



Independent Electricity
System Operator
655 Bay Street
Suite 410, PO Box 1
Toronto, Ontario M5G 2K4
t 416 506 2800
www.ieso.ca

VIA ELECTRONIC MAIL AND FACSIMILE

February 20, 2005

Mr. Michel Mantha
National Energy Board
444 - Seventh Avenue S.W.
Calgary, Alberta
T2P 0X8

Dear Mr. Mantha:

**Re: Proposed Amendments to the NEB Cost Recovery Regulations
Comments of the Ontario Independent Electricity System Operator**

The Ontario Independent Electricity System Operator's (IESO) is pleased to provide comments on the National Energy Board's Proposed Amendments to the Electricity Cost Recovery Regulations . These comments are limited to the implementation of the NEB's proposed methodology as opposed to the methodology itself, as the IESO has already provided substantive comments on the merits of the latter elsewhere¹.

The IESO would like to comment on two aspects of the NEB's proposal that was presented to stakeholders at the January 19, 2006 session in Toronto – i.e., levies applied to newly-regulated IPLs and to currently-regulated IPLs.

Newly-regulated IPLs

The NEB is proposing to levy a charge of 0.2% of project capital costs applied to new power lines approved by the Board. The Board has emphasized that the charge is merely intended to parallel the greenfield fee concept used for oil and gas, and was not arrived at without conducting independent analysis to substantiate these costs. Nevertheless, the IESO would still urge the Board to make the results of this analysis publicly available for stakeholder scrutiny. This

¹ See Ontario Independent Electricity System Operator's (IESO) comments submitted to the NEB - 2 August 2005.

will remove any doubts among stakeholders that the levy was developed to correspond to that applied to the oil and gas industry.

Currently-regulated IPLs

For IPLs that are currently regulated, the Board is proposing to charge a levy on the **actual** energy transmitted (in MWh) by each IPL. The charge is intended to recover the pooled costs attributable to large IPLs in proportion to each company's activity. The actual MWhs are to be an aggregation of international imports and exports. The IESO believes using actual energy transmitted by an IPL to recover pooled costs is a flawed approach because it has the potential of resulting in an over recovery of costs from those jurisdictions that experience loop flows, inadvertent energy, and linked wheel-throughs and a corresponding under recovery from those that do not face these issues. The IESO believes the more appropriate measurement parameter on which to base cost recovery is **scheduled** imports and exports, not actual energy transmitted.

What follows is a brief discussion of the three factors – loop flows, inadvertent energy and linked wheel-throughs - that render the use of actual energy transmitted as a measurement parameter problematic.

First, because power flows follow the laws of physics and not financial arrangements (or the “contract path”), a transmitter's system can experience loop flows. Loop flows refers to the actual flow of electric power on an electric system's transmission facilities resulting from scheduled electric power transfers between two other electric systems. In Ontario, for example, Lake Erie Circulation (LEC) is a measure of the use of Ontario's transmission system by external parties in neighbouring jurisdictions. The flow can circulate through Ontario in a clockwise direction, in at Michigan and out at New York, or in counter clockwise direction, in at New York and out at Michigan. IPLs that are required to report actual energy transmitted, would capture these unscheduled transfers twice: assuming a clockwise direction, once from Michigan as imports and once to New York as exports, thereby overstating the true quantity of international exports and imports transmitted.

Second is inadvertent energy - the difference between actual and scheduled power flow between two control areas. Inadvertent energy has two forms: inadvertent caused by imperfect generation control; and inadvertent caused by interconnection frequency error. While adjacent control areas try to repay these differences with energy, not money, there is usually either a surplus or deficit balance from year to year. These surpluses/deficits would also overstate the quantities of imports and exports reported by IPLs to the Board.

Third is linked wheel-throughs - the movement of electricity from one system to another over transmission facilities of intervening systems. In Ontario, market participants can simultaneously arrange two transactions, importing from one jurisdiction and exporting to another. Since Ontario (the intervening system) is

not the intended destination for these transactions but merely the conduit, these linked transactions would also overstate the actual amount of international exports and imports in Ontario.

Conclusion

Assuming the NEB proceeds with its proposed methodology, the IESO strongly recommends that the Board adopt scheduled transactions as the appropriate measurement parameter. Basing the levy on scheduled quantities instead of metered quantities will overcome the issues associated with loop flows, inadvertent energy and linked wheel-throughs. This approach could potentially have its own limitations, however. Since market participants are only required to indicate the market they are exporting to or importing from, transactions are not tied to any particular IPL facility but to an interconnection. While a proxy could be developed to allocate the transactions between the respective IPLs (e.g., proportional to the rated capacity of the lines owned by the IPLs), the IESO would support further discussions to resolve this and other related issues.

Yours truly,

Original signed by

George Katsuras
Senior Analyst
Regulatory Affairs
Independent Electricity System Operator