Date: Tuesday 6 December 2016

Market Notice – Longford Industrial Action update

Further to the Market Notice issued on Friday 2 December, AEMO has conducted a preliminary assessment of the impact of a full shutdown of the Longford Gas Plant – both the onshore and offshore facilities – if protected industrial action proceeds from Friday 9 December 2016.

As previously advised, an application to suspend or terminate the industrial action has been listed for hearing at Fair Work Australia on Wednesday 7 December at 10:00am. If there is no change to the current status by close of business on 7 December, AEMO will notify the market and activate appropriate emergency protocols.

AEMO's preliminary assessment relies on current declared availability of gas production and pipeline capacity only. This does not mean that individual market participants can necessarily secure gas supplies or capacity.

On this basis AEMO concludes that most (but not all) south-east Australia gas demand can be supported through to early January if the Moomba to Sydney Pipeline and the Moomba to Adelaide Pipeline flow at full capacity, and demand is consistent with seasonal averages. However, this will also require the Moomba Gas Plant and the South West Queensland Pipeline to flow at near full capacity towards south-east Australia. Flow on the Eastern Gas Pipeline will also need to be reversed.

From early January, additional supply restrictions would be necessary to safeguard gas storage inventory for winter.

Initial gas supply shortfalls may occur along the south coast of New South Wales, Tasmania, and eastern Victoria. Demand in eastern Victoria is also expected to be curtailed on 9 December as the Lang Lang Gas Plant (BassGas) is also offline for maintenance. Broader supply shortfalls for Victoria are likely if demand exceeds a 1-in-2 year peak demand day (534 TJ/d).

AEMO has also concluded that it will not be possible to supply gas to a number of gas fired power stations (GPG) in New South Wales, Tasmania and Victoria. Supply to other GPG units may also be restricted on high demand periods, including in South Australia.

This advice is preliminary only and the supply position will be reviewed on a continuous basis if the action proceeds. Details of AEMO's initial state by state assessment are attached to this notice.

Sent on behalf of

Matthew Clemow
(Acting) Group Manager – Gas Real Time Operations
Australian Energy Market Operator

AEMO Summary Assessment for Victoria

Expected Supply

- Supplies are required from the Port Campbell production facilities (Casino, Otway and Minerva) to support Victorian demand.
- Additional supply is also required from Iona Underground Gas Storage (UGS) to meet the supply demand balance. This mode of operation is supportable until the first week of January, at which point the Iona UGS inventory cannot be replenished prior to winter.
- Production from BassGas is required to supply offtakes along the Longford to Melbourne Pipeline.
- BassGas is currently offline and scheduled to resume on 10 December. Some local curtailment may occur if the Longford outage proceeds from 9 December.
- In addition to BassGas, injections are also required into Victoria through the Culcairn interconnection point from the Moomba to Sydney Pipeline (MSP), to support demand along Victorian Northern Interconnect (VNI) and the Longford to Melbourne Pipeline (LMP) including the Outer Ring Main. These connections are usually supplied from Longford (as well as BassGas).
- Supply from the Port Campbell facilities cannot be used to supply the the LMP and VNI due to the design of the Declared Transmission System (DTS). Without injections from Culcairn and BassGas curtailment of load on the LMP and VNI will be required.
- This configuration can support average Victorian demand days (average demand in Victoria is 348 TJ/d). For higher demand days, above approximately 450 TJ/d demand, locational curtailment may be required to support system pressures.
- A 1-in-2 year peak demand day for December is 534 TJ/d, which will be difficult to support and curtailment in northern and eastern Victoria is likely. A 1-in-20 year peak demand day is 702 TJ/d, which cannot be supported and curtailment across Victoria will be required.
- Dandenong LNG storage will be preserved for higher / peak demand days, unplanned outages and GPG requirements to support the NEM. Dandenong LNG also cannot be supplied into the LMP and VNI.

Unsupportable Gas Generation (units that cannot be supported)

- Jeeralang
- Valley Power
- Bairnsdale

Limited Supportability Gas Generation (units that can be supported but only for a limited duration)

- Somerton

Supportable Gas Generation (units that can be supported but speeds up storage depletion)

- Newport
- Mortlake
- Laverton North

AEMO Summary Assessment for New South Wales and the Australian Capital Territory

Expected Supplies

- Gas flows from Queensland combined with Moomba Gas Plant production will be fed into the Moomba to Sydney Pipeline (MSP) and the Moomba to Adelaide Pipelines (MAP).
- 10 TJ/d from Camden Gas Plant.
- Preserve Newcastle Gas Storage (NGS), capacity 120TJ/d, for peak demand days, unplanned outages and GPG requirements to support the NEM.

Expected Pipeline Flows

- MSP baseloads supply into NSW with 10TJ/d from Camden
- The Eastern Gas Pipeline (EGP) will initially be at a higher pressure than the MSP.
- Once EGP linepack has been depleted, the interconnection pipeline between the MSP and EGP could reverse flow from the MSP into the EGP, allowing some flow southbound on the EGP. This is an abnormal condition and requires extensive modelling by Jemena to quantify the potential flows and distribution networks supportability.
- With this system configuration, system demand of up to approximately 450 TJ can be supported in NSW.
- Some curtailment may be required for demand supplied from the EGP on higher demand days.
- AEMO is still working with Jemena, to quantify the flows and identify which supply points would be affected by the pipeline running at lower than normal pressures.
- Towns on the NSW south coast that are connected to the EGP include: Bairnsdale, Bombala, Cooma, Nowra and Bomaderry.
- Reverse flow on the EGP would also be used to support Tasmanian demand via the Tasmanian Gas Pipeline (TGP).

Unsupportable Gas Generation (units that cannot be supported)

- Tallawarra

Limited Supportability Gas Generation (units that can be supported but only for a limited duration)

- Uranquinty

Supportable Gas Generation (units that can be supported but speeds up storage depletion)

- Colongra

AEMO Summary Assessment for Tasmania

Expected Supplies

- Tasmania is normally supplied by Longford Gas Plant. An assessment is currently underway on the possibility of supplying Tasmania by flowing in the reverse direction down the Eastern Gas Pipeline (EGP) from Sydney.
- The EGP will initially be at a higher pressure than the Moomba to Sydney Pipeline (MSP).
- Once the EGP linepack has been depleted, the interconnection pipeline between the MSP and EGP could reverse flow from the MSP into the EGP, allowing some flow southbound on the EGP. This is an abnormal condition and requires extensive modelling by Jemena to quantify the potential gas flows.
- Palisade will also need to assess the capacity of the Tasmanian Gas Pipeline (TGP) to support gas demand in Tasmania with reduced TGP pressure.
- Without reverse flow on the EGP, linepack on the TGP is sufficient for approximately 5 days of Tasmanian demand, excluding gas fired power generation (GPG).
- Due to the reduced pipeline pressure, no GPG is supportable.

Unsupportable Gas Generation (units that cannot be supported)

- Tamar Valley
- Bell Bay

AEMO Summary Assessment for South Australia

Expected Supplies

- Gas flows from Queensland combined with Moomba Gas Plant production will be fed into the Moomba to Sydney Pipeline (MSP) and the Moomba to Adelaide Pipelines (MAP).
- Additional supply from Iona Underground Gas Storage (UGS) to meet the supply demand balance including gas fired power generation (GPG).
- This mode of operation is only supportable until the first week of January (assuming average consumption levels), at which point the Iona UGS inventory cannot be replenished prior to winter.
- Higher than average demand will result in this point being reached earlier.
- When storages reach this level, additional supply restrictions will be required to maintain storage at an acceptable level.

Expected Pipeline Flows

- MAP is the baseload supply into South Australia.
- SEA Gas flow into South Australia would vary as required, to support generation with lower than average flow rates.
- With this system configuration, the majority of demand conditions are expected to be met and can support South Australian Generation requirements for the NEM.

Supportable Gas Generation (units that can be supported but speeds up storage depletion)

- All South Australian gas generators (subject to supply limitations from Port Campbell)

AEMO Summary Assessment for Queensland

Expected Supplies

- Queensland will continue to have gas production that is higher than Queensland domestic (non LNG export) demand.
- No impact to gas flows expected for demand centres off the Roma to Brisbane Pipeline (RBP), Carpentaria Gas Pipeline (CGP) or Queensland Gas Pipeline (QGP) is expected.

Expected Pipeline Flows

- South West Queensland Pipeline (SWQP) is expected to have high gas flow from Wallumbilla towards Moomba.
- Gas prices are expected to reflect the supply of gas from the Wallumbilla gas supply hub, as participants purchase up to 300 TJ/d of gas from the LNG producers to support demand in south-east Australia.

Gas Generation Supportability

- Gas fired power generation in Queensland is not expected to be impacted.