

WEM Reform: Constraint Implementation Update

PSO-WG Meeting 3 November 2018

Aims of the Electricity Sector Reforms

Manage transformation of the energy sector



Remove barriers to investment



Optimise grid use



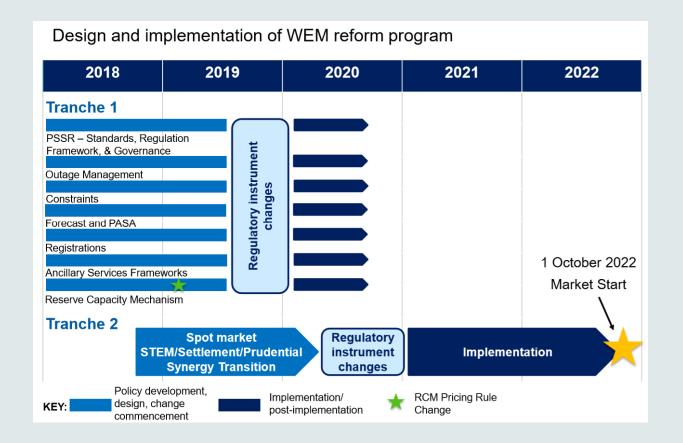
Improve operation of the WEM



Put downward pressure on prices



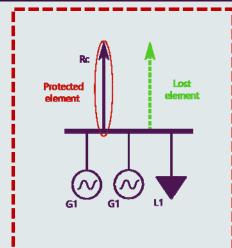
Delivery Approach



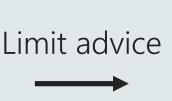


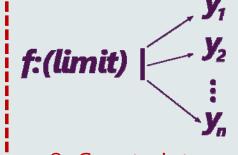
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Constraint technical framework



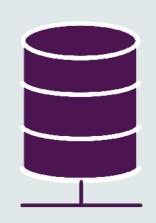
1. Power system model





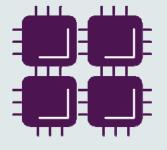
2. Constraint formulation

Constraint equations



3. Constraint library

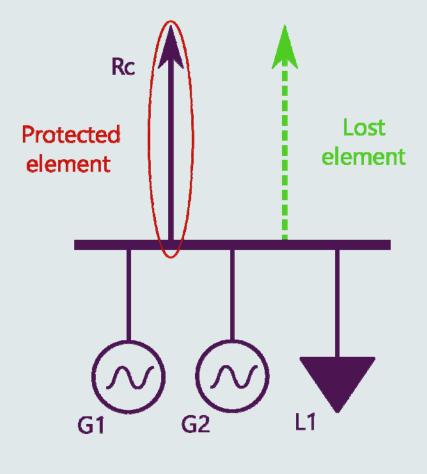
4. Dispatch Engine



Constraint sets



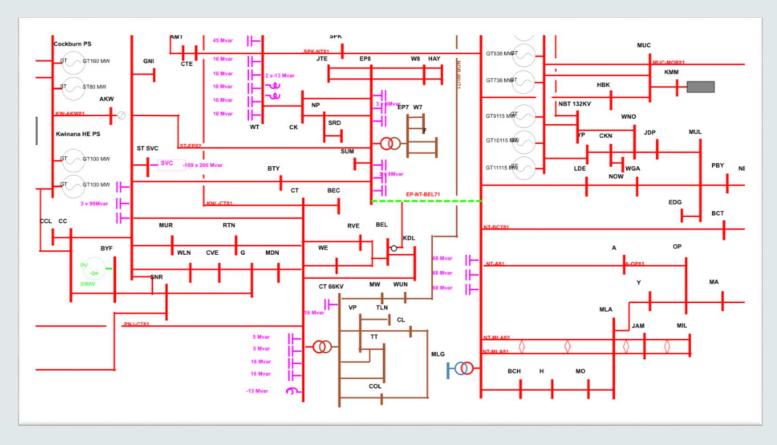
Constraint Concept



$$G1 + G2 \leq Rc + L1$$



Constraint Concept





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The NEMDE Solution

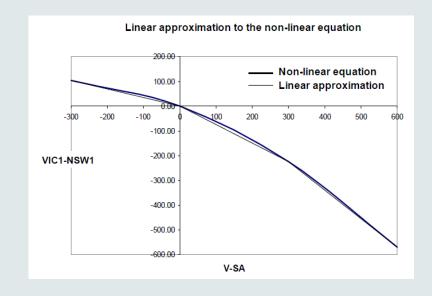
System scenarios ⊗ Network Limits



Limit Advice



Many dispatch constraint equations





Key Questions

- 1) How can we be sure that all appropriate scenarios and network limits have been considered?
 - "Sole discretion" of the Network Operator?
- 2) How should (and how much of) this information be communicated to:
 - a) AEMO, for implementation in the dispatch process
 - b) the market (or the public), for connection feasibility analysis and negotiation of network access

