



January 21, 2010

Alberta Electric System Operator
2500, 330 – 5th Avenue S.W.
Calgary AB T2P 0L4

Attention: Doug Simpson

Dear Mr. Simpson:

RE: AESO Transmission Constraints Management: Rule 9.4 AUC Re-Filing Proposal Paper

In its December 3, 2009 letter, the Alberta Electric System Operator encouraged market participants and interested parties to provide comments regarding the *AESO Discussion Paper Transmission Constraints Management: Rule 9.4 AUC Re-filing Proposal*.¹ This letter provides the comments of Capital Power Corporation.

Summary

Decision 2009-042 is rooted in an understanding on the part of the Alberta Utilities Commission that transmission congestion-related events requiring the application of Rule 9.4 will be infrequent and transient. However, the available evidence suggests that the problem will be much more prevalent and serious than the Commission was led to believe by the AESO. If that is the case, then the revised Rule 9.4 does not satisfy the requirements of the Commission as expressed in its Decision.

In the circumstances, the AESO must either move urgently to provide reasonable and credible evidence to substantiate its assurances to the AUC regarding the infrequency and brevity of transmission congestion-related events or rewrite Rule 9.4 so as to incorporate either a dispatch down service, or a *pro rata* approach to curtailing generators upstream of transmission constraints.²

Discussion

It is abundantly clear from Decision 2009-042 that the Commission was prepared to allow the AESO to employ EMMO/RMO as the approach to curtailing upstream generators *only* ". . . provided that EMMO/RMO is used infrequently and for periods of congestion of short-duration . . .".³ Indeed, there can be no doubt that the assurances from the AESO that it expected congestion to be "infrequent and transient" formed the foundation of the AUC decision.⁴ With respect, this makes it all the more unfortunate that the AESO has provided little information, either before the Rule 9.4 hearing or since, to substantiate those assurances. In fact, the available evidence is to the contrary.

¹ The discussion paper is also dated December 3, 2009

² A dispatch down service approach would be preferred. *Pro rata* is the next best alternative.

³ Decision 2009-042, at para. 117.

⁴ Decision 2009-042, at para. 135. See also Decision 2009-042, at para. 114.



The AESO testimony during the Rule 9.4 hearing was that congestion on the north/south corridor would be ". . . a very good example of something that we would see to be infrequent and typically very short in duration" and that ". . . the only congestion events that I'm aware of on the north/south system, either historic or even on a forecasted basis over the next several years, are related to forced outages or contingency-type situations".⁵

However, in the *Edmonton-Calgary 500kV Transmission Development Need Application* (May 7, 2004), the AESO indicated that ". . . based on the generation development scenario assumed, i.e. upgrades of Genesee 1 and 2, and Sundance 3, 4 and 5 by 2008; and the addition of Keephills Unit 3 in 2009 . . . [c]ongestion on the Edmonton to Calgary transmission path in 2009 was estimated to be about 32% of the time in the 'summer' months, and 21% of the time in the 'winter' months".⁶ Conditions are now rapidly converging toward those predicted circumstances.

For example, when Keephills 3 comes on-stream in 2011, Keephills-Genesee generation will be 86 MW higher (i.e., 2,496 MW vs. 2,410 MW) than in the generation capacity scenario contemplated in the 2004 Need Application. Similarly, forecast demand in 2010 is expected to surpass the levels associated with the highest congestion predicted in that document.⁷

So far as Capital Power is aware, the AESO has provided no new public estimates of the probability of congestion on the Edmonton to Calgary transmission path. The AESO did, however, recently indicate to Capital Power (in a letter dated December 17, 2009), a copy of which is attached, that it anticipates that from the latter half of 2011 (when Keephills 3 is scheduled to be added) to 2014 (when the West Edmonton-Calgary 500 kV HVDC transmission line is expected to be in service) there will be ". . . an increased probability of transmission constraints and possible generation curtailment of Keephills, Genesee and Sundance units during periods of high north to south flows." As much as it might like to, Capital Power finds it is difficult to reconcile this information (i.e., the 2004 Need Application, the 2008-2028 Demand and Energy Outlook, 24-Month Reliability Outlook (2009-2011) and the recent letter from the AESO) with assurances that transmission congestion-related events of the nature that would attract the application of Rule 9.4 will be either infrequent or insignificant.

The requirement for the AESO to provide reasonable and credible evidence to substantiate its assurances is urgent. Moreover, in the absence of such substantiation, the fundamental proviso in Decision 2009-042 cannot be satisfied and Rule 9.4 must be rewritten to eliminate EMMO/RMO re-dispatch.⁸ If that were not to happen then, in light of Decision 2009-042, the AUC would be obliged to reject Rule 9.4 as being contrary to the public interest and failing to support the fair, efficient and openly competitive operation of the Alberta electricity market.

⁵ 3T371 and 373.

⁶ At p. 25.

⁷ According to the AESO *Future Demand and Energy Outlook (2008-2028)*, 2010 summer and winter peak demand for the Alberta Interconnected Electric System is expected to reach 8,437 and 8,994 MW, respectively. These peak demands exceed those that were provided in the 2004 Need Application (8,239 and 8,464 MW) by 198 MW and 530 MW, respectively.

⁸ Either a dispatch down service (preferred) or a pro rata (next best) approach to curtailing generators upstream of transmission constraints should be substituted.

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Capital Power is appreciative of the opportunity to provide these comments and would welcome the opportunity to work with the AESO to achieve a mutually satisfactory outcome. We hope that the AESO will provide information about the potential triggers of future congestion (e.g. line outages, generation outages in the south or central regions, etc), the predicted frequency of congestion in the KEG area up until the first Edmonton-Calgary 500 kV line is built, information of when the congestion is more likely to occur (on peak or off peak percentages and summer or winter), and the magnitude of curtailment expected for KEG generating units as a result of delayed upgrades in the KEG area and those related to the delayed Edmonton-Calgary 500 kV line.

Please contact me directly at (780) 392-5168 if you wish to discuss any of the matters raised in this letter.

Sincerely,

<Unsigned>
Akira Yamamoto
Senior Manager, Regulatory Affairs
Capital Power Corporation