Intertie Setting Price Simulation

Market Pricing Working Group

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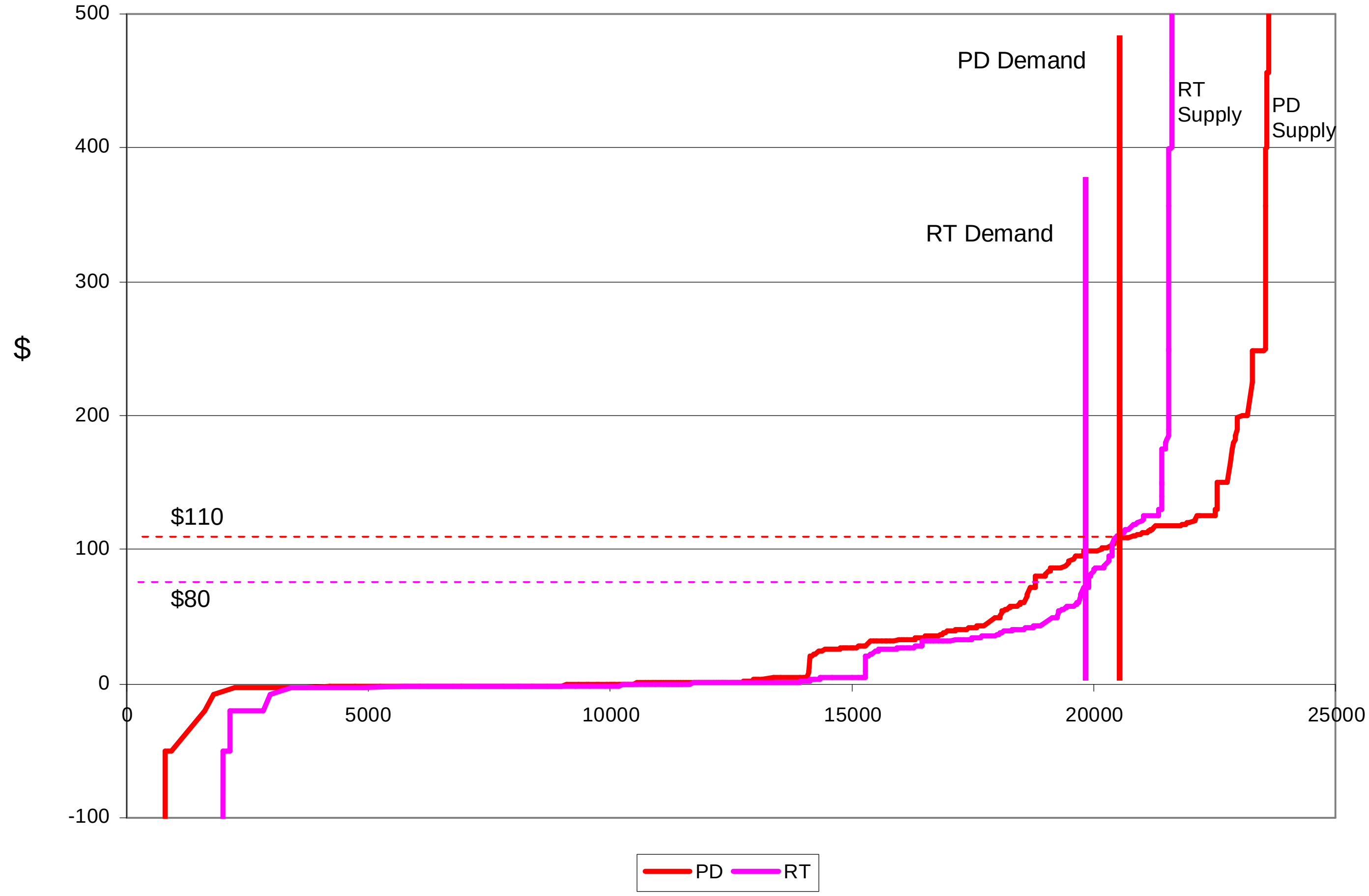
Interties Setting Price - Background

- Issue was originally raised as one of the contributors to the PD – RT price difference

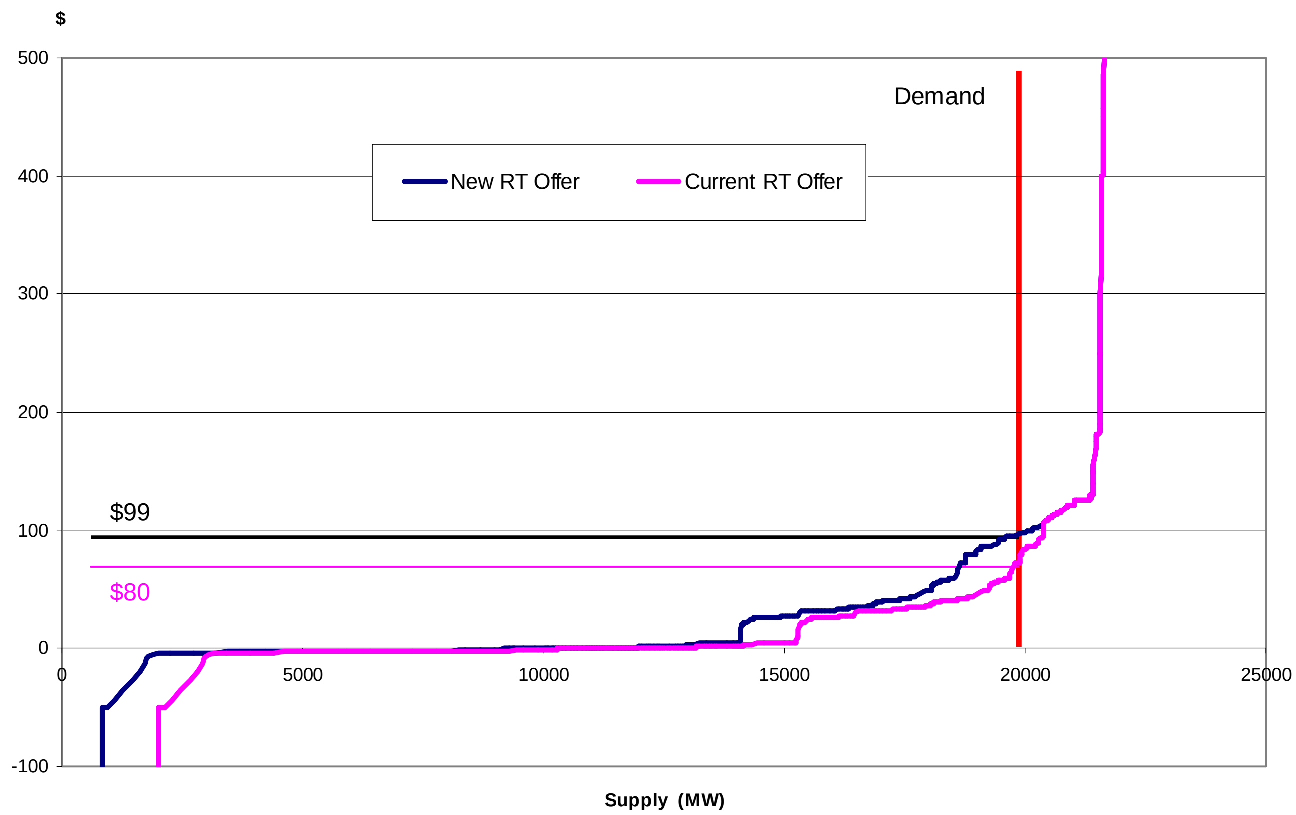
- Original market design calls for only RT dispatchable resources to set price
  – Interties are only dispatchable in PD timeframe and not in RT, therefore can't set price
  – Same rationale as "plant at limit" cannot set price

Pre-dispatch and Real Time Offer Curve - Present Formulation



RT Offer Curve Comparison:

Proposed Vs. Present

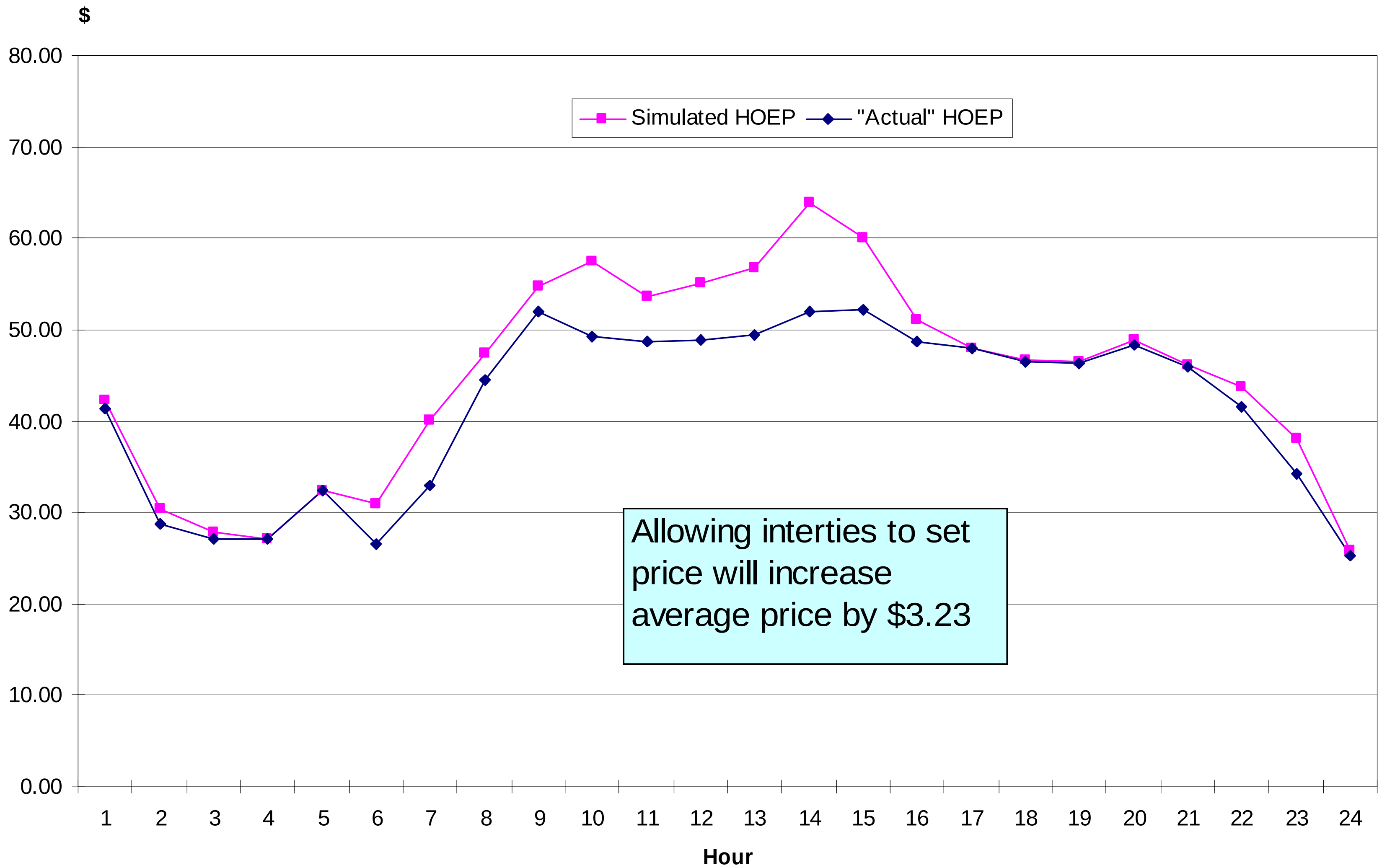


Imp/Exp Setting RT Price

- Simulation Background:
  - Same inputs (SS, DL and generators) in both cases except Import/Export,
  - Exports are treated in the same way as dispatchable load.
  - This Import/Export treatment is only possible in the unconstrained.
  - Scenario 1: dispatched Import/Export in PD sequence are used (no transaction failure taken into account)
  - Scenario 2: RT dispatched Import/Export are used (transaction failures taken into account)

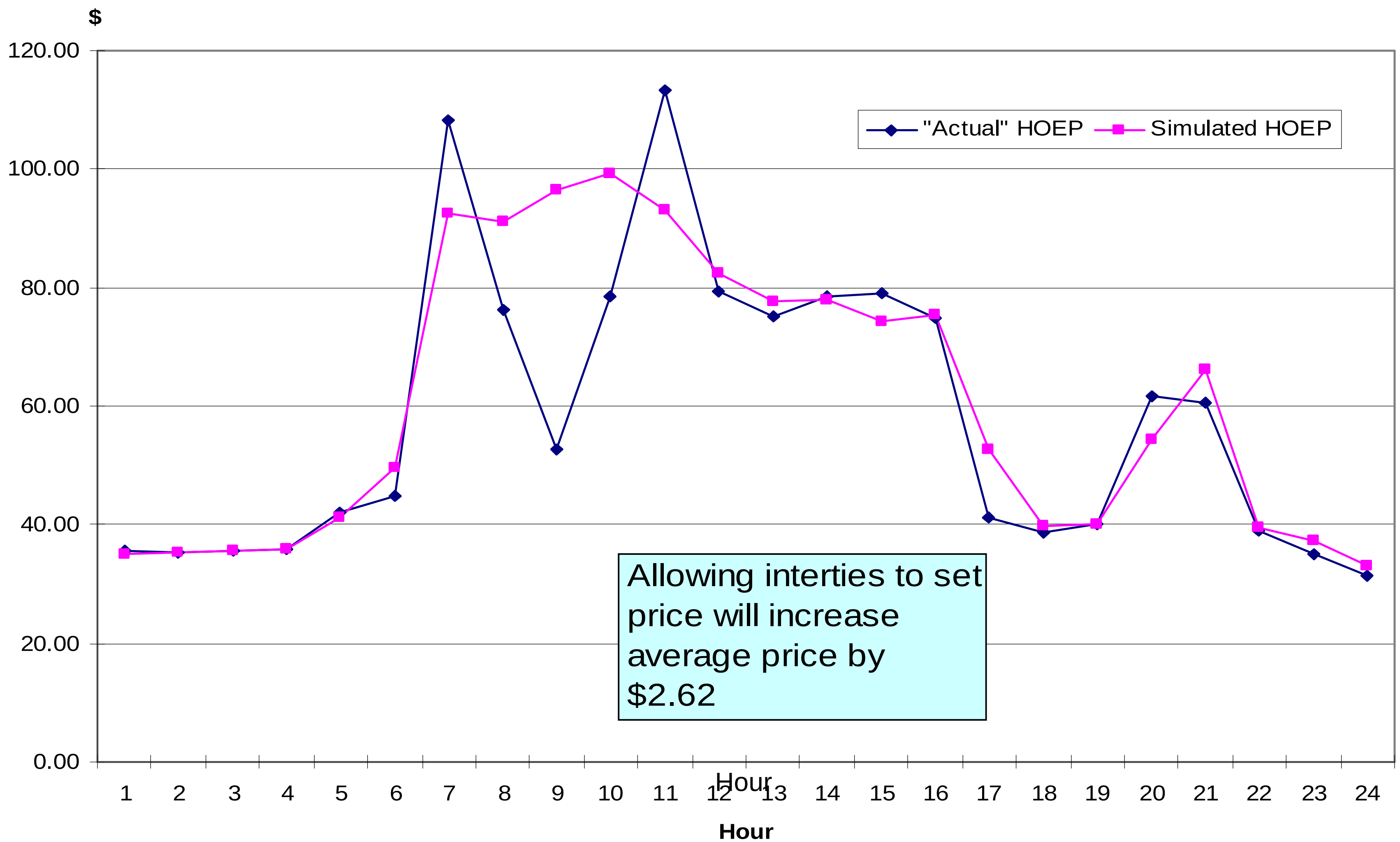
May 1st 2004 (Scenario 1)

No Imp/Exp. Failure Accounted For

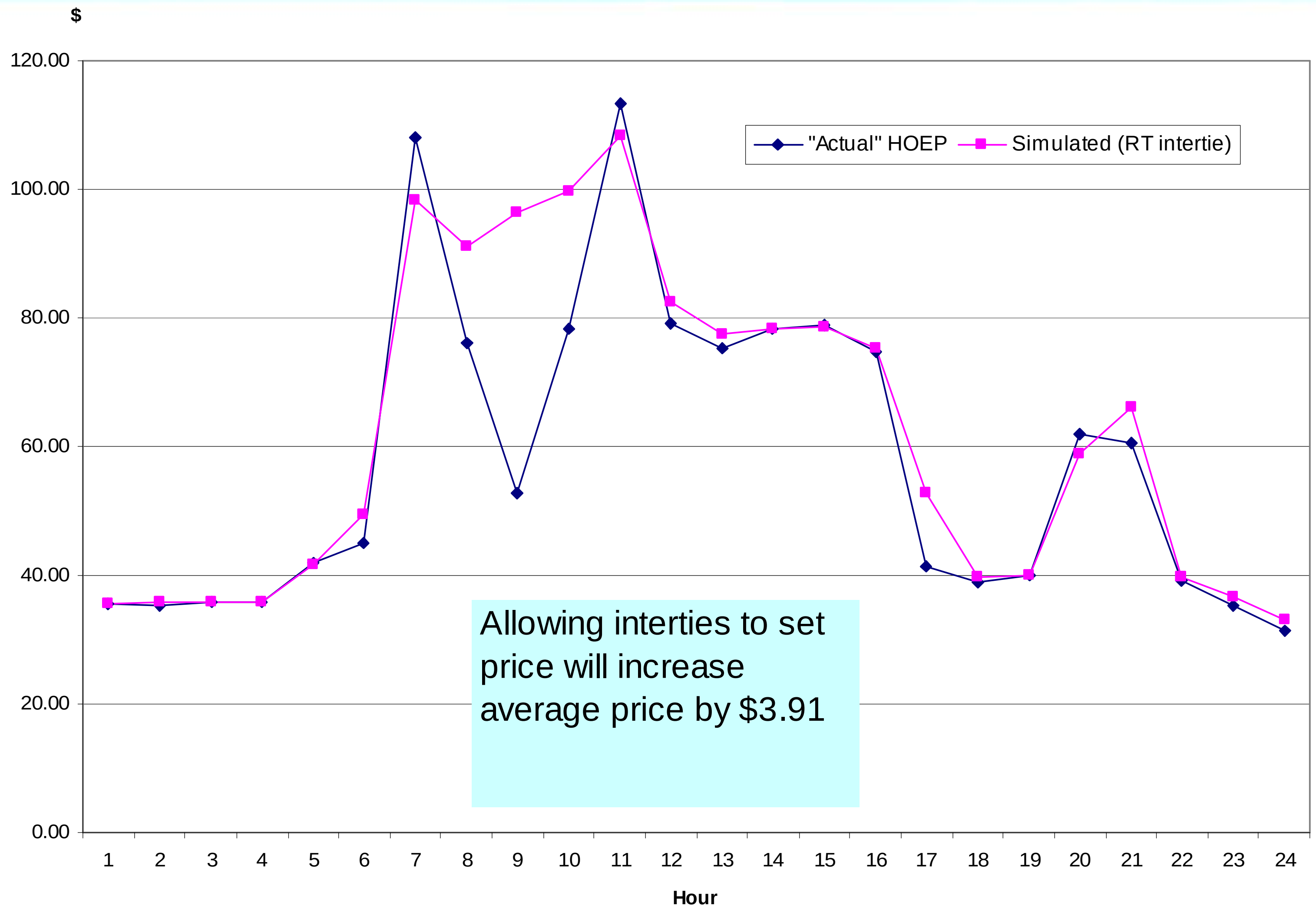


May 2nd 2005 (Scenario 1)

No Transaction Failures Accounted For



May 2nd 2005 (Scenario 2)
Import / Export failure Accounted For



Price Comparison:

Scenario 1 vs. Scenario 2

Observations

- Scenario 1
  - Little price difference in off-peak hours
  - Large difference in peak hours, sensitive to the nature of transaction failure.
    - Ignoring Import failure leads to lower simulated price
    - Ignoring Export failure leads to higher simulated price

- Scenario 2
  - Little or no difference in off peak hours
  - Simulated prices are closer to actual real-time price

Interties Setting Price - Summary

- These initial simulations indicate higher prices
  - Simulator can be used to gather more data

- Other factors affected by this change may also have price impacts
  - IOG
  - Bid/offer behaviour