Agenda

1. Overview of CIR

2. Contents of CIR
   - Information and updates
   - Information to be provided by Network Operators
     - Format, form, manner and timeframe
   - Annual congestion report

3. Further development of CIR

Congestion Information Resource

Overview – what is it?

- Public portal on AEMO's website where congestion information is provided
  - Specific contents required under WEM Rules 2.27B.3
    - Constraints Library
      - Collection of Constraint Equations & Sets
      - Supporting information including Limit Advice
    - Binding Constraints
    - Annual congestion reports, and others as specified in the Procedure
    - Other information as specified in the Procedure

Congestion Information Resource

Overview – Objectives

- Specific objectives under WEM Rules 2.27B.1
  - Provide Network congestion information in cost-effective & timely manner
  - Allow Rule Participants and stakeholders to understand patterns & market impact of Network congestion

Congestion Information Resource

Procedure overview

- Procedure developed under WEM Rules 2.27B.8 requirement.
- To document
  - Information to be published
  - Processes to maintain, publish and update information
  - Process to prepare annual congestion report
  - Information to be provided by NO

- NOTE 1: RCM requirements have been considered however this may change pending consultation on the RCM rules.

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Congestion Information Resource

Contents of CIR – publish, maintain and update

* RCM information to be confirmed following consultation on RCM rules

Information	Update	Comment
Constraints Library	As soon as practically possible	Including "descriptions"
Updates/changes to contents within Constraints Library	As soon as practically possible, where archive and summary are available	Highlighting delta's to the Constraint Library
Binding Constraint Equations	Within 5 minutes or 30 minutes of completion of the Dispatch Schedule	Per clauses 7.13.1x1, 7.13.1x2 and 7.13.1x3
Constraint Equations within 10% of binding	Within 5 minutes or 30 minutes of completion of the Dispatch Schedule	Per clauses 7.13.1x1, 7.13.1x2 and 7.13.1x3
Annual congestion report	31st March each year	
Reports related to stop-gap constraint equations	As required	Refer to paragraph 6.2 of WEM Procedure: Constraint Formulation
Thermal Network Limit Advice	Weekly updates	Refer to paragraph 5.2 of WEM Procedure: Limit Advice Requirements Procedure
Non-thermal Network Limit Advice	Weekly updates after finalisation	Refer to paragraph 5.2 of WEM Procedure: Limit Advice Requirements
Limit Advice for the purpose of RCM*	Last Business Day falling on or before 20 May annually	Per clause 4.1B.5
Preliminary RCM Constraint Equations*	Last Business Day falling on or before 20 May annually	Per clause 4.1B.5
RCM Constraint Equation used in the Network Quantity Access Model*	Last Business Day falling on or before 30 September	Per clause 4.1.16A
Transmission Network Map / Network Opportunity Map (future)	As determined by Western Power	Link to Western Powers website
Network Operator Annual Planning Report	As determined by Western Power	Link to Western Powers website

Congestion Information Resource

Contents of CIR – Constraint Library

- Constraint Library containing "current" Constraint Equations
- Constraint Equation "descriptions" explaining what the equation is covering
- Both dispatch and pre-dispatch Constraint Equations included in the Constraint Library
- Information on changes to the Constraint Library, e.g.
  - Modified constraint equations
  - New constraint equations
  - Retired constraint equations
- Links to historical Constraint Equations

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Congestion Information Resource

Contents of CIR – Binding Constraints

- 2.27B requires the Congestion Information Resource to include information on binding constraints. The new SCED rules also require AEMO to publish information on binding constraints and, near-binding constraints (within 10%):
  - Following each dispatch solution (for that current Dispatch Interval)
  - For each Dispatch Interval (5-mins) or Pre-Dispatch Interval (30-mins) in the Market Schedules (Dispatch, Pre-Dispatch and Week-Ahead)
  - For each Scenario within the Market Schedules
- The Congestion Information Resource will provide information on both binding and near-binding constraints per the above list, however given this is quite a lot of information, AEMO will be seeking input from participants through WRIG on how best to display this data on the WEM Website

Congestion Information Resource

Contents of CIR – Information provided by Network Operator

- Limit Advice in Constraint Library
  - Thermal limits table
  - Non-thermal Limit Advice documents
  - RCM Limit Advice
- Annual Planning Report
  - Connections, augmentations, decommissioning, changes to SWIS
    - For the past 12 months – congestion analysis
    - For the next 5 years- congestion assumptions
    - Links to historical reports
- Network capability and status information (links to NO'S website)
  - SWIS Transmission Network Map
  - Annual Planning Report

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Congestion Information Resource

Annual congestion report

- Published 31st March annually
- Analysis of congestion for the past 12 months, examples:
  - Constraint Equations bound the most frequency
  - Affected parts of the power system
  - Relevant Power system conditions
  - Comparison to previous years/trends
- Analysis of market impact for the past 12 months, examples:
  - Comparison to previous years/trends
- Expected major network augmentations known to N/O for the next 5 years taking into account known information (such as information available via the Outage Intention Plan)

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Congestion Information Resource

Further development of CIR

- To determine how the contents of Congestion Information Resource should be visualised on the WEM website

- Additional consultation through WRIG

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Congestion Information Resource

IT Implementation updates

- Implementation works are underway
- Further details and updates expected in March 2021
- Interim: Comments and proposals for CIR are welcome

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Questions

- Additional comments or questions can be provided to AEMO
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  - AEMO Contact – Josephine Nga

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