

# Counter Intuitive Failure Charge (for discussion purposes)

Inter Jurisdictional Trading Standing Committee  
March 05, 2008



- The counter intuitive nature of a failure charge for a transaction failure that occurred at a time when a failure may have benefited the ICG
- The purpose of the presentation is to discuss possible criteria around counter intuitive failure charges
- The intent is not to promote intentional failures as a result of ongoing conditions
- Does not address request of moving the intertie failure charge calculation from the current 5-minute granularity (MCP) to hourly (HOEP)

## Intertie Failure Charges

- Used to encourage appropriate behavioural changes on the part of market participants where they are incented to make appropriate scheduling decisions
- Charge calculated based on the difference between Real Time ON Price and Pre-Dispatch ON Price
- Reflects impact of intertie failures on the market
  - Real Time Import Failure → RT Price Increase
  - Real Time Export Failure → RT Price Decrease

No Intertie  
Failure Charge  
Treatment

## **Legitimate reasons for failing an intertie transaction:**

- ISO curtailments
- Intertie Limit Reduction
- External ISO ramping capacity changes

Receive Intertie  
Failure Charge  
Treatment

## **Non-legitimate reasons for failing an intertie transaction:**

- NERC tagging errors
- Failure to acquire transmission service (except MISO real-time transactions)
- Bid/offer errors
- Economic selection
- Ramping capacity where separate acquisition is required

IMPORT = the lesser of

- 1.)  $\text{Maximum}(0, \text{Real Time MCP} + \text{PBAF}^1 - \text{Pre-Dispatch MCP}) \times \text{MWh Failed}^2$
- 2.)  $\text{Maximum}(0, \text{Real Time MCP}) \times \text{MWh Failed}^2$

EXPORT = the lesser of

- 1.)  $\text{Maximum}(0, \text{Pre-Dispatch MCP} + \text{PBAF}^1 - \text{Real Time MCP}) \times \text{MWh Failed}^2$
- 2.)  $\text{Maximum}(0, \text{Pre-Dispatch MCP}) \times \text{MWh Failed}^2$

<sup>1</sup>PBAF – Price Bias Adjustment Factor, used to compensate for systemic differences between pre-dispatch and real-time price calculations (pre-dispatch uses peak demand)

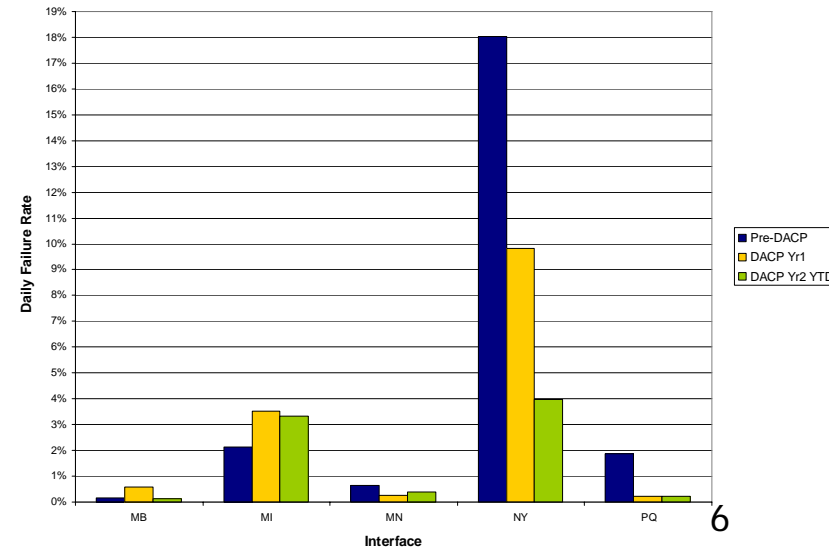
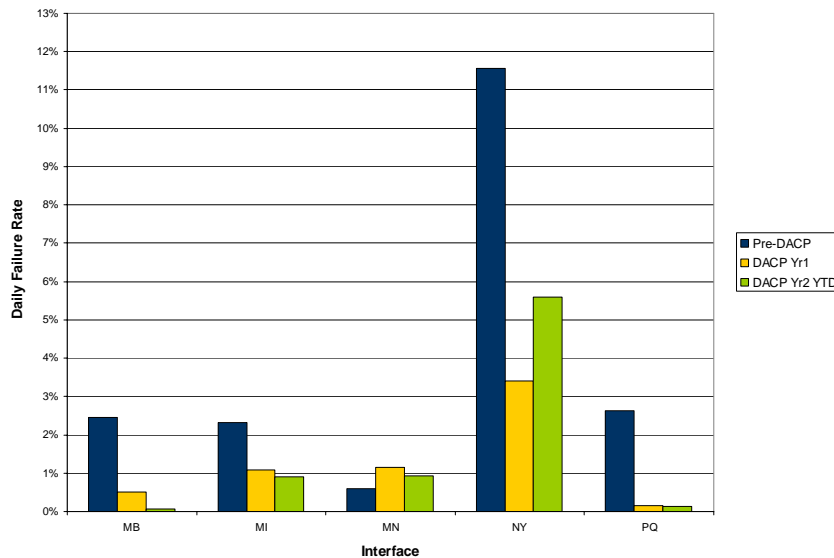
(values available at: <http://www.ieso.ca/imoweb/settlement/se-itf.asp>)

<sup>2</sup>MWh Failed – The difference in scheduled amounts between last Pre-Dispatch run and Real-Time

Intertie failure charge treatment was implemented on June 1<sup>st</sup>, 2006

	Import	Export
<b>Year Prior</b>	<b>3.30%</b>	<b>10.17%</b>
<b>1<sup>st</sup> Year</b>	<b>3.08%</b>	<b>2.74%</b>
<b>2<sup>nd</sup> Year</b>	<b>2.81%</b>	<b>4.11%</b>

## Total Failure Rate



Exports Failures by Interface

Imports Failures by Interface

## ICG Conditions Prior to Failed Transaction:

- An event occurs after the final run of Pre-Dispatch which results in Excessive Baseload Generation (EBG)

## Real-Time Event:

- An import transaction fails to flow in real-time

## Results:

- EBG might require manoeuvring of nuclear units
- The import failure may prevent the EBG event
- Real-time MCP increased from Pre-Dispatch value
- Under current treatment the transaction is linked to a failure charge

## ICG Conditions Prior to Failed Transaction:

- There is a loss of a generator after the final run of Pre-Dispatch

## Real-Time Event:

- An export transaction fails to flow in real-time

## Results:

- Transaction failure freed internal capacity and resulted in a favourable situation
- Real-time MCP decreased from Pre-Dispatch value
- Under current treatment the transaction is linked to a failure charge

- Requires a criteria that revolves around certain events of reliability concerns
- Settlement and Review Process
  - The analysis of counter intuitive failures will be a manual process
  - Is the process reviewed regularly by the IESO or through a market participant submission of a Notice of Disagreement
- Additional issues related to counter intuitive failure brought forth by IJTSC participants