



Implementation of MOF Recommendation Paper
Stakeholder Comment Form

Comments From: **MEG ENERGY CORP.**
Date: APRIL 16, 2009
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8. WIND POWER MANAGEMENT - Supply Surplus

The AESO solicits input from all stakeholders on the proposed supply surplus protocol and proposed modifications to OPP 103 provided below.

- Support
- Oppose
- Indifferent

- (1) Include wind power facilities and co-generation facilities in OPP 103 procedures with co-generation to be subject to Minimum Operating Level (MOL) requirements
- (2) Establish a Minimum Operating Level (MOL) for each asset and, where possible, assets should not be dispatched below their MOL.
- (3) Refine MOL definition to include new constraints not included in Minimum Stable Generation¹ (MSG) but that affect the asset's ability to operate at or below a threshold. MOL is a physical operating limit (not an economic limit) for an asset constrained by legal/regulatory, environmental, health and safety, equipment reliability, operating level required to serve dispatched ancillary services, or operating level required to prevent damages to third party equipment. Examples of physical operating constraints for types of generation and import/export are included in the WG paper (Appendix A).
- (4) Develop a mechanism for pool participants to declare and submit the MOL. It is expected that the need for, approach and frequency of declaration may vary among generators and will need to be defined.
- (5) Revise the current "inflexible block" definition. The definition of "inflexible block" will need to be amended as follows:

"inflexible block" means a block of energy that may be dispatched on or dispatched off, but not partially dispatched on, except for a \$0 offer block it may be dispatched to the asset's MOL.

Definition of "flexible block" does not require any changes since it accommodates the proposed \$0 SMP management protocol.
- (6) Provide market indication of supply surplus conditions (similar to supply adequacy situations) to provide market participants an opportunity to take voluntary actions in the face of potential \$0 SMP conditions and also become aware that an out-of-market dispatch to clear the energy imbalance could be forthcoming.

¹ ISO Rule definition for MSG is "minimum stable generation" which means the minimum generation level that an asset can be continuously operated at without becoming unstable.

Reasons for Stakeholder Position:

We understand that a main component of the proposed protocol is that “inflexible \$0 offer blocks, flexible \$0 offer blocks and wind power facilities would share the burden of curtailments in a fair and effective manner”. This element of the proposed protocol represents a major policy shift from the existing protocol contained in OPP 103, in that OPP 103 currently exempts “generating units primarily serving load or steam process, including those supplying to industrial systems with industrial system designation” (the “Exemption”) from being directed to minimum stable generation in the event of a surplus of supply. It is our strong belief that the unique characteristics and economics of non-dispatchable cogeneration facilities, being those whose bids into the system are not price sensitive, dictate that such an exemption should be preserved.

As is acknowledged in paragraph 3 of Appendix B to the *Supply Surplus (\$0 SMP) Protocol Work Group Recommendation*, the primary purpose of our cogeneration facility is to produce steam which is then injected into the ground in order to extract bitumen. The efficient design of our cogeneration facility results in the creation of significant quantities of power as a by-product of the steam generation. Because the primary purpose of our facility is the creation of steam for bitumen extraction, steam reliability is of paramount importance to our bitumen production operations. Any curtailment in steam production for a cogeneration facility would place a disproportionate burden, both in financial and operational terms, on the primary business that the cogeneration facility was built to support, as compared to a facility whose primary purpose is electricity generation. In particular, the financial burden would manifest in a significant loss of revenue from a reduction in bitumen sales. As such, our cogeneration facility must run at full capacity continuously and steam production should not be compromised due to power market conditions, including conditions of oversupply.

The integrated nature of a cogeneration facility is such that steam and power cannot be made separately which further supports an argument in favour of a continued exemption for cogeneration facilities from any curtailment protocol and was, presumably, a critical factor in the initial decision to include the Exemption in OPP 103. The *Supply Surplus (\$0 SMP) Protocol Work Group Recommendation*, in paragraph 3 of Appendix B, makes the following statement:

“Co-gens are usually sized for the steam requirement and there may not be a lot of flexibility in generation output and (sic) would not cause negative impact to host process. There may be some alternative means to reduce the need for generation output to produce steam such as duct firing.”

Unfortunately, the speculation expressed in the last sentence is incorrect. Non-dispatchable cogeneration steam generation is entirely dependant on maintaining the power output. The suggestion that duct firing could be used to provide dispatchability misses the fact that duct firing has already been maximized to support the steam load.

A further important consideration that cannot be ignored is that the construction of a

cogeneration facility requires substantial investment and a favourable and stable regulatory environment is an important consideration for any entity(ies) considering, or who have already committed to, such a project. The growth in cogeneration in Alberta over the last several years has been substantial, due in part to a favourable regulatory environment. Cogeneration is now an integral part of the infrastructure of Alberta's core industries, providing reliable, on-site steam generation to many sectors including forestry, petro-chemical and oilsands production and refining. In order to encourage the continued development of such projects, investors will require certainty as to the ability of such a facility to operate consistently and reliably. The following illustrates this point²:

“Regulatory barriers pertain to the regulatory environment governing the installation and operation of cogeneration facilities. A key regulatory barrier is access to the electricity grid for the sale of excess electricity. Currently, only Alberta has open access to its electricity grid and has provided easier access to the market. As a result, since 2000, over 1.2 GWe of cogeneration capacity has been installed in the province, more than any other region. While there are many other conditions that affect the penetration of cogeneration (primarily higher electricity prices and reliability issues in Alberta), improved access to the grid and to the market in general are considered primary motivations for the growth of cogeneration in the province.”

Although the paper this quote came from is somewhat dated, the principles that it sets forth remain valid under the existing OPP 103.

In summary, access to the electricity grid for the sale of excess electricity is a key driver of cogeneration development. The proposed protocol represents a significant policy shift which would have a disproportionately negative impact on existing or developing cogeneration projects and would negatively influence the construction of new cogeneration projects in the province. Therefore, MEG argues strongly that the exemption contained in the existing OPP 103 excluding “generating units primarily serving on-site load or steam process, including those supplying to industrial systems with industrial system designation” from the curtailment process should be respected and maintained in any new protocol which may amend or supersede the existing OPP 103.

As a final note, we would like to express our concern with the lack of engagement of all stakeholders to date. The proposed changes to the curtailment protocol that have been embedded in the *Implementation of Market & Operational Framework for Wind Integration* have a significant impact on co-generators in the Province. We urge the AESO to extend the period for stakeholder commentary and to actively notify all stakeholders that are affected by the policy such that they may become appropriately engaged in the discussion.

¹ **“Cogeneration Potential in Canada, Phase 2” completed for Natural Resources Canada and prepared by Catherine Strickland and John Nyboer of MK Jaccard and Associated in April 2002.**

9. SUPPLY SURPLUS – protocol

The Supply Surplus work group also developed the following protocol respecting OPP 103:

- Support
- Oppose
- Indifferent

Step 1: Curtail opportunity services including import transactions.

Step 2: Take the following actions, taking into account the transmission system operating and reliability constraints and an objective of rotating the curtailments amongst market participants where possible:

- a. Curtail flexible \$0 blocks, by pro-rata assignment,
- b. Where wind generation is required to be curtailed pursuant to (a), assign the curtailment amongst each individual wind power facility using the wind power management protocol,
- c. Curtail inflexible \$0 blocks to the asset’s MOL.

Step 3: Curtail an asset to 0 MW (go off line), considering the asset’s minimum off time.

Reasons for Stakeholder Position:

See comments under Section 8. above



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Please return this form with your comments by April 3, 2009 to:

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