

Notice of a Threat to System Security – Seeking a Market Response

Reference: *National Gas Rules (NGR), Part 19, Division 5, Subdivision 5, Notice of Threat to System Security*

Under rule 341 of the NGR, AEMO is notifying participants of a threat to system security in the Declared Transmission System, identified in the 2017 Victorian Gas Planning Review (Available here: <https://www.aemo.com.au/Gas/National-planning-and-forecasting/Victorian-Gas-Planning-Report>).

AEMO advises that the threat to system security is:

- Potential for gas supply sources to be incapable of meeting forecast gas demand.

The threat to system security arises due to the transportation capacity constraint on the South West Pipeline (SWP) to Port Campbell. This is forecast to result in an inability to sufficiently refill the Iona underground gas storage (UGS) reservoirs prior to winter 2018 and for each subsequent winter until the constraint is removed:

- Predicted reservoir levels at Iona UGS by 1 June 2018 remain uncertain, and will depend on production levels (expected to decline) and summer 2017–18 gas powered generation (GPG) demand (forecast to increase after the Hazelwood Power Station closure). Based on winter 2016 Iona UGS reservoir depletion and refill rates over summer 2016–17, refilling Iona UGS prior to winter 2018 may not be sufficient to prevent supply shortfalls during winter 2018.
- AEMO modelling forecasts that Iona UGS reservoir levels may only reach 8.5 PJ ahead of winter 2019. AEMO expects that the daily supply capacity of Iona UGS into the DTS would decrease when the Iona UGS reservoir inventory is low. This reduced supply capacity is expected to result in peak day supply shortfalls occurring during winter 2019.
- Based on AEMO's winter 2016 experience, a minimum Iona UGS storage inventory of 18.5 PJ is required to prevent winter gas supply shortfalls. AEMO considers this to be the minimum Iona UGS inventory requirement, noting that the forecast increase in GPG demand following the Hazelwood Power Station closure creates uncertainty. Based on the difference between 18.5 PJ and 8.5 PJ, AEMO is forecasting a supply shortfall of 10 PJ into the DTS for winter 2019.

The threat to system security is expected to be reduced if the augmentation of the South West Pipeline (SWP), proposed by the DTS service provider in its 2018–22 Access Arrangement submission¹, proceeds as soon as possible.

Curtailment of demand that directly impacts the refilling of the Iona UGS reservoirs is possible from 01/10/2017, depending on Iona UGS refilling progress ahead of winter 2018. If the SWP augmentation is not commissioned by the end of winter 2018, curtailment of demand that directly impacts the refilling of the Iona UGS is likely from 01/10/2018. This threat to system security will remain in effect until SWP augmentation is completed.

¹ AER. 2017. Available at: <https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/apa-victorian-transmission-system-access-arrangement-2018-22/proposal>

The threat to system security is likely to impact:

- | | | | |
|-------------------------------------|---------------------------|--------------------------|---------------------------|
| <input checked="" type="checkbox"/> | Total System | <input type="checkbox"/> | Melbourne Withdrawal Zone |
| <input type="checkbox"/> | Gippsland Withdrawal Zone | <input type="checkbox"/> | Northern Withdrawal Zone |
| <input type="checkbox"/> | Geelong Withdrawal Zone | <input type="checkbox"/> | Ballarat Withdrawal Zone |
| <input type="checkbox"/> | Western Withdrawal Zone | | |

A market response to this notice may partially alleviate the threat to system security. Market participants are request to re-evaluate their positions at all injection and withdrawal points.

- Culcairn injections into the DTS may offset some of the forecast shortfalls, noting that the Culcairn injection capacity is limited by a NSW transmission capacity constraint of 125 TJ/d.
- Due to this capacity limitation, Culcairn supply cannot mitigate all shortfalls. There would still be insufficient supply on peak system demand days up to and exceeding a 1-in-2, or when there is high levels of GPG.

AEMO will update the market if new information is made available, and there will be a market notice to advise the removal of the threat to system security.

AEMO reserves the right to determine an appropriate operational response if the market response is insufficient to avert the threat to system security. Responses may include (without limitation):

- Interruption or curtailment of gas consumption to increase the rate of refilling Iona UGS prior to winter 2018 and winter 2019.
- Interruption or curtailment of gas consumption during winter 2018 and winter 2019 to conserve adequate supply to meet forecast demand.

Further information can be found in the [2017 Victorian Gas Planning Review](#) found on the AEMO website.

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