

# Intertie Failure Charges

Design Working Group Meeting  
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1. Day-Ahead Import Failure Charge
  - Description of Formula Changes and Examples
  - Modifications to Charge Types and Equations
2. Day-Ahead Export Failure Charge
  - Description of Formula Changes and Examples
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# Day-Ahead Import Failure Charge



- Day-ahead imports are eligible for the Day-Ahead Intertie Offer Guarantee (DA-IOG) and are also subject to the Day-Ahead Import Failure Charge (DA-IFC)

- DA-IFC applies to a scheduled day-ahead import that:
  - does not flow in whole or in part in hour-ahead pre-dispatch; and
  - does not have a 'bona-fide or legitimate' reason for the failure

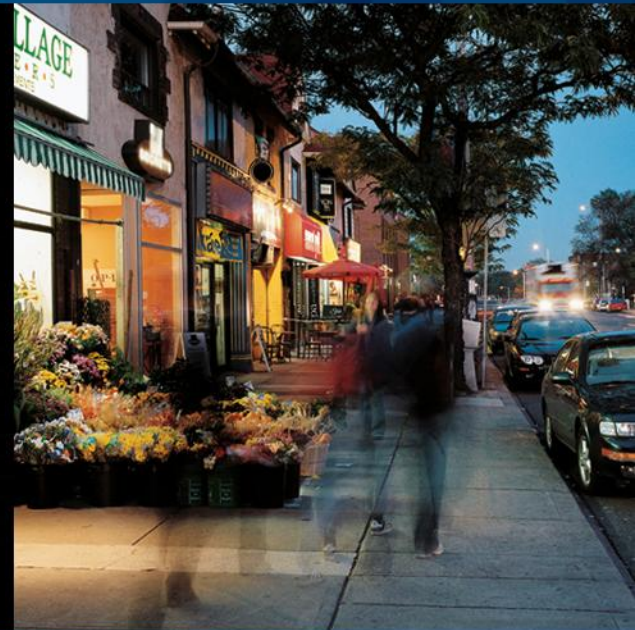
- The current DA-IFC is calculated based on the real-time market clearing price (MCP)
  - Day-Ahead Import Failure Charge =  $\text{Min}[\text{Max}(0, (\text{RT Ontario MCP} - \text{DA Offer}) \times \text{MWh deviation}), \text{Max}(0, \text{RT Ontario MCP}) \times \text{MWh deviation}]$

- The current formula will be modified to address participant's concerns that the formula does not account for other changes occurring between day-ahead and pre-dispatch such that it may be economic for a transaction not to be scheduled in PD -1 (thus not flow in real-time)

- The proposed DA-IFC uses the hour-ahead pre-dispatch price instead of real-time MCP in the calculation
  - Day-Ahead Import Failure Charge =  $\text{Min}[\text{Max}[0, (\text{PD Ontario MCP} - \text{DA Offer}) \times \text{MWh deviation}], \text{Max}(0, \text{PD Offer} - \text{DA Offer}) \times \text{MWh deviation}]$

# Example 1

## Day-Ahead Import Failure Charge



- The objective of this example is to demonstrate the following:
  - The Day-Ahead Import Failure Charge for an import transaction over an hour using both the existing formula (DACP) and the proposed formula (EDAC)

## Current Day-Ahead Import Failure Charge (DACP)

			Amount
Day-Ahead Constrained Schedule	DACS		100
Real-time Constrained Schedule	RTCS		90
Day-Ahead Offer	DAO		\$100
Pre-Dispatch Offer	PDO		\$100
Pre-Dispatch Price	PDP		\$90
Real-time Price	RTP		\$180
MWh Deviation = $\max(0, \text{DACS} - \text{RTCS})$		$\max(0, 100 - 90)$	10
Term 1 = $\max(0, \text{RTP} - \text{DAO})$ x MWh Deviation		$\max(0, 180 - 100) \times 10$	\$800
Term 2 = $\max(\text{RTP}, 0)$ x MWh Deviation		$\max(180, 0) \times 10$	\$1,800
Failure Charge capped by Real-time Price = $\text{Min}(\text{Term1}, \text{Term2})$		$\min(800, 1800)$	\$800
Import Failure Charge			\$800

## Proposed Day-Ahead Import Failure Charge (EDAC)

			Amount
Day-Ahead Constrained Schedule	DACS		100
Real-time Constrained Schedule	RTCS		90
Day-Ahead Offer	DAO		\$100
Pre-Dispatch Offer	PDO		\$100
Pre-Dispatch Price	PDP		\$90
Real-time Price	RTP		\$180
MWh Deviation = $\max(0, \text{DACS} - \text{RTCS})$		$\max(0, 100 - 90)$	10
Term 1 = $\max(0, \text{PDP} - \text{DAO})$ x MWh Deviation		$\max(0, 100 - 100) \times 10$	\$0
Term 2 = $\max(0, \text{PDO} - \text{DAO})$ x MWh Deviation		$\max(0, 100 - 100) \times 10$	\$0
Failure Charge capped by Offer Change = $\text{Min}(\text{Term1}, \text{Term2})$		$\min(0, 0)$	\$0
Import Failure Charge			\$0

# Day-Ahead Export Failure Charge



- Exporters are able to bid into the enhanced day-ahead commitment process
- There is no guarantee design equivalent to the DA-IOG to commit exports in the enhanced day-ahead
- Day-ahead exports are subject to the Day-Ahead Export Failure Charge (DA-EFC)

- DA-EFC applies to a scheduled day-ahead export that:
  - does not flow in whole or in part in hour-ahead pre-dispatch; and
  - does not have a 'bona-fide or legitimate' reason for the failure

- Exporters may receive both a DA-EFC and a RT-EFC for the same transaction: the lesser of the two charges is reversed

- Day-Ahead Export Failure Charge =  $\text{Min}[\text{Max}(0, (\text{DA Bid} - \text{PD Ontario MCP}) \times \text{MWh deviation}), \text{Max}(0, \text{DA Bid} - \text{PD Bid}) \times \text{MWh deviation}]$

# Example 2

## Day-Ahead Export Failure Charge



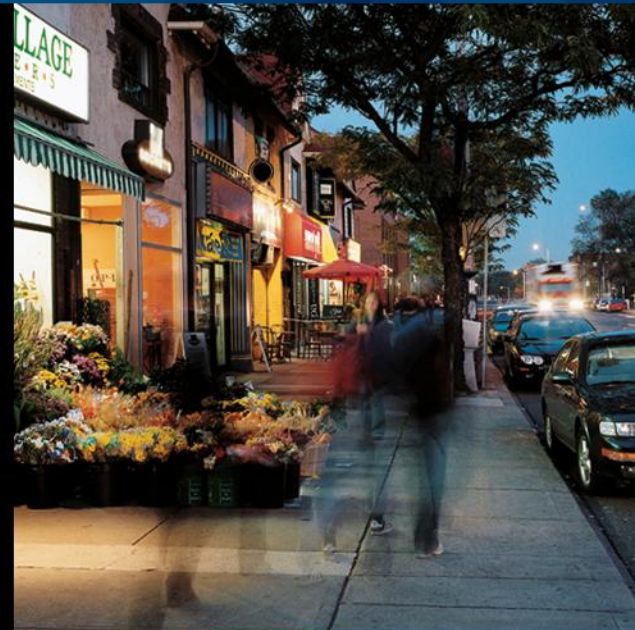
- The objective of this example is to demonstrate the following:
  - The Day-Ahead Export Failure Charge for an export transaction

## Day-Ahead Export Failure Charge

			Amount
Day-Ahead Constrained Schedule	DACS		200
Real-time Constrained Schedule	RTCS		150
Day-Ahead Bid	DAB		\$900
Pre-Dispatch Bid	PDB		\$800
Pre-Dispatch Price	PDP		\$700
Real-time Price	RTP		\$1,200
MWh Deviation = $\max(0, \text{DACS} - \text{RTCS})$		$\max(0, 200 - 150)$	50
Term 1 = $\max(0, \text{DAB} - \text{PDP}) \times \text{MWh Deviation}$		$\max(0, 900 - 700) \times 50$	\$10,000
Term 2 = $\max(0, \text{DAB} - \text{PDB}) \times \text{MWh Deviation}$		$\max(0, 900 - 800) \times 50$	\$5,000
Failure Charge capped by Bid Change = $\text{Min}(\text{Term1}, \text{Term2})$		$\min(10000, 5000)$	\$5,000
Export Failure Charge			\$5,000

# Intertie Failure Charges

## Settlement Statements and Charge Types



- The DA-IFC and RT-IFC settlement amounts will appear on the daily settlement statements using existing charge types:

Settlement Name	Code	Settlement Timeframe
Real-time Import Failure Charge	135	Hourly
Day-Ahead Import Failure Charge	1135	Hourly
Intertie Import Failure Charge Reversal	1139	Hourly

- The DA-EFC and RT-EFC settlement amounts will appear on the daily settlement statements using existing and new charge types:

Settlement Name	Code	Settlement Timeframe
Real-time Export Failure Charge	136	Hourly
Day-ahead Export Failure Charge	<b>NEW</b>	Hourly
Export Failure Charge Reversal	<b>NEW</b>	Hourly