

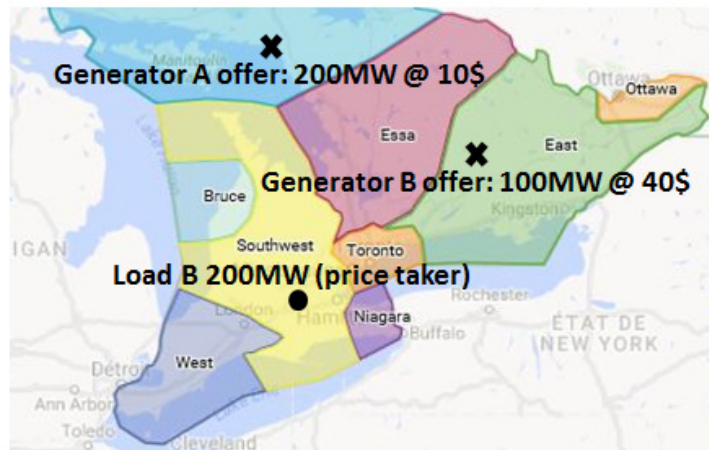
June 15th, 2018

MAG Energy’s Feedback to Congestion Rents and Loss Residuals

MAG Energy would like to take the opportunity to comment on Design Element #17, namely Congestion Rents and Loss Residuals (CRLR). Particularly, we would like more details on why the CRLR will be allocated to loads and not to exports as well.

Scenario 1 below represents the simplified residual settlement example provided by IESO on page 24 of the May 23rd presentation.

SCENARIO 1
Congestion between zone A and B
due to a 100 MW constraint;
No exports



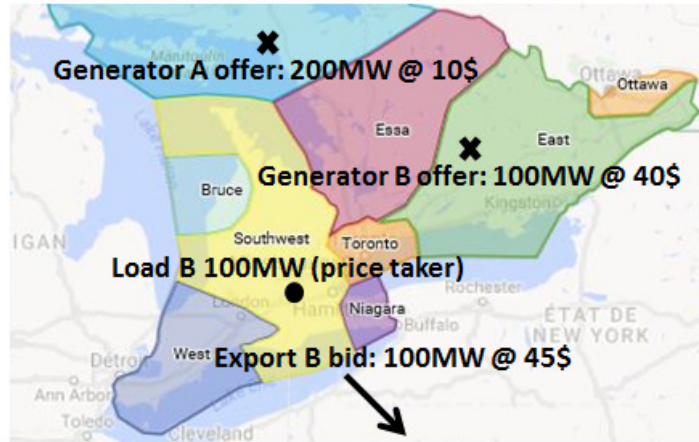
	<i>Scheduled MW</i>	<i>Energy/MW</i>	<i>Internal Cong./MW</i>	<i>Intertie Cong./MW</i>	<i>Settlement</i>	<i>Transmission Rights</i>
Generator A	100	40	-30		- 1000 \$	
Generator B	100	40	0		- 4000 \$	
Load B	200	40	0		8000 \$	
Exporter B	0				0 \$	0 \$
Residuals					3000 \$	

* assuming no loss

If we replace the quantity consumed in IESO by 100 MW from loads and 100 MW from exports, assuming no congestion on the export transmission line, we can see that the residuals would stay 3000\$. However, part of these residuals would come from the exports; therefore exporters would be entitled to the residuals disbursement as much as the loads would be. This situation is shown as Scenario 2 below.

SCENARIO 2

**Congestion between zone A and B
due to a 100 MW constraint;
Export line not congested 100/150 MW**



	<i>Scheduled MW</i>	<i>Energy/MW</i>	<i>Internal Cong./MW</i>	<i>Intertie Cong./MW</i>	<i>Settlement</i>	<i>Transmission Rights</i>
Generator A	100	40	-30		- 1000 \$	
Generator B	100	40	0		- 4000 \$	
Load B	100	40	0		4000 \$	
Exporter B	100	40	0	0	4000 \$	0 \$
Residuals					3000 \$	

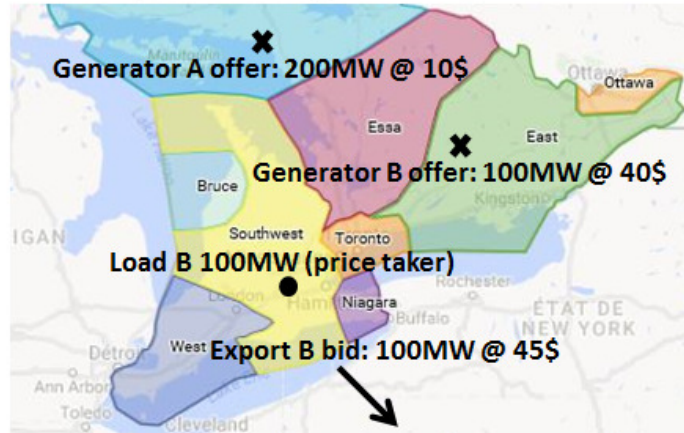
* assuming no loss

Assuming the same situation arise all hours of the month, the weighted supplier price would be 25\$ and the average monthly zonal price of zone A and B would be 10\$ and 40\$, respectively. If the IESO only allocates the residuals to the loads, there are two plausible outcomes:

- A) The IESO will reduce the average monthly zonal price of zone B to 10\$ (40\$ - 3000\$/100 MW) which is lower than the uniform supplier weighted price, contradicting the consideration made on page 26 of the May 23rd presentation;
- B) If the disbursement is capped so the average monthly zonal price of zone B does not go under the uniform supplier weighted price, the IESO will only disburse 1500\$ and there will still be 1500\$ to allocate.

Starting from scenario 2 and adding an intertie transmission constraint, we have scenario 3 below. When congestion arises on an intertie, the export price is composed of three different components, namely the energy price, the internal congestion price and the intertie congestion price, assuming no loss. The internal congestion price is the same for the exporter and the load and this is why the CRLR should be allocated to the exports as well as the loads. The fact that the transmission line is fully scheduled will not change CRLR allocation as intertie congestion is not the same as internal congestion.

SCENARIO 3
Congestion between zone A and B
due to a 100 MW constraint;
Export line congested 100/100 MW



	<i>Scheduled MW</i>	<i>Energy/MW</i>	<i>Internal Cong./MW</i>	<i>Intertie Cong./MW</i>	<i>Settlement</i>	<i>Transmission Rights</i>
Generator A	100	40	-30		- 1000 \$	
Generator B	100	40	0		- 4000 \$	
Load B	100	40	0		4000 \$	
Exporter B	100	40	0	5	4000 \$	500 \$
Residuals					3000 \$	

* assuming no loss

If the definition of “Collected from consumers” on page 23 of the May 23rd presentation does not include exports, we would like to know how the IESO is planning to calculate the CRLR. The IESO will need to separate the generator revenues into two buckets, namely the supply serving loads and the supply serving exports. MAG feels there is a lack of information regarding what will happen with the over collected amount of money that is not disbursed, as shown following scenario 2.

We would also like to point out that exports and loads are usually looked at together when charges are allocated, such as make-whole payment uplifts, and MAG strongly believes that it should be the same for the credits.

Finally, we would like to confirm that the IESO does not plan to introduce an internal FTR market, where rights are sold each month and paid with congestion revenues, as seen in US jurisdictions such as PJM, NE, NYISO and MISO. Our understanding is that the Congestion Rents and Loss Residuals will supersede the usual internal FTR market, is that correct?

Sincerely,

Alexandre Villeneuve
 Head Trader, MAG Energy Solutions