYR Contract") included as part of the Northern York Region Peaking Generation Contract (the "NYR Contract"), with Request for Proposals, subject to the changes set out below and necessitated by Schedule "A". The financial parameters of the Replacement Contract would be as set out in Schedule "B" to this letter. As information about the In consideration of the uncertainties in this proposed replacement project matures, we would adjust the financial parameters of include a mechanism in the Replacement Contract in accordance with the methodology to adjust the NRR upon commercial operation, on the basis set out in Schedule "C" to this letter. If this proposal is acceptable to you, we will prepare the necessary documentation for your review.

The following sets out the changes to the NYR Contract that would be applicable to the Replacement Contract:

1. **Permits and Approvals.** With respect to the approvals required pursuant to the *Planning Act* to construct the replacement project, the OPA would work with TCE, the host municipality and the Province of Ontario to ensure that once all of the requirements for the *Planning Act* approvals have been satisfied, the approvals are issued in a timely manner, or if they are not issued in a timely manner, that so long as the replacement project has been approved under Part II or Part II.1 of the *Environmental Assessment Act* or is the subject of (i) an order under section 3.1 or a declaration under section 3.2 of that Act, or (ii) an exempting regulation made under that Act, ~~that such Planning Act approvals do not impede the development of the project.~~

In the event of TCE encountering* an event of Force Majeure* If this did not occur and as a result of a delay the project were to be delayed by the delays TCE encountered in the issuance of such Planning Act approvals, such delay would be considered* an event of

Force Majeure*, and TCE would be entitled to recover its reasonable, out-of-pocket costs resulting from such delay, by way of a corresponding increase in the Net Revenue Requirement (NRR). The amount of the increase in the NRR would be based on the same factor used in Schedule "C" to amortize capital cost over the term. In addition, the OPA would not have the right to terminate the Replacement Contract for such event of Force Majeure, unless the event of Force Majeure resulted in a delay that was greater than two years and the OPA paid TCE a termination amount of ~~[\$●]~~ \$50,000,000. TCE would be solely responsible for all other permits and approvals required for the project, subject to the standard Force Majeure provisions set out in the NYR Contract.

2. **Oakville Sunk Costs.** The Replacement Contract would provide that verified, non-recoverable sunk costs (net of any residual value) associated with the development of the Oakville Generating Station would be paid to TCE immediately upon its execution, provided that such amount shall not in any case exceed \$37,000,000.
3. **Interconnection Costs.** ~~The Replacement Contract would include a mechanism for the NRR to be adjusted prior to commercial operation to incorporate~~ provide that all out-of-pocket costs incurred by TCE for the electrical and natural gas interconnection of the replacement project, plus an amount to reflect the reasonable cost to TCE in amortizing the recovery of these costs [over the term] ~~[NTD: Consider appropriate recovery period.]~~ of the Replacement Contract. [For the gas connection, this would include all costs paid to the local gas distribution company (the "LDC") that are associated with the connection of the project from the LDC, including a contribution in aid to construction, and terminating at the demarcation between the project and the LDC on the site of the project. For the electrical connection, this would include all costs associated with the design engineering, construction and commissioning of the electrical facilities between the high voltage side of the project switchyard and the point of connection to the Hydro One transmission system, including land and easements, if applicable.] would be reimbursed by the OPA. Such costs would be reimbursed on terms that are substantially the same as the terms set out in Section 1 of Exhibit S of the Accelerated Clean Energy Supply Contract between the OPA and Portland Energy Centre L.P. with the necessary conforming changes being made, provided that (i) there shall be no "Budgeted Costs" included in the NRR on account of such costs, (ii) references to the "Simple Cycle Operation Date" shall be replaced with references to the "Commercial Operation Date", and (iii) there shall be no "Excess H1 Amount".
4. **Gas Delivery and Management Services Costs.** Unlike the NYR Contract, the NRR for the Replacement Contract would take into account all gas delivery and management services costs, and TCE would be responsible for managing natural gas delivery and management services, consistent with the approach taken in the Contract.
5. **Net Revenue Requirement Indexing Factor ("NRRIF²²").** As set out in Schedule "B", the NRRIF would be equal to 20%. In the course of finalizing the Replacement Contract, the OPA would be willing to consider accepting a higher NRRIF, so long as there was a corresponding reduction in the NRR.
6. **Term of Replacement Contract.** The term of the replacement contract would be 25 years. For greater certainty, this would be the definitive length of the term and not an option.

7. **Capacity Check Test.** The Capacity Check Test provisions of the Replacement Contract would be modified so that as long as the demonstrated capacity was not less than [~~90~~90]% of the applicable Seasonal Contract Capacity, the failure to achieve the required Seasonal Contract Capacity would not be an event of default. If the demonstrated capacity was greater than [~~90~~90]% but less than 100% of the applicable Seasonal Contract Capacity, a Capacity Reduction Factor would apply in accordance with the provisions of Exhibit J. **[NTD: Appropriate threshold to be confirmed by SMS.]**
8. **Potential One Hour Runs.** Because of the absence of the "NINRR" term in Exhibit J to the NYR Contract, we do not believe that the potential for single hour imputed production intervals would be detrimental to TCE. We are not proposing any change to Exhibit J but would be willing to discuss any valid concerns TCE may have in this regard.

If this proposal is acceptable to you, we will prepare the necessary documentation for your review. For greater certainty, although this proposal is made in good faith, it remains subject to internal OPA approvals and does not constitute an offer capable of acceptance.

Yours very truly,

JoAnne Butler

- c. Colin Andersen, *Ontario Power Authority*
Michael Killeavy, *Ontario Power Authority*
Rocco Sebastiano, *Osler, Hoskin & Harcourt LLP*

Draft & Privileged

SCHEDULE "A" – TECHNICAL REQUIREMENTS

~~[NTD: TCE's "Value Propositions" includes a note that Schedule "A" to the IA should set out the applicable emissions limits and measurement methodology. To confirm whether the OPA intends to carry these provisions over from the Contract.]~~

Replacement Project

The replacement project shall:

- (a) be a dispatchable facility designed for maximum operational flexibilities;
- (b) be a simple cycle configuration generating facility with fast start capability;
- (c) utilize natural gas supplied by pipeline as the fuel; and
- (d) comply with Section 6 (Generation Connection Criteria), as specified in the 'Ontario Resources and Transmission Assessment Criteria' document published by the IESO. [NTD: Is this not covered by the obligation to comply with applicable laws and regulations?]

Contract Capacity

The replacement project will be a single generating facility and will:

- (a) be able to provide a minimum of 250 MW at 35 °C under both N-1 System Conditions and N-1 Generating Facility Conditions simultaneously. For further clarity, the replacement project must be designed to supply either transmission circuit (M20D or M21D) at all times. Each unit must be able to supply either transmission circuit at all times;
- (b) [be able to provide a minimum of 500 MW at 35 °C under N-2 System Conditions;]
- (c) have a Season 3 Contract Capacity of no less than 480 MW;
- (d) have a Contract Capacity of no more than 550 MW in any Season; and
- (e) have a Nameplate MVA Rating of no more than [650] MVA [NTD: There are no short circuit issues due to connection at 230 kV, so this item can be omitted.]

Electrical Connection

The replacement project will be connected directly to the IESO-Controlled Grid via new double circuit 230 kV transmission lines. [Notwithstanding the foregoing, a replacement project may also connect to a Local Distribution System for the purpose of providing Islanding Capability and still be eligible.]

The replacement project will have a connection point located with a direct* connection to the Hydro One *circuits M20D and M21D between the [●]th transmission tower (Tower #●) leaving

the Preston TS connecting to the Galt TS. [NTD: This assumes TCE builds the transmission line to Boxwood.]

Operation Following a N-2 Contingency (Load Restoration)

For load restoration, the replacement project will comply with the load restoration criteria stipulated under Section 7 of the Ontario Resource and Transmission Assessment Criteria. The criteria are as follows:

- all load to be restored within 8 hours
- amount of load in excess of 150 MW must be restored within 4 hours
- amount of load in excess of 250 MW must be restored within 30 minutes.

Operational Flexibilities

1. Fast Start Capability. The replacement project must be such that each combustion turbine must be capable of fast start-up.
2. Ramp Rate Requirement. The replacement project must be such that each combustion turbine is capable of ramping at a rate of 8%/min or more of its Base Load. [A Contract Ramp Rate will be agreed on by the parties to form part of the Replacement Contract. Ramp rate stipulated in the Replacement Contract will be subject to annual verification and shall form part of a capacity check test.]
3. Turnaround Time Requirement. To be discussed.
4. Black Start Capability. The IESO advised that replacement project is not required to include black-start capability since the generators can be run-up (following a N-2 contingency of the Preston Tap) using the Preston auto-transformer to maintain a synchronous connection to the system.
5. Emissions Requirements. The replacement project shall be such that its emissions shall not exceed the following:
 - (a) Nitrogen Oxides (NOx) in a concentration not exceeding 15 ppmv (based upon Reference Conditions and 15% O2 in the exhaust gases on a dry volume basis) as measured using the KWCG Emissions Measurement Methodology, and all as more particularly set out in the Contract; and
 - (b) Carbon Monoxide (CO) in a concentration not exceeding 10 ppmv (based upon Reference Conditions and 15% O2 in the exhaust gases on a dry volume basis) as measured using the KWCG Emissions Measurement Methodology, and all as more particularly set out in the Contract. [NTD: What is the KWCG Emissions Measurement Methodology? What "Contract" is it set out in?]
 - (c) TCE will provide evidence [NTD: when?] to support the stated emission levels of NOx and CO in the form of a signed certificate by an authorized representative of any of: (1) the original equipment manufacturer of the replacement project's turbines, (2) the supplier or manufacturer of any post combustion emission control

equipment utilized by the replacement project, or (3) the engineering company responsible for the design of the replacement project, which certificate must state that the replacement project, as designed, will operate within these stated limits for NOx and CO.

(d) The Replacement Contract will require that the emission limits for NOx and CO be (i) incorporated into the replacement project's Environmental Review Report prepared as part of its environmental assessment process or otherwise reflected in its completed environmental assessment, and (ii) ultimately reflected in the replacement project's application to the Ministry of the Environment for a Certificate of Approval (Air & Noise) Operating Permit, together with a request that such limits be imposed as a condition in such certificate of approval.

(e) The emission limits for NOx and CO stated in the Replacement Contract will form the basis of an ongoing operating requirement. For greater certainty, the OPA is not requiring TCE to adopt any specific facility design or utilize any particular control equipment with respect to air emissions, provided, however, that the replacement project must comply with the NOx and CO limits set out above.

6. **Fuel Supply.** The replacement project will obtain gas distribution services from Union Gas Limited, and TCE cannot by-pass Union Gas Limited.

7. **Equipment.** The replacement project will be designed utilizing (2) Mitsubishi heavy Industries M501GAC Fast Start gas-fired combustion turbine generators (the "Generators"), with evaporative cooling and emission reduction equipment. Each Generator shall be nominally rated at [250] MW (measured at the Generator's output terminals) new and clean, at ISO conditions. TCE shall negotiate the purchase contract for the Generators with the Generator vendor. [NTD: Is TCE negotiating a new contract with MPS?]

Draft & Privileged

SCHEDULE "B" – FINANCIAL PARAMETERS

<u>Net Revenue Requirement</u>	<u>\$ 12,839 / MW-month</u>
<u>Net Revenue Requirement Indexing Factor</u>	<u>20 %</u>
<u>Annual Average Contract Capacity</u>	<u>500 MW</u>
<u>Nameplate Capacity</u>	<u>101 MW</u>
<u>Start-Up Gas for the Contract Facility</u>	<u>700 MMBTU/start-up</u>
<u>Start-Up Maintenance Cost</u>	<u>\$ [30,000]/start-up (* please refer to the note below)</u>
<u>O&M Costs</u>	<u>\$ [●]/ MWh (* please refer to the note below)</u>
<u>OR Cost</u>	<u>\$ [●]/ MWh (* please refer to the note below)</u>

	<u>Season 1</u>	<u>Season 2</u>	<u>Season 3</u>	<u>Season 4</u>
<u>Contract Heat Rate</u>	<u>10.42</u> <u>MMBTU/MWh</u> <u>(HHV)</u>	<u>10.55</u> <u>MMBTU/MWh</u> <u>(HHV)</u>	<u>10.66</u> <u>MMBTU/MWh</u> <u>(HHV)</u>	<u>10.58</u> <u>MMBTU/MWh</u> <u>(HHV)</u>
<u>Contract Capacity</u> Note: Subject to Schedule "A", TCE to determine Seasonal Contract Capacities so long as the AACC is 500 MW.	<u>101 MW</u>	<u>101 MW</u>	<u>101 MW</u>	<u>101 MW</u>
<u>10nORCC</u>	<u>0 MW</u>	<u>0 MW</u>	<u>0 MW</u>	<u>0 MW</u>

* NOTE: These parameters will be determined following the OPA's review of the unredacted Long-Term Services Agreement between Mitsubishi Power System and TransCanada Energy Ltd. ("LTSA").

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SCHEDULE "C" – ADJUSTMENT METHODOLOGY

[NTD: E. Smith to draft adjustment methodology based on memo from M. Killeavy.]

1. The Net Revenue Requirement set out in Schedule "B" is based on an assumption that the capital cost to design and build the replacement project will be \$425,000,000 (the "Target Capex"). So long as the actual cost to design and build the replacement project (the "Actual Capex") is within 3% higher or lower than the Target Capex, there shall be no adjustment in the NRR. If the Actual Capex is more than 3% higher or lower than the Target Capex, the NRR shall be adjusted on the following basis. For greater certainty, none of the other parameters set out in Schedule "B" is subject to adjustment.

(i) The OPA's share of any difference between the Target Capex and the Actual Capex shall be determined as follows:

OPA Share = (Actual Capex – Target Capex) × 0.50, provided that the OPA Share shall not exceed \$37,500,000

(ii) The adjusted capital cost ("Adjusted Capex") shall be equal to the OPA Share plus the Target Capex. For greater certainty, if the OPA Share is a negative number, the Adjusted Capex shall be less than the Target Capex.

(iii) The adjusted NRR shall be equal to 4626.968162 plus 1.93219×10^{-5} multiplied by the Adjusted Capex.

(b) The determination of the Actual Capex shall not include: (i) any costs being reimbursed by the OPA, including, without limitation, "Interconnection Costs" and "Oakville Sunk Costs", as set out above, (ii) any costs incurred by TCE that were not reasonably required to be incurred in order for TCE to fulfill its obligations under the Replacement Contract or that were not incurred in accordance with "Good Engineering and Operating Practices" (as such term is defined in the Contract), or (iii) any costs not substantiated to the reasonable satisfaction of the OPA. [NTD: This test should provide some measure of comfort about TCE's spending without the need for close oversight and approvals by the OPA.]

(c) The following costs shall be considered fixed components of the Target Capex not subject to change in determining the Actual Capex:

<u>Cost</u>	<u>Fixed Price</u>
<u>Main Turbine Original Costs (excluding change orders)</u>	<u>\$156,274,358</u>
<u>Main Turbine Additional Scope (excluding change orders)</u>	<u>\$39,198,860</u>
<u>[●]</u>	

(d) The determination of the Actual Capex shall be done through an "open book" process, such that all costs incurred by TCE in designing and building the replacement project shall be transparent to the OPA and fully auditable. Any

dispute relating to the determination of the Actual Capex shall be resolved in accordance with the dispute resolution provisions of the Replacement Contract.

- (e) All dollar amounts referenced in this letter are in Canadian dollars, unless otherwise specified.
- (f) [NTD: Michael, in your memo you state that the included cost components for Actual Capex are to mirror those of Target Capex. Is this intended to limit recovery to certain elements of Capex?]

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Aleksandar Kojic

From: Deborah Langelaan
Sent: March 25, 2011 9:30 AM
To: Michael Killeavy
Cc: Bonny Wong
Subject: FW: DRAFT: Terms of Reference for OPA-Special Audit
Attachments: Draft Terms of Reference_2011_OPA Special Audit of Damages Payable to TransCanada Energy Ltd Mar 24.doc

Importance: High
Sensitivity: Confidential

Michael;

Please find attached the Ministry of Finance's draft Terms of Reference for the OGS audit. Would you please provide your comments before noon on Monday?

Thanks,
Deb

Deborah Langelaan | Manager, Natural Gas Projects | OPA |
Suite 1600 - 120 Adelaide St. W. | Toronto, ON M5H 1T1 |
T: 416.969.6052 | F: 416.967.1947 | deborah.langelaan@powerauthority.on.ca |

From: Speevak, Ted (FIN) [<mailto:Ted.Speevak@ontario.ca>]
Sent: March 24, 2011 3:52 PM
To: Bonny Wong
Cc: Deborah Langelaan; King, Richard (FIN)
Subject: DRAFT: Terms of Reference for OPA-Special Audit
Importance: High
Sensitivity: Confidential

Privileged and Confidential
Prepared in Contemplation of Litigation

Hi - Bonnie:

Attached is our Draft Terms of Reference (TOR) for the OPA-Special Audit. Kindly review the TOR and provide Richard with OPA's consolidated comments (i.e., yours & Deb's) by **noon, Monday, March 28, 2011**.

Many Thanks;

- Ted Speevak



**CONFIDENTIAL
HIGH SENSITIVITY**

Ontario Power Authority

Terms of Reference

**Special Audit of Damages Payable
to TransCanada Energy Ltd.**

March, 2011

Ontario Internal Audit Division

Ministry of Finance

**Serving:
Ontario Power Authority**

<XXX - YY/

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Prepared in Contemplation of Litigation

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[A] Background:

In October 2009, the OPA signed a contract with TransCanada Energy Ltd. (TCE) to design, build and operate a 900 megawatt electricity generating station in Oakville over a 20-year term.

The completion of this project was terminated at the direction of the Ministry of Energy of Ontario during October 2010 and the OPA has agreed to pay TCE an amount in damages in order to cover TCE's sunk costs. As a result of this agreement, TCE has abandoned its court actions with the OPA.

As of February 28, 2011, TCE has provided the OPA with 2 binders that include supporting documentation for the development and implementation costs incurred as part of the project. The total amount being claimed by TCE as sunk costs is approximately \$37M as of February 28, 2011. These costs include interest costs, which will continue to accrue overtime.

These amounts have not been audited to date and have not been validated as true "sunk costs" by the OPA. A verification audit has been requested to be completed by the Finance Revenue Audit Service Team (FRAST) of the Ministry of Finance.

[B] Engagement Objectives, Criteria and Scope**Engagement Objective**

The audit objectives are to provide OPA management with assurance that:

- The costs submitted by TCE to be paid by the OPA meet the definition of "sunk costs" (as established for the terms of this review) and are eligible for recovery by TCE.
- The amounts claimed by TCE were incurred in relation to the contracted Oakville generating station.
- The eligible sunk costs submitted for recovery by TCE include adequate supporting documentation to verify the accuracy and existence of amounts claimed.

Definition of "sunk cost": A cost that is incurred but not recoverable (in whole or in part). Not Recoverable, for the purpose of this review, refers to the inability of TCE to recover any or all of the costs incurred in any present or future undertaking.

Criteria

The submitted costs:

1. Meet the definition of "sunk cost";
2. Were incurred in relation to the planned Oakville Generating Station;
3. Were reasonable in amount; and
4. Were paid by TCE.

Scope

The scope of this review includes:

- Review of the binders and supporting documentation supplied by TCE for recovery of sunk costs.
- Review of any applicable documentation (e.g. negotiation terms, correspondence, agreements, evidence of payment, etc.) surrounding the terms of the costs being claimed by TCE for background.
- Scope of sample testing (including sample size) to be discussed and confirmed with management prior to sample testing.

- **Limitations of a review based on documentation alone:**

We are reliant on the integrity and accuracy of the information provided. It is assumed that documented costs were actually incurred and related documentation is accurate. For example, in reviewing the labour costs, we assume:

- That the listed employees actually exist;
- That those employees have the stated job titles;
- That those employees worked on the project for stated number of hours and for the implied rate; and
- That TCE paid the stated amount for the work.

- **Limitations in the data**

The data provided may in turn limit some planned audit procedures. For example, TCE's employment charge rates are based on the midpoint salary for the position, rather than the specific compensation of the individual assigned to the project. This is done to preserve the confidentiality of individual salaries. Consequently, the amount quoted as a cost incurred is not necessarily the amount that was actually paid and cannot be traced to the actual amount payment amount.

Interest during construction is out of scope of this review.

[C] Engagement Approach, Methodology & Engagement Reporting

Our engagement approach will include the following:

- Obtain summary and detailed spreadsheets (in suitable Excel format) from TCE via the OPA contact.
- Aggregate the spreadsheet data into categories (such as labour costs, invoices, employee expenses,...).
- For each category, select a sample for review and request the corresponding documents (invoices, receipts, evidence of payment,...) from TCE via the OPA contact. Risk and sensitivity will be considered in selecting the samples. For example, while employee expenses constitute a very small portion of the total amount that TCE is claiming, these expenses are of a very sensitive nature and the sampling will be adjusted accordingly.
- Some audit procedures may require assistance from OPA Management.
- Review the sample data and note any findings for discussion with and follow-up by OPA Management.

[D] Key Stakeholders & Client Contacts

- Michael Killeavy, Director, Contract Management, Electricity Resources
- Deborah Langelaan, Manager, Natural Gas Projects, Electricity Resources
- Bonny Wong, Manager, Accounting

[E] Engagement Timing & Deliverables

Analysis of the TCE provided spreadsheets of the summary and detailed data would begin upon the receipt by FRAST from OPA. As a category sample is selected for review, the selection will be discussed with the OPA contact along with a request for the corresponding category sample documentation (invoices, receipts, evidence of payments,...) that the OPA contact will convey to TCE. The prioritization will also be discussed with OPA.

In the interest of expediency, all of the category sample documentation requests will be conveyed before undertaking the review of the received sample documentation for a given category. As well, FRAST will review a category sample after all of the requested sample documentation has been received for the particular category. Category sample review may trigger further requests for information/data.

Throughout the audit, FRAST will communicate with OPA staff and management to provide updates on a regular basis. Upon conclusion of the engagement, FRAST will prepare a draft report outlining our findings for discussion with OPA management at an exit meeting.

A final report will be issued one week after receiving comments from OPA management. Specific items that the report will include:

1. Audit Objectives
2. Audit Approach
3. Audit results based on the audit's Objectives and Approach.

The draft and final reports will be issued to Michael Lyle – VP, Legal, Aboriginal & Regulatory Affairs.

[F] Engagement Team

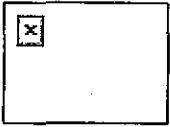
- Richard King – Senior Audit Manager
- Ted Speevak – Consultant

Aleksandar Kojic

From: Smith, Elliot [ESmith@osler.com]
Sent: March 25, 2011 6:00 PM
To: Safouh Soufi; Deborah Langelaan; Michael Killeavy
Cc: Sebastiano, Rocco
Subject: RE: TransCanada Potential Project Negotiations - Capital Cost Estimate Rev 5 February 17, 2011
Attachments: #20297127v6_LEGAL_1_ - Draft Response to A. Pourbaix Letter with Project Proposal.doc; Blackline.pdf

All,
Further to today's discussion, please find attached a revised draft letter to TCE along with a blackline. Please note that this draft presumes that the quarterly ramp rates set out below correspond to the Seasons used in the CES contract. If this is not the case, further revision may be required.

Elliot



Elliot Smith
Associate

416.862.6435 DIRECT
416.862.6666 FACSIMILE
esmith@osler.com

Osler, Hoskin & Harcourt LLP
Box 50, 1 First Canadian Place
Toronto, Ontario, Canada M5X 1B8



From: Safouh Soufi [mailto:safouh@smsenergy-engineering.com]
Sent: Friday, March 25, 2011 5:19 PM
To: Smith, Elliot; Deborah.Langelaan@powerauthority.on.ca; Michael.Killeavy@powerauthority.on.ca
Subject: RE: TransCanada Potential Project Negotiations - Capital Cost Estimate Rev 5 February 17, 2011

Hello Elliot

The figures are per minute and the comma should be replaced with period ".". Sorry about that.

Here are the figures as they should appear in the Contract

Q1: 37.8 MW/minute
Q2: 35.8 MW/minute
Q3: 33.0 MW/minute
Q4: 35.2 MW/minute

Thanks,
Safouh

From: Smith, Elliot [mailto:ESmith@osler.com]

Sent: March 25, 2011 3:30 PM

To: 'safouh@smsenergy-engineering.com'; 'Deborah.Langelaan@powerauthority.on.ca';

'Michael.Killeavy@powerauthority.on.ca'

Subject: Re: TransCanada Potential Project Negotiations - Capital Cost Estimate Rev 5 February 17, 2011

Thanks Safouh. Can you clarify the units of measurement for me?

Elliot

From: Safouh Soufi [mailto:safouh@smsenergy-engineering.com]

Sent: Friday, March 25, 2011 03:18 PM

To: 'Deborah Langelaan' <Deborah.Langelaan@powerauthority.on.ca>; Smith, Elliot; 'Michael Killeavy' <Michael.Killeavy@powerauthority.on.ca>

Subject: RE: TransCanada Potential Project Negotiations - Capital Cost Estimate Rev 5 February 17, 2011

Hello Elliot:

The ramp rate figures for the Facility (two units) will be as follows:

Q1: 37,800 MW

Q2: 35,800 MW

Q3: 33,000 MW

Q4: 35,200 MW

These rates do not required adjustment for ambient conditions and are subject to negotiation with TCE, of course. TCE may see one of these rates in particular as being little aggressive but that is OK for now.

Let me know if you have any questions.

Thanks,
Safouh

From: Deborah Langelaan [mailto:Deborah.Langelaan@powerauthority.on.ca]

Sent: March 25, 2011 11:04 AM

To: esmith@osler.com; rsebastiano@osler.com; Michael Killeavy; Safouh Soufi; gene.meehan@nera.com

Cc: Susan Kennedy

Subject: FW: TransCanada Potential Project Negotiations - Capital Cost Estimate Rev 5 February 17, 2011

Privileged and Confidential

Please find attached TCE's revised capital cost estimate for a peaking plant in Cambridge. Although TCE has reduced its CAPEX by ~\$118 MM we're still miles apart with our estimates.

TCE decreased the following costs:

1. Reduced Fuel gas connection charges to \$0 (decrease of ~\$62 MM)
2. Reduced Electrical connection charges by ~\$34 MM
3. Reduced Insurance & Misc. by ~\$1 MM
4. Reduced Project Uncertainties by ~\$20 MM

Deb

Deborah Langelaan | Manager, Natural Gas Projects| OPA |

Suite 1600 - 120 Adelaide St. W. | Toronto, ON M5H 1T1 |

T: 416.969.6052 | F: 416.967.1947 | deborah.langelaan@powerauthority.on.ca |

From: John Mikkelsen [mailto:john_mikkelsen@transcanada.com]
Sent: March 24, 2011 5:00 PM
To: Deborah Langelaan
Cc: Geoff Murray; Terry Bennett; John Cashin
Subject: TransCanada Potential Project Negotiations - Capital Cost Estimate Rev 5 February 17, 2011

Dear Deborah,

Further to the receipt of your designation letter of March 21, 2011 received today, please find attached capital cost estimate TransCanada Capital Cost Estimate titled "Capital Cost Estimate Boxwood Generation Station...#157;,, Rev.5 dated "Feb 17, 2011...#157;.

Best Regards,

John Mikkelsen, P.Eng.

Director, Eastern Canada, Power Development

TransCanada

Royal Bank Plaza
200 Bay Street
24th Floor, South Tower
Toronto, Ontario M5J 2J1

Tel: 416.869.2102

Fax:416.869.2056

Cell:416.559.1664

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PRIVILEGED, CONFIDENTIAL AND WITHOUT PREJUDICE

Dear Mr. Pourbaix:

Southwest GTA Clean Energy Supply Contract (the "Contract") between TransCanada Energy Ltd. ("TCE") and the Ontario Power Authority ("OPA") dated October 9, 2009

We are writing to you in response to your letter to Colin Andersen, dated March 10, 2011. As stated in Colin's October 7, 2010 letter to you, we wish to work with you to identify projects and the extent to which such projects may compensate TCE for termination of the Contract while appropriately protecting the interests of ratepayers. We have reviewed the proposal contained in the draft implementation agreement and schedules TCE provided to us, and find that it does not meet this requirement. We would like to suggest an alternative proposal which we believe meets this requirement.

The Government of Ontario's Long-Term Energy Plan has identified a need for a peaking natural gas-fired plant in the Kitchener-Waterloo-Cambridge area. We believe such a plant is a project that could compensate TCE for the termination of the Contract and at the same time protect the interests of ratepayers (the "Replacement Project"). We have set out in Schedule "A" to this letter a technical description of the requirements of the Replacement Project.

We would propose to enter into a contract with TCE for TCE to construct, own, operate and maintain the Replacement Project as compensation for the termination of the Contract. The contract for the Replacement Project (the "Replacement Contract") would be based on the final form of contract (the "NYR Contract") included as part of the Northern York Region Peaking Generation Request for Proposals, subject to the changes set out below and otherwise as necessitated by Schedule "A". The financial parameters of the Replacement Contract would be as set out in Schedule "B" to this letter.

The following sets out the changes to the NYR Contract that would be applicable to the Replacement Contract:

1. **Permits and Approvals.** With respect to the approvals required pursuant to the *Planning Act* to construct the Replacement Project, the OPA would work with TCE, the host municipality and the Province of Ontario to ensure that once all of the requirements for the *Planning Act* approvals have been satisfied, the approvals are issued in a timely manner, or if they are not issued in a timely manner, that so long as the Replacement Project has been approved under Part II or Part II.1 of the *Environmental Assessment Act* or is the subject of (i) an order under section 3.1 or a declaration under section 3.2 of that Act, or (ii) an exempting regulation made under that Act, such *Planning Act* approvals do not impede the development of the Replacement Project.

If this did not occur and the delay in the issuance of such *Planning Act* approvals caused TCE not to achieve Commercial Operation by the Milestone Date for Commercial Operation, such delay would be considered an event of Force Majeure, and TCE would be entitled to recover its reasonable, out-of-pocket costs resulting from such delay, by way of a corresponding increase in the Net Revenue Requirement (NRR). In addition, the OPA would not have the right to terminate the Replacement Contract for such event of Force Majeure, unless the event of Force Majeure resulted in a delay that was greater

than two years and the OPA paid TCE a termination amount equal to \$50,000,000 plus the total amount of the sunk costs determined in accordance with paragraph 2, below, provided however that such total of the sunk costs shall not exceed \$37,000,000. TCE would be solely responsible for all other permits and approvals required for the Replacement Project, subject to the standard Force Majeure provisions set out in the NYR Contract.

2. **Oakville Sunk Costs.** The NRR set out in Schedule "B" to this letter includes an amount on account of TCE's sunk costs associated with the development of the Oakville Generating Station. To the extent that the total of the verified, non-recoverable sunk costs (net of any residual value) associated with the development of the Oakville Generating Station is less than \$37,000,000, the NRR shall be reduced by 0.000 019 314 2 multiplied by the amount by which such costs are less than \$37,000,000.
3. **Interconnection Costs.** The Replacement Contract would provide that all out-of-pocket costs incurred by TCE for the electrical and natural gas interconnection of the Replacement Project would be reimbursed by the OPA. Such costs would be reimbursed on terms that are substantially the same as the terms set out in Section 1 of Exhibit S of the Accelerated Clean Energy Supply Contract between the OPA and Portland Energy Centre L.P. with the necessary conforming changes being made, provided that (i) there shall be no "Budgeted Costs" included in the NRR on account of such costs, (ii) references to the "Simple Cycle Operation Date" shall be replaced with references to the "Commercial Operation Date", and (iii) there shall be no "Excess H1 Amount".
4. **Gas Delivery and Management Services Costs.** Unlike the NYR Contract, the NRR for the Replacement Contract would take into account all gas delivery and management services costs, and TCE would be responsible for managing natural gas delivery and management services, consistent with the approach taken in the Contract.
5. **Net Revenue Requirement Indexing Factor (NRRIF).** As set out in Schedule "B", the NRRIF would be equal to 20%. In the course of finalizing the Replacement Contract, the OPA would be willing to consider accepting a higher NRRIF, so long as there was a corresponding reduction in the NRR.
6. **Term of Replacement Contract.** The term of the Replacement Contract would be 25 years. For greater certainty, this would be the definitive length of the term and not an option.
7. **Capacity Check Test.** The Capacity Check Test provisions of the Replacement Contract would be modified so that as long as the demonstrated capacity was not less than 90% of the applicable Seasonal Contract Capacity, the failure to achieve the required Seasonal Contract Capacity would not be an event of default. If the demonstrated capacity was greater than 90% but less than 100% of the applicable Seasonal Contract Capacity, a Capacity Reduction Factor would apply in accordance with the provisions of Exhibit J. In addition, there would be a requirement as part of a Capacity Check Test to confirm that the Replacement Project is capable of achieving the Contract Ramp Rate set out in Schedule "B" to this letter.

8. **Potential One Hour Runs.** Because of the absence of the "NINRR" term in Exhibit J to the NYR Contract, we do not believe that the potential for single hour imputed production intervals would be detrimental to TCE. We are not proposing any change to Exhibit J but would be willing to discuss any concerns TCE may have in this regard.

If this proposal is acceptable to you, we will prepare the necessary documentation for your review. For greater certainty, although this proposal is made in good faith, it remains subject to internal OPA approvals and does not constitute an offer capable of acceptance.

Yours very truly,

JoAnne Butler

- c. Colin Andersen, *Ontario Power Authority*
Michael Killeavy, *Ontario Power Authority*
Rocco Sebastiano, *Osler, Hoskin & Harcourt LLP*

Draft & Privileged

SCHEDULE "A" – TECHNICAL REQUIREMENTS

I. Replacement Project

The Replacement Project shall:

- (a) be a dispatchable facility designed for maximum operational flexibility;
- (b) be a simple cycle configuration generating facility;
- (c) utilize natural gas supplied by pipeline as the fuel; and
- (d) comply with Section 6 (Generation Connection Criteria), as specified in the 'Ontario Resources and Transmission Assessment Criteria' document published by the IESO.

II. Contract Capacity

The Replacement Project will be a single generating facility and will:

- (a) be able to provide a minimum of 250 MW at 35 °C under both N-1 System Conditions and N-1 Generating Facility Conditions simultaneously. For further clarity, the Replacement Project must be designed to supply either transmission circuit M20D or M21D at all times. Each unit must be able to supply either transmission circuit at all times;
- (b) be able to provide a minimum of 500 MW at 35 °C under N-2 System Conditions;
- (c) have a Season 3 Contract Capacity of not less than 480 MW; and
- (d) have a Contract Capacity of not more than 550 MW in any Season.

III. Electrical Connection

The Replacement Project will be connected directly to the IESO-Controlled Grid via new double circuit 230 kV transmission lines. Notwithstanding the foregoing, the Replacement Project may also connect to a Local Distribution System for the purpose of providing Islanding Capability.

The Replacement Project will have a connection point located with a direct connection to the Hydro One circuits M20D and M21D between the [●]th transmission tower (Tower #●) leaving the Preston TS connecting to the Galt TS. [Note: This assumes the Replacement Project is located at the Boxwood site.]

IV. Operation Following a N-2 Contingency (Load Restoration)

If a disruption occurs that leads to N-2 system conditions, TCE shall be required to use Commercially Reasonable Efforts (as such term is defined in the Contract) to assist the IESO, as directed by the IESO, in restoring load in accordance with Section 7 of the Ontario Resource and Transmission Assessment Criteria.

V. Operational Flexibilities

1. **Ramp Rate Requirement.** The Replacement Project must be such that each combustion turbine is capable of ramping at a rate equal to or greater than the Contract Ramp Rate. The Contract Ramp Rate will be subject to verification as part of the Capacity Check Test.
2. **Emissions Requirements.**
 - (a) The emissions from the Replacement Project shall meet or exceed the following criteria:
 - (i) Nitrogen Oxides (NOx) in a concentration not exceeding 15 ppmv (based upon Reference Conditions (as such term is defined in the Contract) and 15% O₂ in the exhaust gases on a dry volume basis) as measured using an emissions measurement methodology substantially based on Exhibit W to the Contract (the "Emissions Measurement Methodology"); and
 - (ii) Carbon Monoxide (CO) in a concentration not exceeding 10 ppmv (based upon Reference Conditions and 15% O₂ in the exhaust gases on a dry volume basis) as measured using the Emissions Measurement Methodology.
 - (b) TCE will provide evidence to support the stated emission levels of NOx and CO in the form of a signed certificate by an authorized representative of any of: (1) the original equipment manufacturer of the Replacement Project's turbines, (2) the supplier or manufacturer of any post combustion emission control equipment utilized by the Replacement Project, or (3) the engineering company responsible for the design of the Replacement Project, which certificate must state that the Replacement Project, as designed, will operate within these stated limits for NOx and CO.
 - (c) The Replacement Contract will require that the emission limits for NOx and CO be (i) incorporated into the Replacement Project's Environmental Review Report or its completed environmental assessment, and (ii) reflected in the Replacement Project's application to the Ministry of the Environment for a Certificate of Approval (Air) Operating Permit, together with a specific request in such application that such limits be imposed as conditions of such Certificate of Approval.
 - (d) The emission limits for NOx and CO stated in the Replacement Contract will form the basis of an ongoing operating requirement. For greater certainty, the OPA is not requiring TCE to adopt any specific facility design or utilize any particular control equipment with respect to air emissions, provided, however, the Replacement Project must comply with the NOx and CO limits set out above, including, without limitation, at the time of attaining Commercial Operation and during any Capacity Check Test.

3. **Fuel Supply.** The Replacement Project will obtain gas distribution services from Union Gas Limited, and TCE cannot by-pass Union Gas Limited.
4. **Equipment.** The Replacement Project will be designed utilizing (2) M501GAC Fast Start gas-fired combustion turbine generators to be supplied by MPS Canada, Inc. (the "Generators"), with evaporative cooling and emission reduction equipment. Each Generator shall be nominally rated at [●] MW (measured at the Generator's output terminals) new and clean, at ISO conditions.

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SCHEDULE "B" – FINANCIAL PARAMETERS

Net Revenue Requirement	\$ 12,887 / MW-month
Net Revenue Requirement Indexing Factor	20 %
Annual Average Contract Capacity	500 MW
Nameplate Capacity	[●] MW
Start-Up Gas for the Contract Facility	700 MMBTU/start-up
Start-Up Maintenance Cost	\$30,000/start-up
O&M Costs	\$0.89 / MWh
OR Cost	\$0.50 / MWh

	<u>Season 1</u>	<u>Season 2</u>	<u>Season 3</u>	<u>Season 4</u>
<u>Contract Heat Rate</u>	10.42 MMBTU/MWh (HHV)	10.55 MMBTU/MWh (HHV)	10.66 MMBTU/MWh (HHV)	10.58 MMBTU/MWh (HHV)
<u>Contract Capacity</u> Note: Subject to Schedule "A", TCE to determine Seasonal Contract Capacities so long as the AACC is 500 MW.	[●] MW	[●] MW	[●] MW	[●] MW
<u>10nORCC</u>	0 MW	0 MW	0 MW	0 MW
<u>Contract Ramp Rate</u>	37.8 MW/minute	35.8 MW/minute	33.0 MW/minute	35.2 MW/minute

PRIVILEGED, CONFIDENTIAL AND WITHOUT PREJUDICE

Dear Mr. Pourbaix:

Southwest GTA Clean Energy Supply Contract (the “Contract”) between TransCanada Energy Ltd. (“TCE”) and the Ontario Power Authority (“OPA”) dated October 9, 2009

We are writing to you in response to your letter to Colin Andersen, dated March 10, 2011. As stated in Colin’s October 7, 2010 letter to you, we wish to work with you to identify projects and the extent to which such projects may compensate TCE for termination of the Contract while appropriately protecting the interests of ratepayers. We have reviewed the proposal contained in the draft implementation agreement and schedules TCE provided to us, and find that it does not meet this requirement. We would like to suggest an alternative proposal which we believe meets this requirement.

The Government of Ontario’s Long-Term Energy Plan has identified a need for a peaking natural gas-fired plant in the Kitchener-Waterloo-Cambridge area. We believe such a plant is a project that could compensate TCE for the termination of the Contract and at the same time protect the interests of ratepayers (the “Replacement Project”). We have set out in Schedule “A” to this letter a technical description of the requirements of the Replacement Project.

We would propose to enter into a contract with TCE for TCE to construct, own, operate and maintain the Replacement Project as compensation for the termination of the Contract. The contract for the Replacement Project (the “Replacement Contract”) would be based on the final form of contract (the “NYR Contract”) included as part of the Northern York Region Peaking Generation Request for Proposals, subject to the changes set out below and otherwise as necessitated by Schedule “A”. The financial parameters of the Replacement Contract would be as set out in Schedule “B” to this letter.

The following sets out the changes to the NYR Contract that would be applicable to the Replacement Contract:

1. **Permits and Approvals.** With respect to the approvals required pursuant to the *Planning Act* to construct the Replacement Project, the OPA would work with TCE, the host municipality and the Province of Ontario to ensure that once all of the requirements for the *Planning Act* approvals have been satisfied, the approvals are issued in a timely manner, or if they are not issued in a timely manner, that so long as the Replacement Project has been approved under Part II or Part II.1 of the *Environmental Assessment Act* or is the subject of (i) an order under section 3.1 or a declaration under section 3.2 of that Act, or (ii) an exempting regulation made under that Act, such *Planning Act* approvals do not impede the development of the Replacement Project.

If this did not occur and the delay in the issuance of such *Planning Act* approvals caused TCE not to achieve Commercial Operation by the Milestone Date for Commercial Operation, such delay would be considered an event of Force Majeure, and TCE would be entitled to recover its reasonable, out-of-pocket costs resulting from such delay, by way of a corresponding increase in the Net Revenue Requirement (NRR). In addition, the OPA would not have the right to terminate the Replacement Contract for such event of Force Majeure, unless the event of Force Majeure resulted in a delay that was greater than two

years and the OPA paid TCE a termination amount equal to \$50,000,000 plus the ~~sum~~total amount of the ~~Sunk Costs~~ determined in accordance with paragraph 2, below, provided ~~however~~ that such ~~amount~~total of ~~Sunk Costs~~the sunk costs shall not exceed \$37,000,000. TCE would be solely responsible for all other permits and approvals required for the Replacement Project, subject to the standard Force Majeure provisions set out in the NYR Contract.

2. **Oakville Sunk Costs.** ~~The Replacement Contract would provide that any *NRR set out in Schedule "B"* to this letter includes an amount on account of TCE's sunk costs associated with the development of the Oakville Generating Station. To the extent that the total of the verified, non-recoverable sunk costs (net of any residual value) associated with the development of the Oakville Generating Station (the "Sunk Costs"), would be added to the *NRR set out in Schedule "B"*, by taking the sum of the Sunk Costs, provided that such amount shall not exceed \$37,000,000, multiplying it by {0.000 019 320 1}, and adding it to the NRR. [NTD: This corresponds to a maximum adder of \$715.]~~ is less than \$37,000,000, the NRR shall be reduced by 0.000 019 314 2 multiplied by the amount by which such costs are less than \$37,000,000.
3. **Interconnection Costs.** The Replacement Contract would provide that all out-of-pocket costs incurred by TCE for the electrical and natural gas interconnection of the Replacement Project would be reimbursed by the OPA. Such costs would be reimbursed on terms that are substantially the same as the terms set out in Section 1 of Exhibit S of the Accelerated Clean Energy Supply Contract between the OPA and Portland Energy Centre L.P. with the necessary conforming changes being made, provided that (i) there shall be no "Budgeted Costs" included in the NRR on account of such costs, (ii) references to the "Simple Cycle Operation Date" shall be replaced with references to the "Commercial Operation Date", and (iii) there shall be no "Excess H1 Amount".
4. **Gas Delivery and Management Services Costs.** Unlike the NYR Contract, the NRR for the Replacement Contract would take into account all gas delivery and management services costs, and TCE would be responsible for managing natural gas delivery and management services, consistent with the approach taken in the Contract.
5. **Net Revenue Requirement Indexing Factor (NRRIF).** As set out in Schedule "B", the NRRIF would be equal to 20%. In the course of finalizing the Replacement Contract, the OPA would be willing to consider accepting a higher NRRIF, so long as there was a corresponding reduction in the NRR.
6. **Term of Replacement Contract.** The term of the Replacement Contract would be 25 years. For greater certainty, this would be the definitive length of the term and not an option.
7. **Capacity Check Test.** The Capacity Check Test provisions of the Replacement Contract would be modified so that as long as the demonstrated capacity was not less than 90% of the applicable Seasonal Contract Capacity, the failure to achieve the required Seasonal Contract Capacity would not be an event of default. If the demonstrated capacity was greater than 90% but less than 100% of the applicable Seasonal Contract Capacity, a Capacity Reduction Factor would apply in accordance with the provisions of Exhibit J. In addition, there would be a requirement as part of a Capacity Check Test to confirm that the

Replacement Project is capable of achieving the Contract Ramp Rate set out in Schedule "B" to this letter.

8. **Potential One Hour Runs.** Because of the absence of the "NINRR" term in Exhibit J to the NYR Contract, we do not believe that the potential for single hour imputed production intervals would be detrimental to TCE. We are not proposing any change to Exhibit J but would be willing to discuss any concerns TCE may have in this regard.

If this proposal is acceptable to you, we will prepare the necessary documentation for your review. For greater certainty, although this proposal is made in good faith, it remains subject to internal OPA approvals and does not constitute an offer capable of acceptance.

Yours very truly,

JoAnne Butler

- c. Colin Andersen, *Ontario Power Authority*
Michael Killeavy, *Ontario Power Authority*
Rocco Sebastiano, *Osler, Hoskin & Harcourt LLP*

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SCHEDULE "A" – TECHNICAL REQUIREMENTS

I. Replacement Project

The Replacement Project shall:

- (a) be a dispatchable facility designed for maximum operational flexibility;
- (b) be a simple cycle configuration generating facility;
- (c) utilize natural gas supplied by pipeline as the fuel; and
- (d) comply with Section 6 (Generation Connection Criteria), as specified in the 'Ontario Resources and Transmission Assessment Criteria' document published by the IESO.

II. Contract Capacity

The Replacement Project will be a single generating facility and will:

- (a) be able to provide a minimum of 250 MW at 35 °C under both N-1 System Conditions and N-1 Generating Facility Conditions simultaneously. For further clarity, the Replacement Project must be designed to supply either transmission circuit M20D or M21D at all times. Each unit must be able to supply either transmission circuit at all times;
- (b) be able to provide a minimum of 500 MW at 35 °C under N-2 System Conditions;
- (c) have a Season 3 Contract Capacity of not less than 480 MW; and
- (d) have a Contract Capacity of not more than 550 MW in any Season.

III. Electrical Connection

The Replacement Project will be connected directly to the IESO-Controlled Grid via new double circuit 230 kV transmission lines. Notwithstanding the foregoing, the Replacement Project may also connect to a Local Distribution System for the purpose of providing Islanding Capability.

The Replacement Project will have a connection point located with a direct connection to the Hydro One circuits M20D and M21D between the [●]th transmission tower (Tower #●) leaving the Preston TS connecting to the Galt TS. [Note: This assumes the Replacement Project is located at the Boxwood site.]

IV. Operation Following a N-2 Contingency (Load Restoration)

~~For load restoration, the Replacement Project will comply with the load restoration criteria stipulated under~~ If a disruption occurs that leads to N-2 system conditions, TCE shall be required to use Commercially Reasonable Efforts (as such term is defined in the Contract) to assist the IESO, as directed by the IESO, in restoring load in accordance with Section 7 of the Ontario Resource and Transmission Assessment Criteria. The criteria are as follows:

- ~~all load to be restored within 8 hours~~
- ~~amount of load in excess of 150 MW must be restored within 4 hours~~
- ~~amount of load in excess of 250 MW must be restored within 30 minutes.~~

~~[NTD: We should discuss further. I remain unclear on what obligation(s) this imposes on TCE.]~~

V. Operational Flexibilities

- ~~1. **Fast Start Capability.** The Replacement Project must be such that each combustion turbine must be capable of fast start up. [NTD: Is this subsumed by the Ramp Rate requirement?]~~

1. **2. Ramp Rate Requirement.** The Replacement Project must be such that each combustion turbine is capable of ramping at a rate of 8%/minute or more of its Base Load equal to or greater than the Contract Ramp Rate. The Contract Ramp Rate will be subject to verification as part of the Capacity Check Test. ~~[NTD: SMS to define "Base Load". Can we use Nameplate Capacity instead of Base Load, as is currently done in the COD test?]~~

2. **3. Emissions Requirements.**

- (a) The emissions from the Replacement Project shall meet or exceed the following criteria:
 - (i) Nitrogen Oxides (NOx) in a concentration not exceeding 15 ppmv (based upon Reference Conditions (as such term is defined in the Contract) and 15% O₂ in the exhaust gases on a dry volume basis) as measured using an emissions measurement methodology substantially based on Exhibit W to the Contract (the "Emissions Measurement Methodology"); and
 - (ii) Carbon Monoxide (CO) in a concentration not exceeding 10 ppmv (based upon Reference Conditions and 15% O₂ in the exhaust gases on a dry volume basis) as measured using the Emissions Measurement Methodology.
- (b) TCE will provide evidence to support the stated emission levels of NOx and CO in the form of a signed certificate by an authorized representative of any of: (1) the original equipment manufacturer of the Replacement Project's turbines, (2) the supplier or manufacturer of any post combustion emission control equipment utilized by the Replacement Project, or (3) the engineering company responsible for the design of the Replacement Project, which certificate must state that the Replacement Project, as designed, will operate within these stated limits for NOx and CO.
- (c) The Replacement Contract will require that the emission limits for NOx and CO be (i) incorporated into the Replacement Project's Environmental Review Report or its completed environmental assessment, and (ii) reflected in the Replacement Project's application to the Ministry of the Environment for a Certificate of Approval (Air) Operating Permit, together with a specific request in such

application that such limits be imposed as conditions of such Certificate of Approval.

- (d) The emission limits for NOx and CO stated in the Replacement Contract will form the basis of an ongoing operating requirement. For greater certainty, the OPA is not requiring TCE to adopt any specific facility design or utilize any particular control equipment with respect to air emissions, provided, however, the Replacement Project must comply with the NOx and CO limits set out above, including, without limitation, at the time of attaining Commercial Operation and during any Capacity Check Test.

3. ~~4.-Fuel Supply.~~ The Replacement Project will obtain gas distribution services from Union Gas Limited, and TCE cannot by-pass Union Gas Limited.

4. ~~5.-Equipment.~~ The Replacement Project will be designed utilizing (2) M501GAC Fast Start gas-fired combustion turbine generators to be supplied by MPS Canada, Inc. (the "Generators"), with evaporative cooling and emission reduction equipment. Each Generator shall be nominally rated at [●] MW (measured at the Generator's output terminals) new and clean, at ISO conditions.

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SCHEDULE "B" – FINANCIAL PARAMETERS

Net Revenue Requirement	\$ 11,873 <u>12,887</u> / MW-month
Net Revenue Requirement Indexing Factor	20 %
Annual Average Contract Capacity	500 MW
Nameplate Capacity	[●] MW
Start-Up Gas for the Contract Facility	700 MMBTU/start-up
Start-Up Maintenance Cost	\$30,000/start-up
O&M Costs	\$0.89 / MWh
OR Cost	\$0.50 / MWh
Contract Ramp-Rate	8%/minute of Base Load

	<u>Season 1</u>	<u>Season 2</u>	<u>Season 3</u>	<u>Season 4</u>
Contract Heat Rate	10.42 MMBTU/MWh (HHV)	10.55 MMBTU/MWh (HHV)	10.66 MMBTU/MWh (HHV)	10.58 MMBTU/MWh (HHV)
Contract Capacity Note: Subject to Schedule "A", TCE to determine Seasonal Contract Capacities so long as the AACC is 500 MW	[●] MW	[●] MW	[●] MW	[●] MW
10nORCC	0 MW	0 MW	0 MW	0 MW

<u>Contract Ramp Rate</u>	<u>37.8</u> <u>MW/minute</u>	<u>35.8</u> <u>MW/minute</u>	<u>33.0</u> <u>MW/minute</u>	<u>35.2</u> <u>MW/minute</u>
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Draft & Privileged

Aleksandar Kojic

From: Michael Killeavy
Sent: March 25, 2011 9:15 PM
To: JoAnne Butler; Susan Kennedy
Cc: Deborah Langelaan
Subject: TCE Matter - Response to TCE Letter of 10 March 2011 to the OPA
Attachments: #20297127v6_LEGAL_1_- Draft Response to A. Pourbaix Letter with Project Proposal.doc; OPA Counter-Proposal NRR Model 25 Mar 2011 COUNTER-PROPOSAL v4.xls; Draft Schedule C - Adjustment Methodology 20325513_1.DOC

Importance: High

*** PRIVILEGED AND CONFIDENTIAL - PREPARED IN CONTEMPLATION OF LITIGATION ***

Attached is the proposed response back to TCE and the model used to calculate the NRR. The salient points are:

1. We have responded to each of TCE's purported value propositions as we discussed and agreed.
2. We spent a great deal of time reviewing the CAPEX and we believe that the CAPEX ought to be pegged at \$375 million. We used the TCE CAPEX spend profile and just pro-rated it down from \$540 million to \$375 million.
3. The resulting NRR is \$12,887/MW-month. NERA has independently developed a model that is somewhat different from ours and has confirmed the figure. This is encouraging: two different models and the variation in calculated NRR is ~\$100/MW-month (<1%). We have done an "all equity" analysis with a cost of equity at 7.5%, which is at about the middle of the calculated costs of equity. We are ignoring the 5.25% that TCE purports is its unlevered cost of equity since it is far too low. NERA has confirmed that 7.5% is a reasonable cost of equity to use. If we used TCE's 5.25% the NRR would be \$10,530/MW-month, keeping all other parameters the same. We used as many of TCE's other modelling parameters as we could.
4. The financial value of the OGS is set at \$50 million. NERA has some good arguments for using a value in this neighbourhood, so we used this to solve for the NRR. We recognize that we may need to raise this, but I think we can push back on claims for a higher value. NERA thinks it might go as high as \$200 million and still be defensible, but that puts the NRR up around \$15,984/MW-month, holding all other parameters the same.
5. The alleged OGS Sunk Costs are included in the NRR.
6. We still haven't seen the LTSA so we estimated our own figures for O&M. Deb has worked out some reasonable figures for GD&M, too.
7. We have developed a framework for target costing the CAPEX and then adjusting the NRR (also attached). We thought that it was best to disclose this to TCE once we had gauged their reaction to the main proposal. Accordingly, it isn't part of the proposed response back, but can be given to TCE at the afternoon or Tuesday meeting if they are dismayed at the low NRR. We thought that if they did grudgingly accept the counter-proposal, why bother offering up target costing the CAPEX? In any event, it is developed and ready to go if we need it. We also developed a formula for converting the final target cost adjusted CAPEX into NRR to avoid getting into a "battle of the financial models" with TCE afterward.
8. Although it isn't part of the letter, we thought that you might tell TCE when you call that we are prepared to give TCE the full residual value for K-W peaking plant, i.e., we will

not build in a "clawback" mechanism in the substantive contract with TCE to re-capture any residual value for the plant - it's theirs to keep. Their reaction to this may help us counter their arguments for a high OGS residual value to boost up the OGS \$50 million financial value. I think there is value in holding this back for the time being and using our judgment on when it's best to propose target costing the CAPEX and adjusting the NRR.

NERA won't be at the meeting with TCE as we want to preserve NERA's independence in the event we need to go to litigation and rely on Gene as an expert. Safouh will come in case there are questions about the technical specifications in Schedule A. I did the modelling, so I can answer the modelling questions. So we think we've got all the bases covered.

I am very pleased with how everyone came together this week to develop and finalize this response back to TCE.

I'll be monitoring my BlackBerry over the weekend if you should have any questions.

Michael

Michael Killeavy, LL.B., MBA, P.Eng.
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Ontario Power Authority
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Toronto, Ontario, M5H 1T1
416-969-6288 (office)
416-969-6071 (fax)
416-520-9788 (cell)
Michael.killeavy@powerauthority.on.ca

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We would propose to enter into a contract with TCE for TCE to construct, own, operate and maintain the Replacement Project as compensation for the termination of the Contract. The contract for the Replacement Project (the "Replacement Contract") would be based on the final form of contract (the "NYR Contract") included as part of the Northern York Region Peaking Generation Request for Proposals, subject to the changes set out below and otherwise as necessitated by Schedule "A". The financial parameters of the Replacement Contract would be as set out in Schedule "B" to this letter.

The following sets out the changes to the NYR Contract that would be applicable to the Replacement Contract:

1. **Permits and Approvals.** With respect to the approvals required pursuant to the *Planning Act* to construct the Replacement Project, the OPA would work with TCE, the host municipality and the Province of Ontario to ensure that once all of the requirements for the *Planning Act* approvals have been satisfied, the approvals are issued in a timely manner, or if they are not issued in a timely manner, that so long as the Replacement Project has been approved under Part II or Part II.1 of the *Environmental Assessment Act* or is the subject of (i) an order under section 3.1 or a declaration under section 3.2 of that Act, or (ii) an exempting regulation made under that Act, such *Planning Act* approvals do not impede the development of the Replacement Project.

If this did not occur and the delay in the issuance of such *Planning Act* approvals caused TCE not to achieve Commercial Operation by the Milestone Date for Commercial Operation, such delay would be considered an event of Force Majeure, and TCE would be entitled to recover its reasonable, out-of-pocket costs resulting from such delay, by way of a corresponding increase in the Net Revenue Requirement (NRR). In addition, the OPA would not have the right to terminate the Replacement Contract for such event of Force Majeure, unless the event of Force Majeure resulted in a delay that was greater

than two years and the OPA paid TCE a termination amount equal to \$50,000,000 plus the total amount of the sunk costs determined in accordance with paragraph 2, below, provided however that such total of the sunk costs shall not exceed \$37,000,000. TCE would be solely responsible for all other permits and approvals required for the Replacement Project, subject to the standard Force Majeure provisions set out in the NYR Contract.

2. **Oakville Sunk Costs.** The NRR set out in Schedule "B" to this letter includes an amount on account of TCE's sunk costs associated with the development of the Oakville Generating Station. To the extent that the total of the verified, non-recoverable sunk costs (net of any residual value) associated with the development of the Oakville Generating Station is less than \$37,000,000, the NRR shall be reduced by 0.000 019 314 2 multiplied by the amount by which such costs are less than \$37,000,000.
3. **Interconnection Costs.** The Replacement Contract would provide that all out-of-pocket costs incurred by TCE for the electrical and natural gas interconnection of the Replacement Project would be reimbursed by the OPA. Such costs would be reimbursed on terms that are substantially the same as the terms set out in Section 1 of Exhibit S of the Accelerated Clean Energy Supply Contract between the OPA and Portland Energy Centre L.P. with the necessary conforming changes being made, provided that (i) there shall be no "Budgeted Costs" included in the NRR on account of such costs, (ii) references to the "Simple Cycle Operation Date" shall be replaced with references to the "Commercial Operation Date", and (iii) there shall be no "Excess H1 Amount".
4. **Gas Delivery and Management Services Costs.** Unlike the NYR Contract, the NRR for the Replacement Contract would take into account all gas delivery and management services costs, and TCE would be responsible for managing natural gas delivery and management services, consistent with the approach taken in the Contract.
5. **Net Revenue Requirement Indexing Factor (NRRIF).** As set out in Schedule "B", the NRRIF would be equal to 20%. In the course of finalizing the Replacement Contract, the OPA would be willing to consider accepting a higher NRRIF, so long as there was a corresponding reduction in the NRR.
6. **Term of Replacement Contract.** The term of the Replacement Contract would be 25 years. For greater certainty, this would be the definitive length of the term and not an option.
7. **Capacity Check Test.** The Capacity Check Test provisions of the Replacement Contract would be modified so that as long as the demonstrated capacity was not less than 90% of the applicable Seasonal Contract Capacity, the failure to achieve the required Seasonal Contract Capacity would not be an event of default. If the demonstrated capacity was greater than 90% but less than 100% of the applicable Seasonal Contract Capacity, a Capacity Reduction Factor would apply in accordance with the provisions of Exhibit J. In addition, there would be a requirement as part of a Capacity Check Test to confirm that the Replacement Project is capable of achieving the Contract Ramp Rate set out in Schedule "B" to this letter.

8. **Potential One Hour Runs.** Because of the absence of the “NINRR” term in Exhibit J to the NYR Contract, we do not believe that the potential for single hour imputed production intervals would be detrimental to TCE. We are not proposing any change to Exhibit J-but would be willing to discuss any concerns TCE may have in this regard.

If this proposal is acceptable to you, we will prepare the necessary documentation for your review. For greater certainty, although this proposal is made in good faith, it remains subject to internal OPA approvals and does not constitute an offer capable of acceptance.

Yours very truly,

JoAnne Butler

- c. Colin Andersen, *Ontario Power Authority*
Michael Killeavy, *Ontario Power Authority*
Rocco Sebastiano, *Osler, Hoskin & Harcourt LLP*

Draft & Privileged

SCHEDULE "A" – TECHNICAL REQUIREMENTS

I. Replacement Project

The Replacement Project shall:

- (a) be a dispatchable facility designed for maximum operational flexibility;
- (b) be a simple cycle configuration generating facility;
- (c) utilize natural gas supplied by pipeline as the fuel; and
- (d) comply with Section 6 (Generation Connection Criteria), as specified in the 'Ontario Resources and Transmission Assessment Criteria' document published by the IESO.

II. Contract Capacity

The Replacement Project will be a single generating facility and will:

- (a) be able to provide a minimum of 250 MW at 35 °C under both N-1 System Conditions and N-1 Generating Facility Conditions simultaneously. For further clarity, the Replacement Project must be designed to supply either transmission circuit M20D or M21D at all times. Each unit must be able to supply either transmission circuit at all times;
- (b) be able to provide a minimum of 500 MW at 35 °C under N-2 System Conditions;
- (c) have a Season 3 Contract Capacity of not less than 480 MW; and
- (d) have a Contract Capacity of not more than 550 MW in any Season.

III. Electrical Connection

The Replacement Project will be connected directly to the IESO-Controlled Grid via new double circuit 230 kV transmission lines. Notwithstanding the foregoing, the Replacement Project may also connect to a Local Distribution System for the purpose of providing Islanding Capability.

The Replacement Project will have a connection point located with a direct connection to the Hydro One circuits M20D and M21D between the [●]th transmission tower (Tower #●) leaving the Preston TS connecting to the Galt TS. [Note: This assumes the Replacement Project is located at the Boxwood site.]

IV. Operation Following a N-2 Contingency (Load Restoration)

If a disruption occurs that leads to N-2 system conditions, TCE shall be required to use Commercially Reasonable Efforts (as such term is defined in the Contract) to assist the IESO, as directed by the IESO, in restoring load in accordance with Section 7 of the Ontario Resource and Transmission Assessment Criteria.

V. Operational Flexibilities

1. **Ramp Rate Requirement.** The Replacement Project must be such that each combustion turbine is capable of ramping at a rate equal to or greater than the Contract Ramp Rate. The Contract Ramp Rate will be subject to verification as part of the Capacity Check Test.
2. **Emissions Requirements.**
 - (a) The emissions from the Replacement Project shall meet or exceed the following criteria:
 - (i) Nitrogen Oxides (NOx) in a concentration not exceeding 15 ppmv (based upon Reference Conditions (as such term is defined in the Contract) and 15% O₂ in the exhaust gases on a dry volume basis) as measured using an emissions measurement methodology substantially based on Exhibit W to the Contract (the "Emissions Measurement Methodology"); and
 - (ii) Carbon Monoxide (CO) in a concentration not exceeding 10 ppmv (based upon Reference Conditions and 15% O₂ in the exhaust gases on a dry volume basis) as measured using the Emissions Measurement Methodology.
 - (b) TCE will provide evidence to support the stated emission levels of NOx and CO in the form of a signed certificate by an authorized representative of any of: (1) the original equipment manufacturer of the Replacement Project's turbines, (2) the supplier or manufacturer of any post combustion emission control equipment utilized by the Replacement Project, or (3) the engineering company responsible for the design of the Replacement Project, which certificate must state that the Replacement Project, as designed, will operate within these stated limits for NOx and CO.
 - (c) The Replacement Contract will require that the emission limits for NOx and CO be (i) incorporated into the Replacement Project's Environmental Review Report or its completed environmental assessment, and (ii) reflected in the Replacement Project's application to the Ministry of the Environment for a Certificate of Approval (Air) Operating Permit, together with a specific request in such application that such limits be imposed as conditions of such Certificate of Approval.
 - (d) The emission limits for NOx and CO stated in the Replacement Contract will form the basis of an ongoing operating requirement. For greater certainty, the OPA is not requiring TCE to adopt any specific facility design or utilize any particular control equipment with respect to air emissions, provided, however, the Replacement Project must comply with the NOx and CO limits set out above, including, without limitation, at the time of attaining Commercial Operation and during any Capacity Check Test.

3. **Fuel Supply.** The Replacement Project will obtain gas distribution services from Union Gas Limited, and TCE cannot by-pass Union Gas Limited.
4. **Equipment.** The Replacement Project will be designed utilizing (2) M501GAC Fast Start gas-fired combustion turbine generators to be supplied by MPS Canada, Inc. (the "Generators"), with evaporative cooling and emission reduction equipment. Each Generator shall be nominally rated at [●] MW (measured at the Generator's output terminals) new and clean, at ISO conditions.

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SCHEDULE "B" – FINANCIAL PARAMETERS

Net Revenue Requirement	\$ 12,887 / MW-month
Net Revenue Requirement Indexing Factor	20 %
Annual Average Contract Capacity	500 MW
Nameplate Capacity	[●] MW
Start-Up Gas for the Contract Facility	700 MMBTU/start-up
Start-Up Maintenance Cost	\$30,000/start-up
O&M Costs	\$0.89 / MWh
OR Cost	\$0.50 / MWh

	<u>Season 1</u>	<u>Season 2</u>	<u>Season 3</u>	<u>Season 4</u>
<u>Contract Heat Rate</u>	10.42 MMBTU/MWh (HHV)	10.55 MMBTU/MWh (HHV)	10.66 MMBTU/MWh (HHV)	10.58 MMBTU/MWh (HHV)
<u>Contract Capacity</u> Note: Subject to Schedule "A", TCE to determine Seasonal Contract Capacities so long as the AACC is 500 MW	[●] MW	[●] MW	[●] MW	[●] MW
<u>10nORCC</u>	0 MW	0 MW	0 MW	0 MW
<u>Contract Ramp Rate</u>	37.8 MW/minute	35.8 MW/minute	33.0 MW/minute	35.2 MW/minute

Baseline NRR Calculation

CAPEX Spend:	\$375,000,000	Yearly % Spend	
2009	\$18	3%	
2010	\$26	5%	
2011	\$80	17%	
2012	\$109	20%	
2013	\$225	42%	
2014	\$72	13%	100%
	5339	million	

Capital Cost Allowance:

Capital Cost Allowance:		CCA Rate
CapEx to Class 1	33%	4%
CapEx to Class 17	38%	8%
CapEx to Class 48	29%	15%
	100%	
Inflation Factor	(IfY)	2%
NRR Index Factor	(NRRIF)	20%
Statutory Tax Rate		25%
Plant Capacity	(AACC)	500 MW

Equate ANR to INR \Rightarrow CSP is only revenue
 Total Plan Revenues = CSP * NRRy * AACCC
 Total Plant Revenue = $\{PNNRb\} * \{NRRIF\} \{Ify\} * AACCC + \{PNNRb\} * (1 - NRRIF) * AACCC$
 PNNRb = Project NRR

Fixed O&M	\$5,500,000 (2003 \$)
GD&M	\$10,000,000 (2011 \$)
Calculate EBITDA	
EBITDA = Plant Revenues - Operating Costs (\$29 million/year)	
Calculate CCA by allocating CAPEX to appropriate pools	
Determine tax payable = (EBITDA - CCA) × (statutory tax rate)	
Total cash flows = EBITDA - Taxes - CapEx	

First cash flow is august 1, 2009
All others are July 1, 20XX
Use YNPV

[illegible]



Target Costing Allocation of Actual CAPEX

Target CAPEX = \$375,000,000

CAPEX Sharing:	Overrun	Underrun
OPA	50%	35%
TCE	50%	65%

FINAL CAPEX =	\$500,000,000
Overrun (Underrun) =	\$125,000,000
OPA Share	\$62,500,000
TCE Share	\$62,500,000
Adjusted CAPEX =	\$437,500,000 Target CAPEX + OPA Share

Initial NRR	\$12,887	11873	\$1,014
Final NRR	\$14,094		

m =	1.93142E-05
b =	5644.131697

ADJUSTED CAPEX	FINAL NRR	FITTED LINE
\$348,750,000	\$12,380	\$12,380
\$357,500,000	\$12,549	\$12,549
\$366,250,000	\$12,718	\$12,718
\$375,000,000	\$12,887	\$12,887
\$387,500,000	\$13,128	\$13,128
\$400,000,000	\$13,370	\$13,370
\$412,500,000	\$13,611	\$13,611
\$425,000,000	\$13,853	\$13,853
\$437,500,000	\$14,094	\$14,094

Baseline NRR Calculation

Adjusted CAPEX Spend:	\$437,500,000	Yearly % Spend
2009	\$18	3%
2010	\$26	5%
2011	\$90	17%
2012	\$109	20%
2013	\$225	42%
2014	\$72	13%
	\$539	100%

Capital Cost Allowance:

CapEx to Class 1	33%	CCA Rate	4%
CapEx to Class 17	86%		8%
CapEx to Class 48	29%		15%
	100%		
Inflation Factor (Ify)			2%
NRR Index Factor (NRRIF)			20%
Statutory Tax Rate			25%
Plant Capacity (AACC)			500 MW

Equate ANR to INR => CSP is only revenue

Total Plant Revenues = CSP = NRRy * AACC

Total Plant Revenue = [(PNWRb) * (NRRIF) / (Ify)] * AACC + [(PNWRb) * (1 - NRRIF)] * AACC

PNWRb = Project NRR

Assume \$29 million/year in non-

GD&M \$5,500,000 (2009 \$)

\$10,000,000 (2011 \$)

Calculate EBITDA

EBITDA = Plant Revenues - Operating Costs (\$29 million/year)

Calculate CCA by allocating CAPEX to appropriate pools

Determine tax payable = (EBITDA - CCA) * (statutory tax rate)

Total cash flows = EBITDA - Taxes - CapEx

First cash flow is august 1, 2009

All others are July 1, 20XX

Use XNPV

TCE Cost of Capital

7.50%

	01-Aug-09	01-Jul-10	01-Jul-11	01-Jul-12	01-Jul-13
% CAPEX Allocation to year	3%	5%	17%	20%	42%
Yearly CAPEX Spend	\$14,342,666	\$20,848,785	\$73,197,895	\$88,067,866	\$182,633,738
Book Value of Capital	\$14,342,666	\$35,191,452	\$108,389,347	\$196,457,213	\$379,090,951
Non-indexed NRR					
Total NRR					
REVENUES = CSP					
CAPEX					
GD&M					
EBITDA					
Depreciation (Capital Cost Allowance)					
Taxes Payable					
Total Cash Flow	(\$14,342,666)	(\$20,848,785)	(\$73,197,895)	(\$88,067,866)	(\$182,633,738)
Final NRR	\$14,094				
Target OGS NPV + Sunk Costs	\$87,000,000				
XNPV for K-W Peaking Plant	\$87,000,000				
XNPV in 2012 plus spend	\$76,761,176				
XIRR	9.09%				



18	19	20	21	22	23	24	25
Jul-32	01-Jul-33	01-Jul-34	01-Jul-35	01-Jul-36	01-Jul-37	01-Jul-38	01-Jul-39
\$6,304	\$81,144,307	\$74,076,638	\$67,624,563	\$61,734,463	\$56,357,392	\$51,448,663	\$46,967,484
\$1,276	\$11,276	\$11,276	\$11,276	\$11,276	\$11,276	\$11,276	\$11,276
\$3,947	\$4,026	\$4,107	\$4,189	\$4,273	\$4,358	\$4,445	\$4,534
\$5,223	\$15,302	\$15,382	\$15,464	\$15,548	\$15,634	\$15,721	\$15,810
\$6,414	\$91,810,070	\$82,293,200	\$72,785,993	\$63,288,641	\$53,801,342	\$44,324,298	\$34,857,712
\$2,946	\$9,846,405	\$9,028,383	\$8,203,800	\$7,387,876	\$6,575,633	\$5,767,146	\$4,962,489
\$6,663	\$15,459,797	\$15,768,993	\$16,084,372	\$16,406,060	\$16,734,181	\$17,068,865	\$17,410,242
\$6,804	\$67,503,869	\$67,500,875	\$67,497,821	\$67,494,706	\$67,491,528	\$67,488,287	\$67,484,981
\$0,663	\$7,741,997	\$7,067,669	\$6,452,075	\$5,890,099	\$5,377,072	\$4,908,729	\$4,481,179
\$6,535	\$14,940,468	\$15,108,301	\$15,261,436	\$15,401,152	\$15,528,614	\$15,644,890	\$15,750,951
\$0,269	\$52,563,401	\$52,392,573	\$52,236,384	\$52,093,554	\$51,962,914	\$51,843,397	\$51,734,031

SCHEDULE "C" – ADJUSTMENT METHODOLOGY

1. The Net Revenue Requirement set out in Schedule "B" is based on an assumption that the capital cost to design and build the Replacement Project will be \$375,000,000 (the "Target Capex"). So long as the actual cost to design and build the Replacement Project (the "Actual Capex") is within 3% higher or lower than the Target Capex, there shall be no adjustment in the NRR. If the Actual Capex is more than 3% higher or lower than the Target Capex, the NRR shall be adjusted on the following basis. For greater certainty, none of the other parameters set out in Schedule "B" is subject to adjustment.

- (i) The OPA's share of any difference between the Target Capex and the Actual Capex shall be determined as follows:

OPA Share = (Actual Capex – Target Capex) × 0.50, provided that the OPA Share shall not exceed \$37,500,000

- (ii) The adjusted capital cost ("Adjusted Capex") shall be equal to the OPA Share plus the Target Capex. For greater certainty, if the OPA Share is a negative number, the Adjusted Capex shall be less than the Target Capex.
- (iii) The adjusted NRR shall be equal to 5185.205289 plus 1.78219×10^{-5} multiplied by the Adjusted Capex.
- (b) The determination of the Actual Capex shall not include: (i) any costs being reimbursed by the OPA, including, without limitation, "Interconnection Costs" and "Oakville Sunk Costs", as set out above, (ii) any costs incurred by TCE that were not reasonably required to be incurred in order for TCE to fulfill its obligations under the Replacement Contract or that were not incurred in accordance with "Good Engineering and Operating Practices" (as such term is defined in the Contract), or (iii) any costs not substantiated to the reasonable satisfaction of the OPA.
- (c) The following costs shall be considered fixed components of the Target Capex not subject to change in determining the Actual Capex:

<u>Cost</u>	<u>Fixed Price</u>
Main Turbine Original Costs (excluding change orders)	\$156,274,358
Main Turbine Additional Scope (excluding change orders)	\$39,198,860
[●]	

- (d) The determination of the Actual Capex shall be done through an "open book" process, such that all costs incurred by TCE in designing and building the Replacement Project shall be transparent to the OPA and fully auditable. Any dispute relating to the determination of the Actual Capex shall be resolved in accordance with the dispute resolution provisions of the Replacement Contract.

- (e) All dollar amounts referenced in this letter are in Canadian dollars, unless otherwise specified.

Draft & Privileged

Aleksandar Kojic

From: Safouh Soufi [safouh@smsenergy-engineering.com]
Sent: March 25, 2011 9:17 PM
To: 'Smith, Elliot'; Deborah Langelaan; Michael Killeavy
Cc: 'Sebastiano, Rocco'
Subject: RE: TransCanada Potential Project Negotiations - Capital Cost Estimate Rev 5 February 17, 2011
Attachments: #20297127v6_LEGAL_1_ - Draft Response to A Pourbaix Letter with Project Proposal_SMS_Rev_1.doc

Group:

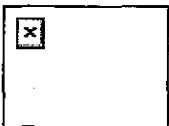
I made some comments on the document and few changes to Schedule A. It may appear as if I made significant changes to Schedule A; judging by track changes but I didn't. MSWord is awkward when you change section numbering it makes it look as if the entire section had been added.

Thanks,
Safouh

From: Smith, Elliot [mailto:ESmith@osler.com]
Sent: March 25, 2011 6:00 PM
To: Safouh Soufi; Deborah.Langelaan@powerauthority.on.ca; Michael.Killeavy@powerauthority.on.ca
Cc: Sebastiano, Rocco
Subject: RE: TransCanada Potential Project Negotiations - Capital Cost Estimate Rev 5 February 17, 2011

All,
Further to today's discussion, please find attached a revised draft letter to TCE along with a blackline. Please note that this draft presumes that the quarterly ramp rates set out below correspond to the Seasons used in the CES contract. If this is not the case, further revision may be required.

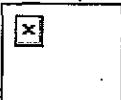
Elliot



Elliot Smith
Associate

416.862.6435 DIRECT
416.862.6666 FACSIMILE
esmith@osler.com

Osler, Hoskin & Harcourt LLP
Box 50, 1 First Canadian Place
Toronto, Ontario, Canada M5X 1B8



From: Safouh Soufi [mailto:safouh@smsenergy-engineering.com]
Sent: Friday, March 25, 2011 5:19 PM
To: Smith, Elliot; Deborah.Langelaan@powerauthority.on.ca; Michael.Killeavy@powerauthority.on.ca
Subject: RE: TransCanada Potential Project Negotiations - Capital Cost Estimate Rev 5 February 17, 2011

Hello Elliot

The figures are per minute and the comma should be replaced with period ".". Sorry about that.

Here are the figures as they should appear in the Contract

Q1: 37.8 MW/minute
Q2: 35.8 MW/minute
Q3: 33.0 MW/minute
Q4: 35.2 MW/minute

Thanks,
Safouh

From: Smith, Elliot [mailto:ESmith@osler.com]
Sent: March 25, 2011 3:30 PM
To: 'safouh@smsenergy-engineering.com'; 'Deborah.Langelaan@powerauthority.on.ca';
'Michael.Killeavy@powerauthority.on.ca'
Subject: Re: TransCanada Potential Project Negotiations - Capital Cost Estimate Rev 5 February 17, 2011

Thanks Safouh. Can you clarify the units of measurement for me?

Elliot

From: Safouh Soufi [mailto:safouh@smsenergy-engineering.com]
Sent: Friday, March 25, 2011 03:18 PM
To: 'Deborah Langelaan' <Deborah.Langelaan@powerauthority.on.ca>; Smith, Elliot; 'Michael Killeavy'
<Michael.Killeavy@powerauthority.on.ca>
Subject: RE: TransCanada Potential Project Negotiations - Capital Cost Estimate Rev 5 February 17, 2011

Hello Elliot:

The ramp rate figures for the Facility (two units) will be as follows:

Q1: 37,800 MW
Q2: 35,800 MW
Q3: 33,000 MW
Q4: 35,200 MW

These rates do not required adjustment for ambient conditions and are subject to negotiation with TCE, of course. TCE may see one of these rates in particular as being little aggressive but that is OK for now.

Let me know if you have any questions.

Thanks,
Safouh

From: Deborah Langelaan [mailto:Deborah.Langelaan@powerauthority.on.ca]
Sent: March 25, 2011 11:04 AM
To: esmith@osler.com; rsebastiano@osler.com; Michael Killeavy; Safouh Soufi; gene.meehan@nera.com
Cc: Susan Kennedy
Subject: FW: TransCanada Potential Project Negotiations - Capital Cost Estimate Rev 5 February 17, 2011

Privileged and Confidential

Please find attached TCE's revised capital cost estimate for a peaking plant in Cambridge. Although TCE has reduced its CAPEX by ~\$118 MM we're still miles apart with our estimates.

TCE decreased the following costs:

1. Reduced Fuel gas connection charges to \$0 (decrease of ~\$62 MM)
2. Reduced Electrical connection charges by ~\$34 MM
3. Reduced Insurance & Misc. by ~\$1 MM
4. Reduced Project Uncertainties by ~\$20 MM

Deb

Deborah Langelaan | Manager, Natural Gas Projects|OPA |
Suite 1600 - 120 Adelaide St. W. | Toronto, ON M5H 1T1 |
T: 416.969.6052 | F: 416.967.1947 | deborah.langelaan@powerauthority.on.ca |

From: John Mikkelsen [mailto:john_mikkelsen@transcanada.com]
Sent: March 24, 2011 5:00 PM
To: Deborah Langelaan
Cc: Geoff Murray; Terry Bennett; John Cashin
Subject: TransCanada Potential Project Negotiations - Capital Cost Estimate Rev 5 February 17, 2011

Dear Deborah,

Further to the receipt of your designation letter of March 21, 2011 received today, please find attached capital cost estimate TransCanada Capital Cost Estimate titled "Capital Cost Estimate Boxwood Generation Station...#157;., Rev.5 dated "Feb 17, 2011...#157;.

Best Regards,

John Mikkelsen, P.Eng.

Director, Eastern Canada, Power Development

TransCanada

Royal Bank Plaza
200 Bay Street
24th Floor, South Tower
Toronto, Ontario M5J 2J1

Tel: 416.869.2102

Fax:416.869.2056

Cell:416.559.1664

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de le divulguer sans autorisation.

DRAFT: MARCH 25, 2011

PRIVILEGED, CONFIDENTIAL AND WITHOUT PREJUDICE

Dear Mr. Pourbaix:

Southwest GTA Clean Energy Supply Contract (the "Contract") between TransCanada Energy Ltd. ("TCE") and the Ontario Power Authority ("OPA") dated October 9, 2009

We are writing to you in response to your letter to Colin Andersen, dated March 10, 2011. As stated in Colin's October 7, 2010 letter to you, we wish to work with you to identify projects and the extent to which such projects may compensate TCE for termination of the Contract while appropriately protecting the interests of ratepayers. We have reviewed the proposal contained in the draft implementation agreement and schedules TCE provided to us, and find that it does not meet this requirement. We would like to suggest an alternative proposal which we believe meets this requirement.

The Government of Ontario's Long-Term Energy Plan has identified a need for a peaking natural gas-fired plant in the Kitchener-Waterloo-Cambridge area. We believe such a plant is a project that could compensate TCE for the termination of the Contract and at the same time protect the interests of ratepayers (the "Replacement Project"). We have set out in Schedule "A" to this letter a technical description of the requirements of the Replacement Project.

We would propose to enter into a contract with TCE for TCE to construct, own, operate and maintain the Replacement Project as compensation for the termination of the Contract. The contract for the Replacement Project (the "Replacement Contract") would be based on the final form of contract (the "NYR Contract") included as part of the Northern York Region Peaking Generation Request for Proposals, subject to the changes set out below and otherwise as necessitated by Schedule "A". The financial parameters of the Replacement Contract would be as set out in Schedule "B" to this letter.

The following sets out the changes to the NYR Contract that would be applicable to the Replacement Contract:

1. **Permits and Approvals.** With respect to the approvals required pursuant to the *Planning Act* to construct the Replacement Project, the OPA would work with TCE, the host municipality and the Province of Ontario to ensure that once all of the requirements for the *Planning Act* approvals have been satisfied, the approvals are issued in a timely manner, or if they are not issued in a timely manner, that so long as the Replacement Project has been approved under Part II or Part II.1 of the *Environmental Assessment Act* or is the subject of (i) an order under section 3.1 or a declaration under section 3.2 of that Act, or (ii) an exempting regulation made under that Act, such *Planning Act* approvals do not impede the development of the Replacement Project.

If this did not occur and the delay in the issuance of such *Planning Act* approvals caused TCE not to achieve Commercial Operation by the Milestone Date for Commercial Operation, such delay would be considered an event of Force Majeure, and TCE would be entitled to recover its reasonable, out-of-pocket costs resulting from such delay, by way of a corresponding increase in the Net Revenue Requirement (NRR). In addition, the OPA would not have the right to terminate the Replacement Contract for such event of Force Majeure, unless the event of Force Majeure resulted in a delay that was greater

than two years and the OPA paid TCE a termination amount equal to \$50,000,000 plus the total amount of the sunk costs determined in accordance with paragraph 2, below, provided however that such total of the sunk costs shall not exceed \$37,000,000. TCE would be solely responsible for all other permits and approvals required for the Replacement Project, subject to the standard Force Majeure provisions set out in the NYR Contract.

2. **Oakville Sunk Costs.** The NRR set out in Schedule "B" to this letter includes an amount on account of TCE's sunk costs associated with the development of the Oakville Generating Station. To the extent that the total of the verified, non-recoverable sunk costs (net of any residual value) associated with the development of the Oakville Generating Station is less than \$37,000,000, the NRR shall be adjusted using reduced-by-a factor (the "NRR Adjusting Factor"). The NRR Adjusting Factor will be 0.000-019-314-2 multiplied by the amount by which such costs are less than \$37,000,000. {NTD: At this point, it is strategically in the OPA interest not to tip TCE's hand by disclosing a specific number to adjust NRR. I am concerned that TCE may find this figure acceptable and will be difficult for the OPA to back away from it. The OPA proposed figure is 1.5 times more than what TCE has proposed for NRR adjustment. Yes it works in the OPA favour to adjust NRR sunk cost but not so for higher CAPEX. For upward CAPEX adjustment we would want the NRR Adjusting Factor to be as low as possible even lower than what TCE has proposed. To do that, we may have to take into account significant revenues from start-up as one way to lower NRR Adjusting Factor. Also, one other concern in giving TCE a specific number at this stage in the game is it could potentially allow TCE to figure out how OPA model works. We have to consider this very carefully.}
3. **Interconnection Costs.** The Replacement Contract would provide that all out-of-pocket costs incurred by TCE for the electrical and natural gas interconnection of the Replacement Project would be reimbursed by the OPA. Such costs would be reimbursed on terms that are substantially the same as the terms set out in Section 1 of Exhibit S of the Accelerated Clean Energy Supply Contract between the OPA and Portland Energy Centre L.P. with the necessary conforming changes being made, provided that (i) there shall be no "Budgeted Costs" included in the NRR on account of such costs, (ii) references to the "Simple Cycle Operation Date" shall be replaced with references to the "Commercial Operation Date", and (iii) there shall be no "Excess H1 Amount".
4. **Gas Delivery and Management Services Costs.** Unlike the NYR Contract, the NRR for the Replacement Contract would take into account all gas delivery and management services costs, and TCE would be responsible for managing natural gas delivery and management services, consistent with the approach taken in the Contract. {NTD – Food for thoughts: should we not say that we used \$14+ Million as basis for NRR calculations and in so doing make the change to the \$14+ be subject to NRR Adjusting Factor. Given that right now they seem to be using a relatively high number for a simple cycle duty. There is room for NRR reduction here. TCE wouldn't mind this approach as per email from Terry Bennett to JoAnne of March 18 in which Terry says referring to GD&M "This is another item that "will be what it will be" and we can figure out how to deal with it later".}

5. **Net Revenue Requirement Indexing Factor (NRRIF).** As set out in Schedule "B", the NRRIF would be equal to 20%. In the course of finalizing the Replacement Contract, the OPA would be willing to consider accepting a higher NRRIF, so long as there was a corresponding reduction in the NRR.
6. **Term of Replacement Contract.** The term of the Replacement Contract would be 25 years. For greater certainty, this would be the definitive length of the term and not an option.
7. **Capacity Check Test.** The Capacity Check Test provisions of the Replacement Contract would be modified so that as long as the demonstrated capacity was not less than 90% of the applicable Seasonal Contract Capacity, the failure to achieve the required Seasonal Contract Capacity would not be an event of default. If the demonstrated capacity was greater than 90% but less than 100% of the applicable Seasonal Contract Capacity, a Capacity Reduction Factor would apply in accordance with the provisions of Exhibit J. In addition, there would be a requirement as part of a Capacity Check Test to confirm that the Replacement Project is capable of achieving the Contract Ramp Rate set out in Schedule "B" to this letter.
8. **Potential One Hour Runs.** Because of the absence of the "NINRR" term in Exhibit J to the NYR Contract, we do not believe that the potential for single hour imputed production intervals would be detrimental to TCE. We are not proposing any change to Exhibit J but would be willing to discuss any concerns TCE may have in this regard.

If this proposal is acceptable to you, we will prepare the necessary documentation for your review. For greater certainty, although this proposal is made in good faith, it remains subject to internal OPA approvals and does not constitute an offer capable of acceptance.

Yours very truly,

JoAnne Butler

- c. Colin Andersen, *Ontario Power Authority*
Michael Killeavy, *Ontario Power Authority*
Rocco Sebastiano, *Osler, Hoskin & Harcourt LLP*

SCHEDULE "A" – TECHNICAL REQUIREMENTS

I. Replacement Project

The Replacement Project shall:

- (a) be a dispatchable facility designed for maximum operational flexibility;
- (b) be a simple cycle configuration generating facility;
- (c) utilize natural gas supplied by pipeline as the fuel; and
- (d) comply with Section 6 (Generation Connection Criteria), as specified in the 'Ontario Resources and Transmission Assessment Criteria' document published by the IESO.

II. Contract Capacity

The Replacement Project will be a single generating facility and will:

- (a) be able to provide a minimum of 250 MW at 35 °C under both N-1 System Conditions and N-1 Generating Facility Conditions simultaneously. For further clarity, the Replacement Project must be designed to supply either transmission circuit M20D or M21D at all times. Each unit must be able to supply either transmission circuit at all times;
- (b) be able to provide a minimum of 500 MW at 35 °C under N-2 System Conditions;
- (c) have a Season 3 Contract Capacity of not less than 480 MW; and
- (d) have a Contract Capacity of not more than 550 MW in any Season.

III. Electrical Connection

The Replacement Project will be connected directly to the IESO-Controlled Grid via new double circuit 230 kV transmission lines. Notwithstanding the foregoing, the Replacement Project may also connect to a Local Distribution System for the purpose of providing Islanding Capability.

The Replacement Project will have a connection point located with a direct connection to the Hydro One circuits M20D and M21D between the [●]th transmission tower (Tower #●) leaving the Preston TS connecting to the Galt TS. [Note: This assumes the Replacement Project is located at the Boxwood site.]

IV. Operation Following a N-2 Contingency (Load Restoration)

If a disruption occurs that leads to N-2 system conditions, TCE shall be required to use Commercially Reasonable Efforts (as such term is defined in the Contract) to assist the IESO, as directed by the IESO, in restoring load in accordance with Section 7 of the Ontario Resource and Transmission Assessment Criteria.

V. Operational Flexibilities

1. **Ramp Rate Requirement.** The Replacement Project must be such that the two each combustion turbines combined are capable of ramping at a rate equal to or greater than the Contract Ramp Rate. The Contract Ramp Rate will be subject to verification as part of the Capacity Check Test. {NTD: Reference to each CTG was correct in the earlier version of Schedule A since the ramp was expressed in %/min. Since we changed that to MW/min for the Facility, we are now by definition referring to two turbines.}

2.VI. Emissions Requirements:

- (a) The emissions from the Replacement Project shall meet or exceed the following criteria:
 - (i) Nitrogen Oxides (NOx) in a concentration not exceeding 15 ppmv (based upon Reference Conditions (as such term is defined in the Contract) and 15% O₂ in the exhaust gases on a dry volume basis) as measured using an emissions measurement methodology substantially based on Exhibit W to the Contract (the "Emissions Measurement Methodology"); and
 - (ii) Carbon Monoxide (CO) in a concentration not exceeding 10 ppmv (based upon Reference Conditions and 15% O₂ in the exhaust gases on a dry volume basis) as measured using the Emissions Measurement Methodology.
- (b) TCE will provide evidence to support the stated emission levels of NOx and CO in the form of a signed certificate by an authorized representative of any of: (1) the original equipment manufacturer of the Replacement Project's turbines, (2) the supplier or manufacturer of any post combustion emission control equipment utilized by the Replacement Project, or (3) the engineering company responsible for the design of the Replacement Project, which certificate must state that the Replacement Project, as designed, will operate within these stated limits for NOx and CO.
- (c) The Replacement Contract will require that the emission limits for NOx and CO be (i) incorporated into the Replacement Project's Environmental Review Report or its completed environmental assessment, and (ii) reflected in the Replacement Project's application to the Ministry of the Environment for a Certificate of Approval (Air) Operating Permit, together with a specific request in such application that such limits be imposed as conditions of such Certificate of Approval.
- (d) The emission limits for NOx and CO stated in the Replacement Contract will form the basis of an ongoing operating requirement. For greater certainty, the OPA is not requiring TCE to adopt any specific facility design or utilize any particular control equipment with respect to air emissions, provided, however, the Replacement Project must comply with the NOx and CO limits set out above, including, without limitation, at the time of attaining Commercial Operation and during any Capacity Check Test.

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VII. Fuel Supply:

The Replacement Project will obtain gas distribution services from Union Gas Limited, and TCE cannot by-pass Union Gas Limited.

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VIII. Project Major Equipment:

The Replacement Project may deploy Two (2) M501GAC Fast Start gas-fired combustion turbine generators to be supplied by MPS Canada, Inc. (the "Generators"), with evaporative cooling and emission reduction equipment. Each Generator shall be nominally rated at [●] MW (measured at the Generator's output terminals) new and clean, at ISO conditions.

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SCHEDULE "B" – FINANCIAL PARAMETERS

Net Revenue Requirement	\$ 12,887 / MW-month
Net Revenue Requirement Indexing Factor	20 %
Annual Average Contract Capacity	500 MW
Nameplate Capacity	[●] MW
Start-Up Gas for the Contract Facility	700 MMBTU/start-up
Start-Up Maintenance Cost	\$30,000/start-up
O&M Costs	\$0.89 / MWh
OR Cost	\$0.50 / MWh

	<u>Season 1</u>	<u>Season 2</u>	<u>Season 3</u>	<u>Season 4</u>
<u>Contract Heat Rate</u>	10.42 MMBTU/MWh (HHV)	10.55 MMBTU/MWh (HHV)	10.66 MMBTU/MWh (HHV)	10.58 MMBTU/MWh (HHV)
<u>Contract Capacity</u> Note: Subject to Schedule "A" TCE to determine Seasonal Contract Capacities so long as the AACC is 500 MW	[●] MW	[●] MW	[●] MW	[●] MW
<u>10nORCC</u>	0 MW	0 MW	0 MW	0 MW
<u>Contract Ramp Rate</u>	37.8 MW/minute	35.8 MW/minute	33.0 MW/minute	35.2 MW/minute

Aleksandar Kojic

From: Smith, Elliot [ESmith@osler.com]
Sent: March 28, 2011 1:46 PM
To: Safouh Soufi; Deborah Langelaan; Michael Killeavy
Cc: Sebastiano, Rocco
Subject: RE: TransCanada Potential Project Negotiations - Capital Cost Estimate Rev 5 February 17, 2011
Attachments: #20297127v7_LEGAL_1_ - Draft Response to A. Pourbaix Letter with Project Proposal.doc; blackline.pdf

Please find attached a revised draft of the response letter to A. Pourbaix, along with a blackline to Friday afternoon's draft.

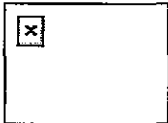
Elliot

From: Smith, Elliot
Sent: Friday, March 25, 2011 6:00 PM
To: 'Safouh Soufi'; Deborah.Langelaan@powerauthority.on.ca; Michael.Killeavy@powerauthority.on.ca
Cc: Sebastiano, Rocco
Subject: RE: TransCanada Potential Project Negotiations - Capital Cost Estimate Rev 5 February 17, 2011

All,

Further to today's discussion, please find attached a revised draft letter to TCE along with a blackline. Please note that this draft presumes that the quarterly ramp rates set out below correspond to the Seasons used in the CES contract. If this is not the case, further revision may be required.

Elliot



Elliot Smith
Associate

416.862.6435 DIRECT
416.862.6666 FACSIMILE
esmith@osler.com

Osler, Hoskin & Harcourt LLP
Box 50, 1 First Canadian Place
Toronto, Ontario, Canada M5X 1B8



From: Safouh Soufi [mailto:safouh@smsenergy-engineering.com]
Sent: Friday, March 25, 2011 5:19 PM
To: Smith, Elliot; Deborah.Langelaan@powerauthority.on.ca; Michael.Killeavy@powerauthority.on.ca
Subject: RE: TransCanada Potential Project Negotiations - Capital Cost Estimate Rev 5 February 17, 2011

Hello Elliot:

The figures are per minute and the comma should be replaced with period ".". Sorry about that.

Here are the figures as they should appear in the Contract

Q1: 37.8 MW/minute
Q2: 35.8 MW/minute
Q3: 33.0 MW/minute
Q4: 35.2 MW/minute

Thanks,
Safouh

From: Smith, Elliot [mailto:ESmith@osler.com]
Sent: March 25, 2011 3:30 PM
To: 'safouh@smsenergy-engineering.com'; 'Deborah.Langelaan@powerauthority.on.ca'; 'Michael.Killeavy@powerauthority.on.ca'
Subject: Re: TransCanada Potential Project Negotiations - Capital Cost Estimate Rev 5 February 17, 2011

Thanks Safouh. Can you clarify the units of measurement for me?

Elliot

From: Safouh Soufi [mailto:safouh@smsenergy-engineering.com]
Sent: Friday, March 25, 2011 03:18 PM
To: 'Deborah Langelaan' <Deborah.Langelaan@powerauthority.on.ca>; Smith, Elliot; 'Michael Killeavy' <Michael.Killeavy@powerauthority.on.ca>
Subject: RE: TransCanada Potential Project Negotiations - Capital Cost Estimate Rev 5 February 17, 2011

Hello Elliot:

The ramp rate figures for the Facility (two units) will be as follows:

Q1: 37,800 MW
Q2: 35,800 MW
Q3: 33,000 MW
Q4: 35,200 MW

These rates do not required adjustment for ambient conditions and are subject to negotiation with TCE, of course. TCE may see one of these rates in particular as being little aggressive but that is OK for now.

Let me know if you have any questions.

Thanks,
Safouh

From: Deborah Langelaan [mailto:Deborah.Langelaan@powerauthority.on.ca]
Sent: March 25, 2011 11:04 AM
To: esmith@osler.com; rsebastiano@osler.com; Michael Killeavy; Safouh Soufi; gene.meehan@nera.com
Cc: Susan Kennedy
Subject: FW: TransCanada Potential Project Negotiations - Capital Cost Estimate Rev 5 February 17, 2011

Privileged and Confidential

Please find attached TCE's revised capital cost estimate for a peaking plant in Cambridge. Although TCE has reduced its CAPEX by ~\$118 MM we're still miles apart with our estimates.

TCE decreased the following costs:

1. Reduced Fuel gas connection charges to \$0 (decrease of ~\$62 MM)
2. Reduced Electrical connection charges by ~\$34 MM
3. Reduced Insurance & Misc. by ~\$1 MM
4. Reduced Project Uncertainties by ~\$20 MM

Deb

Deborah Langelaan | Manager, Natural Gas Projects|OPA |
Suite 1600 - 120 Adelaide St. W. | Toronto, ON M5H 1T1 |
T: 416.969.6052 | F: 416.967.1947 | deborah.langelaan@powerauthority.on.ca |

From: John Mikkelsen [mailto:john_mikkelsen@transcanada.com]
Sent: March 24, 2011 5:00 PM
To: Deborah Langelaan
Cc: Geoff Murray; Terry Bennett; John Cashin
Subject: TransCanada Potential Project Negotiations - Capital Cost Estimate Rev 5 February 17, 2011

Dear Deborah,

Further to the receipt of your designation letter of March 21, 2011 received today, please find attached capital cost estimate TransCanada Capital Cost Estimate titled "Capital Cost Estimate Boxwood Generation Station...#157;,, Rev.5 dated "Feb 17, 2011...#157;.

Best Regards,

John Mikkelsen, P.Eng.

Director, Eastern Canada, Power Development

TransCanada

Royal Bank Plaza
200 Bay Street
24th Floor, South Tower
Toronto, Ontario M5J 2J1

Tel: 416.869.2102

Fax:416.869.2056

Cell:416.559.1664

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PRIVILEGED, CONFIDENTIAL AND WITHOUT PREJUDICE

Dear Mr. Pourbaix:

Southwest GTA Clean Energy Supply Contract (the "Contract") between TransCanada Energy Ltd. ("TCE") and the Ontario Power Authority ("OPA") dated October 9, 2009

We are writing to you in response to your letter to Colin Andersen, dated March 10, 2011. As stated in Colin's October 7, 2010 letter to you, we wish to work with you to identify projects and the extent to which such projects may compensate TCE for termination of the Contract while appropriately protecting the interests of ratepayers. We have reviewed the proposal contained in the draft implementation agreement and schedules TCE provided to us, and find that it does not meet this requirement. We would like to suggest an alternative proposal which we believe meets this requirement.

The Government of Ontario's Long-Term Energy Plan has identified a need for a peaking natural gas-fired plant in the Kitchener-Waterloo-Cambridge area. We believe such a plant is a project that could compensate TCE for the termination of the Contract and at the same time protect the interests of ratepayers (the "Replacement Project"). We have set out in Schedule "A" to this letter a technical description of the requirements of the Replacement Project.

We would propose to enter into a contract with TCE for TCE to construct, own, operate and maintain the Replacement Project as compensation for the termination of the Contract. The contract for the Replacement Project (the "Replacement Contract") would be based on the final form of contract (the "NYR Contract") included as part of the Northern York Region Peaking Generation Request for Proposals, subject to the changes set out below and otherwise as necessitated by Schedule "A". The financial parameters of the Replacement Contract would be as set out in Schedule "B" to this letter. In consideration of the uncertainties in the Replacement Project, we would include a mechanism in the Replacement Contract to adjust the NRR upon commercial operation on the basis set out in Schedule "C" to this letter.

The following sets out the changes to the NYR Contract that would be applicable to the Replacement Contract:

1. **Permits and Approvals.** With respect to the approvals required pursuant to the *Planning Act* to construct the Replacement Project, the OPA would work with TCE, the host municipality and the Province of Ontario to ensure that once all of the requirements for the *Planning Act* approvals have been satisfied, the approvals are issued in a timely manner, or if they are not issued in a timely manner, that so long as the Replacement Project has been approved under Part II or Part II.1 of the *Environmental Assessment Act* or is the subject of (i) an order under section 3.1 or a declaration under section 3.2 of that Act, or (ii) an exempting regulation made under that Act, such *Planning Act* approvals do not impede the development of the Replacement Project.

If this did not occur and the delay in the issuance of such *Planning Act* approvals caused TCE not to achieve Commercial Operation by the Milestone Date for Commercial Operation, such delay would be considered an event of Force Majeure, and TCE would be entitled to recover its reasonable, out-of-pocket costs resulting from such delay, by way of a corresponding increase in the Net Revenue Requirement (NRR). In addition, the

OPA would not have the right to terminate the Replacement Contract for such event of Force Majeure, unless the event of Force Majeure resulted in a delay that was greater than two years and the OPA paid TCE a termination amount equal to \$50,000,000 plus the total amount of the verified, non-recoverable sunk costs (net of any residual value) associated with the development of the Oakville Generating Station, provided however that such total amount shall not exceed \$37,000,000. TCE would be solely responsible for all other permits and approvals required for the Replacement Project, subject to the standard Force Majeure provisions set out in the NYR Contract.

2. **Oakville Sunk Costs.** The NRR set out in Schedule "B" to this letter includes an amount equal to \$37,000,000 on account of TCE's sunk costs associated with the development of the Oakville Generating Station. To the extent that the total of the verified, non-recoverable sunk costs (net of any residual value) associated with the development of the Oakville Generating Station is less than \$37,000,000, the NRR shall be reduced by [0.000 019 314 2] multiplied by the amount by which such costs are less than \$37,000,000.
3. **Interconnection Costs.** The Replacement Contract would provide that all out-of-pocket costs incurred by TCE for the electrical and natural gas interconnection of the Replacement Project would be reimbursed by the OPA. Such costs would be reimbursed on terms that are substantially the same as the terms set out in Section 1 of Exhibit S of the Accelerated Clean Energy Supply Contract between the OPA and Portland Energy Centre L.P. with the necessary conforming changes being made, provided that (i) there shall be no "Budgeted Costs" included in the NRR on account of such costs, (ii) references to the "Simple Cycle Operation Date" shall be replaced with references to the "Commercial Operation Date", and (iii) there shall be no "Excess H1 Amount". [NTD: To discuss possible interrelationship between Interconnection Costs and scope of contracted GD&M services.]
4. **Gas Delivery and Management Services Costs.** Unlike the NYR Contract, the NRR for the Replacement Contract would take into account all gas delivery and management services costs, and TCE would be responsible for managing natural gas delivery and management services, consistent with the approach taken in the Contract.
5. **Net Revenue Requirement Indexing Factor (NRRIF).** As set out in Schedule "B", the NRRIF would be equal to 20%. In the course of finalizing the Replacement Contract, the OPA would be willing to consider accepting a higher NRRIF, so long as there was a corresponding reduction in the NRR.
6. **Term of Replacement Contract.** The term of the Replacement Contract would be 25 years. For greater certainty, this would be the definitive length of the term and not an option.
7. **Capacity Check Test.** The Capacity Check Test provisions of the Replacement Contract would be modified so that as long as the demonstrated capacity was not less than 90% of the applicable Seasonal Contract Capacity, the failure to achieve the required Seasonal Contract Capacity would not be an event of default. If the demonstrated capacity was greater than 90% but less than 100% of the applicable Seasonal Contract Capacity, a Capacity Reduction Factor would apply in accordance with the provisions of Exhibit J. In

addition, there would be a requirement as part of a Capacity Check Test to confirm that the Replacement Project is capable of achieving the Contract Ramp Rate set out in Schedule "B" to this letter.

8. **Potential One Hour Runs.** Because of the absence of the "NINRR" term in Exhibit J to the NYR Contract, we do not believe that the potential for single hour imputed production intervals would be detrimental to TCE. We are not proposing any change to Exhibit J but would be willing to discuss any concerns TCE may have in this regard.

If this proposal is acceptable to you, we will prepare the necessary documentation for your review. For greater certainty, although this proposal is made in good faith, it remains subject to internal OPA approvals and does not constitute an offer capable of acceptance.

Yours very truly,

JoAnne Butler

- c. Colin Andersen, *Ontario Power Authority*
Michael Killeavy, *Ontario Power Authority*
Rocco Sebastiano, *Osler, Hoskin & Harcourt LLP*

Draft & Privileged

SCHEDULE "A" – TECHNICAL REQUIREMENTS

I. Replacement Project

The Replacement Project shall:

- (a) be a dispatchable facility designed for maximum operational flexibility;
- (b) be a simple cycle configuration generating facility;
- (c) utilize natural gas supplied by pipeline as the fuel; and
- (d) comply with Section 6 (Generation Connection Criteria), as specified in the 'Ontario Resources and Transmission Assessment Criteria' document published by the IESO.

II. Contract Capacity

The Replacement Project will be a single generating facility and will:

- (a) be able to provide a minimum of 250 MW at 35 °C under both N-1 System Conditions and N-1 Generating Facility Conditions simultaneously. For further clarity, the Replacement Project must be designed to supply either transmission circuit M20D or M21D at all times. Each unit must be able to supply either transmission circuit at all times;
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The Replacement Project will be connected directly to the IESO-Controlled Grid via new double circuit 230 kV transmission lines. Notwithstanding the foregoing, the Replacement Project may also connect to a Local Distribution System for the purpose of providing Islanding Capability.

The Replacement Project will have a connection point located with a direct connection to the Hydro One circuits M20D and M21D between the [●]th transmission tower (Tower #●) leaving the Preston TS connecting to the Galt TS. [Note: This assumes the Replacement Project is located at the Boxwood site.]

IV. Operation Following a N-2 Contingency (Load Restoration)

If a disruption occurs that leads to N-2 system conditions, TCE shall be required to use Commercially Reasonable Efforts (as such term is defined in the Contract) to assist the IESO, as directed by the IESO, in restoring load in accordance with Section 7 of the Ontario Resource and Transmission Assessment Criteria. This obligation would replace the provision for Islanding Capability set out in Section 1.11 of the NYR Contract.

V. Operational Flexibilities

The Replacement Project must be such that the two combustion turbines combined are capable of ramping at a rate equal to or greater than the Contract Ramp Rate. The Contract Ramp Rate will be subject to verification as part of the Capacity Check Test.

VI. Emissions Requirements.

- (a) The emissions from the Replacement Project shall meet or exceed the following criteria:
 - (i) Nitrogen Oxides (NOx) in a concentration not exceeding 15 ppmv (based upon Reference Conditions (as such term is defined in the Contract) and 15% O₂ in the exhaust gases on a dry volume basis) as measured using an emissions measurement methodology substantially based on Exhibit W to the Contract (the "Emissions Measurement Methodology"); and
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- (b) TCE will provide evidence to support the stated emission levels of NOx and CO in the form of a signed certificate by an authorized representative of any of: (1) the original equipment manufacturer of the Replacement Project's turbines, (2) the supplier or manufacturer of any post combustion emission control equipment utilized by the Replacement Project, or (3) the engineering company responsible for the design of the Replacement Project, which certificate must state that the Replacement Project, as designed, will operate within these stated limits for NOx and CO.
- (c) The Replacement Contract will require that the emission limits for NOx and CO be (i) incorporated into the Replacement Project's Environmental Review Report or its completed environmental assessment, and (ii) reflected in the Replacement Project's application to the Ministry of the Environment for a Certificate of Approval (Air) Operating Permit, together with a specific request in such application that such limits be imposed as conditions of such Certificate of Approval.
- (d) The emission limits for NOx and CO stated in the Replacement Contract will form the basis of an ongoing operating requirement. For greater certainty, the OPA is not requiring TCE to adopt any specific facility design or utilize any particular control equipment with respect to air emissions, provided, however, the Replacement Project must comply with the NOx and CO limits set out above, including, without limitation, at the time of attaining Commercial Operation and during any Capacity Check Test.

VII. Fuel Supply

The Replacement Project will obtain gas distribution services from Union Gas Limited, and TCE cannot by-pass Union Gas Limited.

VIII. Project Major Equipment.

The Replacement Project will be designed utilizing (2) M501GAC Fast Start gas-fired combustion turbine generators to be supplied by MPS Canada, Inc. (the “Generators”), with evaporative cooling and emission reduction equipment. Each Generator shall be nominally rated at [●] MW (measured at the Generator’s output terminals) new and clean, at ISO conditions.

SCHEDULE "B" – FINANCIAL PARAMETERS

Net Revenue Requirement	\$ 12,887 / MW-month
Net Revenue Requirement Indexing Factor	20 %
Annual Average Contract Capacity	500 MW
Nameplate Capacity	[●] MW
Start-Up Gas for the Contract Facility	700 MMBTU/start-up
Start-Up Maintenance Cost	\$30,000/start-up
O&M Costs	\$0.89 / MWh
OR Cost	\$0.50 / MWh

	<u>Season 1</u>	<u>Season 2</u>	<u>Season 3</u>	<u>Season 4</u>
<u>Contract Heat Rate</u>	10.42 MMBTU/MWh (HHV)	10.55 MMBTU/MWh (HHV)	10.66 MMBTU/MWh (HHV)	10.58 MMBTU/MWh (HHV)
<u>Contract Capacity</u> Note: Subject to Schedule "A", TCE to determine Seasonal Contract Capacities so long as the AACC is 500 MW.	[●] MW	[●] MW	[●] MW	[●] MW
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SCHEDULE "C" – ADJUSTMENT METHODOLOGY

1. The Net Revenue Requirement set out in Schedule "B" is based on a target capital cost for the design and construction of the Replacement Project of \$375,000,000 (the "Target Capex"). So long as the actual cost to design and build the Replacement Project (the "Actual Capex") is within 3% higher or lower than the Target Capex, there shall be no adjustment in the NRR. If the Actual Capex is more than 3% higher or lower than the Target Capex, the NRR shall be adjusted on the following basis. For greater certainty, none of the other parameters set out in Schedule "B" is subject to adjustment.

- (i) The OPA's share of any difference between the Target Capex and the Actual Capex shall be determined as follows:

OPA Share = (Actual Capex – Target Capex) × 0.50, provided that the OPA Share shall not exceed \$37,500,000

- (ii) The adjusted NRR shall be equal to the NRR set out in Schedule "B", plus the OPA Share multiplied by [●]. For greater certainty, if the OPA Share is a negative number, the adjusted NRR shall be less than the NRR set out in Schedule "B". **[NTD: The adjustment value may need to correspond to the adjustment value being used for Oakville Sunk Costs.]**

- (b) The determination of the Actual Capex shall not include: (i) any costs being reimbursed by the OPA, including, without limitation, "Interconnection Costs", as set out above, (ii) any costs incurred by TCE that were not reasonably required to be incurred in order for TCE to fulfill its obligations under the Replacement Contract or that were not incurred in accordance with "Good Engineering and Operating Practices" (as such term is defined in the Contract), or (iii) any costs not substantiated to the reasonable satisfaction of the OPA.
- (c) The following costs shall be considered fixed components of the Target Capex not subject to change in determining the Actual Capex:

<u>Cost</u>	<u>Fixed Price</u>
Main Turbine Original Costs (excluding change orders)	US\$144,900,000
Main Turbine Additional Scope (excluding change orders)	US\$36,295,000
Hedge Costs	\$[●]

- (d) The determination of the Actual Capex shall be done through an "open book" process, such that all costs incurred by TCE in designing and building the Replacement Project shall be transparent to the OPA and fully auditable. Any dispute relating to the determination of the Actual Capex shall be resolved in accordance with the dispute resolution provisions of the Replacement Contract.
- (e) All dollar amounts referenced in this letter are in Canadian dollars, unless otherwise specified.

PRIVILEGED, CONFIDENTIAL AND WITHOUT PREJUDICE

Dear Mr. Pourbaix:

Southwest GTA Clean Energy Supply Contract (the "Contract") between TransCanada Energy Ltd. ("TCE") and the Ontario Power Authority ("OPA") dated October 9, 2009

We are writing to you in response to your letter to Colin Andersen, dated March 10, 2011. As stated in Colin's October 7, 2010 letter to you, we wish to work with you to identify projects and the extent to which such projects may compensate TCE for termination of the Contract while appropriately protecting the interests of ratepayers. We have reviewed the proposal contained in the draft implementation agreement and schedules TCE provided to us, and find that it does not meet this requirement. We would like to suggest an alternative proposal which we believe meets this requirement.

The Government of Ontario's Long-Term Energy Plan has identified a need for a peaking natural gas-fired plant in the Kitchener-Waterloo-Cambridge area. We believe such a plant is a project that could compensate TCE for the termination of the Contract and at the same time protect the interests of ratepayers (the "Replacement Project"). We have set out in Schedule "A" to this letter a technical description of the requirements of the Replacement Project.

We would propose to enter into a contract with TCE for TCE to construct, own, operate and maintain the Replacement Project as compensation for the termination of the Contract. The contract for the Replacement Project (the "Replacement Contract") would be based on the final form of contract (the "NYR Contract") included as part of the Northern York Region Peaking Generation Request for Proposals, subject to the changes set out below and otherwise as necessitated by Schedule "A". The financial parameters of the Replacement Contract would be as set out in Schedule "B" to this letter. In consideration of the uncertainties in the Replacement Project, we would include a mechanism in the Replacement Contract to adjust the NRR upon commercial operation on the basis set out in Schedule "C" to this letter.

The following sets out the changes to the NYR Contract that would be applicable to the Replacement Contract:

1. **Permits and Approvals.** With respect to the approvals required pursuant to the *Planning Act* to construct the Replacement Project, the OPA would work with TCE, the host municipality and the Province of Ontario to ensure that once all of the requirements for the *Planning Act* approvals have been satisfied, the approvals are issued in a timely manner, or if they are not issued in a timely manner, that so long as the Replacement Project has been approved under Part II or Part II.1 of the *Environmental Assessment Act* or is the subject of (i) an order under section 3.1 or a declaration under section 3.2 of that Act, or (ii) an exempting regulation made under that Act, such *Planning Act* approvals do not impede the development of the Replacement Project.

If this did not occur and the delay in the issuance of such *Planning Act* approvals caused TCE not to achieve Commercial Operation by the Milestone Date for Commercial Operation, such delay would be considered an event of Force Majeure, and TCE would be entitled to recover its reasonable, out-of-pocket costs resulting from such delay, by way of a corresponding increase in the Net Revenue Requirement (NRR). In addition, the OPA

would not have the right to terminate the Replacement Contract for such event of Force Majeure, unless the event of Force Majeure resulted in a delay that was greater than two years and the OPA paid TCE a termination amount equal to \$50,000,000 plus the total amount of the verified, non-recoverable sunk costs determined in accordance with paragraph 2, below (net of any residual value) associated with the development of the Oakville Generating Station, provided however that such total of the sunk costs amount shall not exceed \$37,000,000. TCE would be solely responsible for all other permits and approvals required for the Replacement Project, subject to the standard Force Majeure provisions set out in the NYR Contract.

2. **Oakville Sunk Costs.** The NRR set out in Schedule "B" to this letter includes an amount equal to \$37,000,000 on account of TCE's sunk costs associated with the development of the Oakville Generating Station. To the extent that the total of the verified, non-recoverable sunk costs (net of any residual value) associated with the development of the Oakville Generating Station is less than \$37,000,000, the NRR shall be reduced by 10.000 019 314 21 multiplied by the amount by which such costs are less than \$37,000,000.
3. **Interconnection Costs.** The Replacement Contract would provide that all out-of-pocket costs incurred by TCE for the electrical and natural gas interconnection of the Replacement Project would be reimbursed by the OPA. Such costs would be reimbursed on terms that are substantially the same as the terms set out in Section 1 of Exhibit S of the Accelerated Clean Energy Supply Contract between the OPA and Portland Energy Centre L.P. with the necessary conforming changes being made, provided that (i) there shall be no "Budgeted Costs" included in the NRR on account of such costs, (ii) references to the "Simple Cycle Operation Date" shall be replaced with references to the "Commercial Operation Date", and (iii) there shall be no "Excess H1 Amount". [NTD: To discuss possible interrelationship between Interconnection Costs and scope of contracted GD&M services.]
4. **Gas Delivery and Management Services Costs.** Unlike the NYR Contract, the NRR for the Replacement Contract would take into account all gas delivery and management services costs, and TCE would be responsible for managing natural gas delivery and management services, consistent with the approach taken in the Contract.
5. **Net Revenue Requirement Indexing Factor (NRRIF).** As set out in Schedule "B", the NRRIF would be equal to 20%. In the course of finalizing the Replacement Contract, the OPA would be willing to consider accepting a higher NRRIF, so long as there was a corresponding reduction in the NRR.
6. **Term of Replacement Contract.** The term of the Replacement Contract would be 25 years. For greater certainty, this would be the definitive length of the term and not an option.
7. **Capacity Check Test.** The Capacity Check Test provisions of the Replacement Contract would be modified so that as long as the demonstrated capacity was not less than 90% of the applicable Seasonal Contract Capacity, the failure to achieve the required Seasonal Contract Capacity would not be an event of default. If the demonstrated capacity was greater than 90% but less than 100% of the applicable Seasonal Contract Capacity, a Capacity Reduction Factor would apply in accordance with the provisions of Exhibit J. In

addition, there would be a requirement as part of a Capacity Check Test to confirm that the Replacement Project is capable of achieving the Contract Ramp Rate set out in Schedule "B" to this letter.

8. **Potential One Hour Runs.** Because of the absence of the "NINRR" term in Exhibit J to the NYR Contract, we do not believe that the potential for single hour imputed production intervals would be detrimental to TCE. We are not proposing any change to Exhibit J but would be willing to discuss any concerns TCE may have in this regard.

If this proposal is acceptable to you, we will prepare the necessary documentation for your review. For greater certainty, although this proposal is made in good faith, it remains subject to internal OPA approvals and does not constitute an offer capable of acceptance.

Yours very truly,

JoAnne Butler

- c. Colin Andersen, *Ontario Power Authority*
Michael Killeavy, *Ontario Power Authority*
Rocco Sebastiano, *Osler, Hoskin & Harcourt LLP*

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SCHEDULE "A" – TECHNICAL REQUIREMENTS

I. Replacement Project

The Replacement Project shall:

- (a) be a dispatchable facility designed for maximum operational flexibility;
- (b) be a simple cycle configuration generating facility;
- (c) utilize natural gas supplied by pipeline as the fuel; and
- (d) comply with Section 6 (Generation Connection Criteria), as specified in the 'Ontario Resources and Transmission Assessment Criteria' document published by the IESO.

II. Contract Capacity

The Replacement Project will be a single generating facility and will:

- (a) be able to provide a minimum of 250 MW at 35 °C under both N-1 System Conditions and N-1 Generating Facility Conditions simultaneously. For further clarity, the Replacement Project must be designed to supply either transmission circuit M20D or M21D at all times. Each unit must be able to supply either transmission circuit at all times;
- (b) be able to provide a minimum of 500 MW at 35 °C under N-2 System Conditions;
- (c) have a Season 3 Contract Capacity of not less than 480 MW; and
- (d) have a Contract Capacity of not more than 550 MW in any Season.

III. Electrical Connection

The Replacement Project will be connected directly to the IESO-Controlled Grid via new double circuit 230 kV transmission lines. Notwithstanding the foregoing, the Replacement Project may also connect to a Local Distribution System for the purpose of providing Islanding Capability.

The Replacement Project will have a connection point located with a direct connection to the Hydro One circuits M20D and M21D between the [●]th transmission tower (Tower #●) leaving the Preston TS connecting to the Galt TS. [Note: This assumes the Replacement Project is located at the Boxwood site.]

IV. Operation Following a N-2 Contingency (Load Restoration)

If a disruption occurs that leads to N-2 system conditions, TCE shall be required to use Commercially Reasonable Efforts (as such term is defined in the Contract) to assist the IESO, as directed by the IESO, in restoring load in accordance with Section 7 of the Ontario Resource and Transmission Assessment Criteria. This obligation would replace the provision for Islanding Capability set out in Section 1.11 of the NYR Contract.

V. Operational Flexibilities

1. ~~Ramp Rate Requirement.~~ The Replacement Project must be such that ~~each~~the two combustion turbine ~~is~~turbines combined are capable of ramping at a rate equal to or greater than the Contract Ramp Rate. The Contract Ramp Rate will be subject to verification as part of the Capacity Check Test.

2. VI. Emissions Requirements.

- (a) The emissions from the Replacement Project shall meet or exceed the following criteria:
 - (i) Nitrogen Oxides (NOx) in a concentration not exceeding 15 ppmv (based upon Reference Conditions (as such term is defined in the Contract) and 15% O₂ in the exhaust gases on a dry volume basis) as measured using an emissions measurement methodology substantially based on Exhibit W to the Contract (the "Emissions Measurement Methodology"); and
 - (ii) Carbon Monoxide (CO) in a concentration not exceeding 10 ppmv (based upon Reference Conditions and 15% O₂ in the exhaust gases on a dry volume basis) as measured using the Emissions Measurement Methodology.
- (b) TCE will provide evidence to support the stated emission levels of NOx and CO in the form of a signed certificate by an authorized representative of any of: (1) the original equipment manufacturer of the Replacement Project's turbines, (2) the supplier or manufacturer of any post combustion emission control equipment utilized by the Replacement Project, or (3) the engineering company responsible for the design of the Replacement Project, which certificate must state that the Replacement Project, as designed, will operate within these stated limits for NOx and CO.
- (c) The Replacement Contract will require that the emission limits for NOx and CO be (i) incorporated into the Replacement Project's Environmental Review Report or its completed environmental assessment, and (ii) reflected in the Replacement Project's application to the Ministry of the Environment for a Certificate of Approval (Air) Operating Permit, together with a specific request in such application that such limits be imposed as conditions of such Certificate of Approval.
- (d) The emission limits for NOx and CO stated in the Replacement Contract will form the basis of an ongoing operating requirement. For greater certainty, the OPA is not requiring TCE to adopt any specific facility design or utilize any particular control equipment with respect to air emissions, provided, however, the Replacement Project must comply with the NOx and CO limits set out above, including, without limitation, at the time of attaining Commercial Operation and during any Capacity Check Test.

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3. VII. Fuel Supply.

The Replacement Project will obtain gas distribution services from Union Gas Limited, and TCE cannot by-pass Union Gas Limited.

4. VIII. Project Major Equipment.

The Replacement Project will be designed utilizing (2) M501GAC Fast Start gas-fired combustion turbine generators to be supplied by MPS Canada, Inc. (the "Generators"), with evaporative cooling and emission reduction equipment. Each Generator shall be nominally rated at [●] MW (measured at the Generator's output terminals) new and clean, at ISO conditions.

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SCHEDULE "B" – FINANCIAL PARAMETERS

Net Revenue Requirement	\$ 12,887 / MW-month
Net Revenue Requirement Indexing Factor	20 %
Annual Average Contract Capacity	500 MW
Nameplate Capacity	[●] MW
Start-Up Gas for the Contract Facility	700 MMBTU/start-up
Start-Up Maintenance Cost	\$30,000/start-up
O&M Costs	\$0.89 / MWh
OR Cost	\$0.50 / MWh

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