



DECLARED WHOLESALE GAS MARKET – COMPLIANCE REPORT AND INVESTIGATION INTO UNINTENDED SCHEDULING RESULT FOLLOWING EVENT ON 1 OCTOBER 2016

DWGM ER 16/005

Published: 4 January 2017





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1 INTRODUCTION

AEMO intervened in the Declared Wholesale Gas Market (DWGM) on 1 October 2016 and published an [intervention report](#) on 14 October 2016.

Two follow-up detailed investigations were carried out to identify first, whether the intervention resulted in any unintended scheduling result and secondly, the investigation required under section 91BN of the NGL.

This report contains the outcomes of these two investigations and is published in accordance with:

1. Section 91BN of the National Gas Law (NGL), which requires AEMO to investigate a suspected breach, determine its materiality if a breach is found, and then publish a report on whether there is a breach of the Wholesale Market Procedures.
2. Rule 218 of the National Gas Rules (NGR), which requires AEMO to investigate and report on possible unintended scheduling results.

All times in this report are expressed as AEST.

2 EVENT SUMMARY

At 04:26 injections ceased from the Longford Gas Plant (Longford). Longford came back online at 04:52 at a reduced rate but ceased all injections again at 05:36. At 04:32 pressures at Sale custody transfer meter started dropping. Pressure at Sale then continued to decline until Longford came back online later that day.

The Longford outage also disrupted supplies to the Eastern Gas Pipeline (EGP). At 08:28, the operator of the VicHub injection facility (Jemena) informed AEMO that the Eastern Gas Pipeline (EGP) had low levels of linepack, and indicated that the linepack would only last until 11:00 at the then flow rates. Subsequently, AEMO sought, but was not able to obtain confirmation of the quantity of gas that VicHub would be able to inject into the DTS over the course of the day. On this basis, AEMO determined that it should apply a constraint to VicHub due to the risk that the EGP had insufficient linepack to support injections to the Declared Transmission System (DTS). This constraint was applied to all subsequent operating schedules for that gas day.

At 08:30 the DTS was in an abnormal operating state due to a threat to the supply of gas to customers with both forecast and actual pressures below the operating limits specified in the *Wholesale Market Critical Location Pressures* document. On this basis, at 08:40, in accordance with rule 341 of the NGR, AEMO issued a notice of a threat to system security. In accordance with the *Wholesale Market System Security Procedures (Victoria)* and rule 343 AEMO intervened in the market by publishing an ad hoc operating schedule at 09:03.

At approximately 14:30, Jemena updated the EGP linepack capacity adequacy flag on the Natural Gas Services Bulletin Board (GasBB) to red indicating involuntary curtailment of 'firm' load is likely or happening on the gas day. This flag remained red until the following gas day. At approximately 17:00, Longford ceased injections into the EGP due to a gas quality issue and did not begin injections again until around 19:40. Accordingly, AEMO did not remove the constraint at VicHub in any of the subsequent schedules issued on that gas day.



See Appendix A for a detailed chronology.



3 ASSESSMENT OF THE EVENT

3.1 Market Notices

Market notices are required under rule 341(1) of the NGR when AEMO considers that there is a threat to system security, and under rule 341(5) when it considers that the threat to system security is at an end. Market notices are published on the Market Information Bulletin Board (MIBB) as a short text message (INT029) known as a ‘System Wide Notice’ (SWN), with longer notices attached as documents. AEMO also notifies nominated representatives of Registered participants by Short Message Service (SMS) and email as a secondary means of communication in accordance with Chapter 7 of the *Wholesale Market Gas Scheduling Procedures (Vic) (GSP)*.

AEMO published a notice of a threat to system security at 08:40 on 1 October 2016 (see Appendix C), but did not subsequently publish a notice about the end the threat, thereby not meeting the requirement of rule 341(5).

SWNs issued during 1 October 2016 are tabled in Appendix B, along with a separate table showing additional SWNs that were required under the GSP, but not issued.

AEMO notes that there was a delay of up to a 15 minutes between the time that AEMO first sends SWN SMS notifications and the receipt time for some Registered Participants. This is due to limitations in the system used for sending SWN SMS notifications. AEMO does not consider this to be a breach of the GSP or the *Wholesale Market Electronic Communications Procedures*, but AEMO is investigating options that may reduce this delay of SWN SMS notifications.

REQUIREMENT	ASSESSMENT
<p>Rule 341 of the NGR - Notice of threat to system security</p> <p>(5) AEMO must inform Registered participants immediately when it reasonably considers a threat to system security to be at an end.</p>	<p>The failure to publish a SWN on the MIBB notifying the market of the end of threat to system security is a breach of rule 341(5).</p> <p>AEMO considers the threat to system security to have ended at the conclusion of the Victorian Gas Update teleconference held at 14:30 hrs, when a SWN should have been issued.</p> <p>This breach is not considered to be material as the representatives of each distributor and retailer were present at the Victorian Gas Update teleconference, and the market was operated normally after the scheduling constraints to limit Longford injections to zero and to schedule in peak shaving LNG, were removed for the 2pm OS.</p>
<p>Chapter 7 of the GSP</p> <p>Notifications and communication of market and system information between AEMO and Market Participants must be in accordance with the <i>Wholesale Market Electronic Communication Procedures</i>.</p>	<p>AEMO did not comply with Chapter 7 of the GSP and the <i>Wholesale Market Electronic Communication Procedures</i> by not notifying Market Participants of changes to constraints via MIBB report INT029 as well as follow-up SMS notifications.</p>



REQUIREMENT	ASSESSMENT
<p>MIBB is the primary means by which AEMO and Market Participants communicate information required under these Procedures.</p> <p>...An SWN with follow up SMS message may be used to notify Market Participants of any of the following:</p> <ul style="list-style-type: none"> the application of any new or amended SDPCs or DFPCs; time and date of the commencement and completion of any intervention; time and date of the commencement and completion of any threats to system security; <p>any other information AEMO reasonably considers it needs to notify Market Participants.</p>	<p>AEMO has determined that the breach is not material because:</p> <ul style="list-style-type: none"> The constraints were published to Market Participants via MIBB reports INT111 (SDPC), INT112 (DFPC), INT112b (NFTC) and INT112c (SSC), and; Market Participants could not rebid for the 10AM OS (and hence there was no resultant financial impact) after the publication of the ad hoc OS at 9AM when the constraints were first applied.

3.2 Application of the constraint at VicHub

In accordance with rule 218(1) of the NGR, AEMO has investigated an alleged unintended scheduling result at the request of a Market Participant. The request referred to an alleged unintended scheduling result in respect of injections at the VicHub injection point for the 10am schedule on 1 October 2016 and all subsequent schedules on that gas day.

AEMO has reviewed the chain of events and considers that, although the linepack adequacy flag on the GasBB for the EGP was still red, the constraint on VicHub should have been able to be reduced or removed from the 10pm schedule once Longford had begun injecting back into the EGP. Prior to the 10pm schedule, AEMO considers that the constraint was reasonable in the circumstances (low levels of linepack in the EGP, and Longford injections into the EGP did not stabilise until after 19:40).

AEMO notes that there was room for improvement in communications between AEMO, Jemena and affected Market Participants regarding VicHub’s ability to inject gas into the DTS. A number of communications were being carried out through representatives of Registered participants who were unable to assist AEMO in its inquiries. Participants are required to provide up-to-date emergency contact details in accordance with rule 334 of the NGR, and AEMO has commenced a review of its current emergency contact dataset.



3.2.1 Determination of unintended scheduling result

AEMO has assessed these events against the criteria in rule 217 of the NGR in Table 1.

Table 1: Assessment against rule 217 of the NGR

Assessment Criteria	Assessment
<p>217(1) <i>If scheduling instructions issued as part of an operating schedule produce one or more of the following results:</i></p> <p>...</p> <p>(c) <i>a quantity of gas under an injection bid below the market price is not scheduled for injection;</i></p> <p>...</p> <p><i>then that result will be an unintended scheduling result unless otherwise specified ...</i></p>	<p>For the ad hoc operating schedule and each subsequent operating schedule, there were quantities of gas at the VicHub injection point bid below the market price that were not scheduled for injection due to the impact of the constraint.</p>
<p>217(2) <i>A result specified in subrule(1) will not be an unintended scheduling result to the extent that the result arose from the application of, or (as the case may be) the exercise of rights or performance of obligations in accordance with:</i></p> <p>(i) <i>Division 5 of this Part;</i></p> <p>(ii) <i>the system security procedures; or</i></p> <p>...</p> <p>(x) <i>Directional flow point constraints as defined in the gas scheduling procedures</i></p>	<p>AEMO issued a notice of threat to system security in accordance with rule 341.</p> <p>AEMO then intervened in the market through issuing an ad hoc operating schedule, as required by rule 343 and the <i>Wholesale Market System Security Procedures (Victoria)</i>.</p> <p>AEMO constrained VicHub for the remainder of that gas day using a directional flow point constraint (DFPC) in accordance with rule 343 and section 3.8B of the <i>Wholesale Market System Security Procedures (Victoria)</i>. AEMO considers that the threat to system security was effective until after the 2pm operating schedule.</p> <p>The 9am ad hoc, 10am and 2pm operating schedules are covered by the exceptions set out in sub-paragraphs (i), (ii) and (x).</p> <p>The 6pm operating schedule is covered by exception set out in sub-paragraph (x) only, as the application of the constraint was reasonable in the circumstances.</p> <p>None of the exceptions apply to the 10pm operating schedule.</p>
<p>217(3) [exception subrule]</p>	<p>Not applicable.</p>
<p>217(4) <i>A result specified in subrule (1) will not be an unintended scheduling result unless its estimated financial effect on Market Participants exceeds either:</i></p> <p>(a) <i>for an individual Market Participant, \$24,113.55, adjusted to reflect the change in the Consumer Price Index in accordance with subrule (5); or</i></p>	<p>Based on the complete removal of the DFPC at the 10pm schedule, AEMO has estimated the financial effect of the application of the constraint on Market Participants for the 10pm operating schedule and notes</p>



<p>(b) for all affected Market Participants, an aggregate of \$60,283.89, adjusted to reflect the change in the Consumer Price Index in accordance with subrule (5).</p>	<p>that the biggest estimated financial impact on a single Market Participant was \$127,560.50¹. The financial effect of this event exceeds the threshold set out in rule 217(4)(a).</p>
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AEMO has determined that, of the five affected operating schedules (9am ad hoc, 10am, 2pm, 6pm and 10pm), it is only the scheduling instructions issued as part of the 10pm operating schedule that resulted in an unintended scheduling result.

Market Participants who may have been negatively impacted by the unintended scheduling result will be notified by AEMO. Any compensation to be paid will be determined in accordance with the dispute resolution processes set out in the NGR.

3.2.2 Determination of materiality of breach of GSP

AEMO has also assessed these events in accordance with section 91BN of the NGL in Table 2.

Table 2: Assessment against GSP

REQUIREMENT	ASSESSMENT
<p>Section 3.8B of the GSP ...AEMO may apply and change DFPCs to both operating schedules and pricing schedules during the gas day where AEMO reasonably considers that it is needed to reflect the circumstances applicable at the relevant system injection points and system withdrawal points.</p>	<p>The application of the DFPC at the 10pm schedule was not reasonably needed in the circumstances. This is a breach of 3.8B of the GSP. AEMO has determined that the breach is material because while it did not cause significant system and operational impacts to market participants, AEMO, end users and stakeholders, it did cause significant financial impacts to market participants as defined by the unintended scheduling result threshold.</p>

3.3 Application of cut-off times for the ad hoc schedule

Condition 6 in section 5.4 of the GSP necessitated the issuing of an ad hoc OS. The cut-off time for the ad hoc OS and the demand forecasts was 6:00 AM instead of 5:00 AM and 8:00 AM respectively, as stipulated by Condition 6. AEMO considers this to be a breach of Condition 6 in section 5.4 of the GSP.

The absence of updated bids between 05:00 and 06:00, and a small difference in demand forecasts between 5:00 AM and 8:00 AM of less than 4 TJ indicate, however, that there was no material impact as a result of this breach.

REQUIREMENT	ASSESSMENT
<p>Condition 6 of Section 5.4 of the GSP – Publish an ad hoc operating schedule due to a potential threat to system security by:</p>	<p>AEMO did not comply by:</p> <ul style="list-style-type: none"> using a bid cut-off time of 06:00 instead of 05:00 for the ad hoc OS; and

¹ Note that the financial effects calculated for the purposes of this report are only an estimate of Market Participants' change in financial position within the market.



REQUIREMENT	ASSESSMENT
<ul style="list-style-type: none">• applying the <i>Market Participant</i> bids and hedge information from the most recently approved <i>operating schedule</i> to the ad hoc <i>operating schedule</i> by setting the cut-off time to the one applicable in that previous schedule• applying the most up-to-date <i>demand forecasts</i> by leaving the <i>demand forecast</i> time set to the cut-off time of the start of the current <i>scheduling horizon</i> schedule (not reset to earlier schedule)	<ul style="list-style-type: none">• using a demand forecast time of 06:00 instead of 08:00 for the ad hoc OS <p>Neither breach is material because they did not cause any significant financial, system or operational impact to Market Participants, AEMO, end users and stakeholders.</p>



4 RESPONSE TO FINDINGS

AEMO has taken the following actions in response to its findings:

- AEMO has updated its internal procedures relating to the management of constraints and the issuing of market notices.
- AEMO has commenced a review of its emergency contact data.
- AEMO has updated its internal procedures relating to the management of ad hoc operating schedules.



APPENDIX A – CHRONOLOGY

Time (AEST)	Event/Action	Details
04:28	AEMO calls Esso	Esso estimates Longford will be down for an extended duration. All four plants are down (3 gas plants and 1 crude plant). AEMO requests that Esso provide further information as soon as possible.
04:45	AEMO reconfigures the DTS	Over a half-hour period AEMO commenced reconfiguring the DTS by shutting down all running compression (Brooklyn Comp 11, 12 and Wollert 5) and adjusting Brooklyn CG set points.
04:50	AEMO calls Esso	Esso provides an initial forecast that it may take up to 12 hours before Longford regains full capacity. GP1 is back online and flowing some gas into the DTS but everything else remains offline. AEMO observes some flow through the AEMO gas SCADA.
05:03	AEMO calls Esso	Esso advises AEMO of initial estimate of constraint, 4 TJ/h for the first 6 hours of the gas day.
05:10	AEMO calls Esso	Esso advises that Longford should start coming back online in 2 hours and estimates the new constraint to be 4 TJ/hr for the first 2 hours of the gas day. Esso does not believe that this will be a 6 hour event.
05:11	AEMO reconfigures the DTS	DCG outlet pressure reduced from 2,760 kPa to 2,700 kPa to increase LMP survival time, being the time before it breaches its minimum pressure.
05:30	AEMO models the DTS	With current Longford constraint information, AEMO runs a gas pipeline model indicating that there is no threat to system security or any potential pressure issues.
05:37	AEMO observation	Longford flow reduces to zero. ²
05:47	Esso calls AEMO	Esso provides AEMO with a preliminary estimate for a daily constraint figure of 514 TJ for the daily rate and will confirm it shortly. AEMO will implement this daily constraint and constrain down the hourly injections to 0 TJ/h for the first 3 hours of the gas day.
05:53	AEMO approves schedule	6:00 AM Current Gas Day Schedule Approved
05:56	Esso emails AEMO	Esso advises an updated SDPC for gas day of 515 TJ due to operational requirements.
05:57	Esso calls AEMO	Esso confirms the daily quantity of 514 TJ and 0 TJ/h for the first 3 hours of the gas day and injections to recommence at 9am.
06:03	AEMO calls Multinet	AEMO discusses the reduction of DCG outlet pressure and requests more information on the minimum pressure requirements at downstream CTMs. AEMO looking to reduce DCG outlet pressure further (2,700 kPa at time of call), which would potentially take some CTMs below their winter contract pressure. Multinet agrees to call back.
06:29	AEMO calls AGN	AEMO discusses the reduction of DCG outlet pressure with AGN and requests more information regarding minimum pressure requirements at downstream CTMs. AEMO looking to reduce DCG outlet pressure further (2,700 kPa at time of call), which would potentially take some CTMs below their winter contract pressure. AGN estimates that the DCG outlet pressure may be dropped down to 2,500 kPa without disrupting operations for the DTS Peninsula CTM.
06:34	Multinet calls AEMO	Multinet advises that 1,800 kPa is the minimum pressure requirement to satisfy CTM downstream of Dandenong Terminal Station.

² Note: no further injections observed for another 5 hours.



Time (AEST)	Event/Action	Details
06:40	AEMO calls AGN	AEMO outlines the potential for a breach of the minimum contract pressures at the Sale CTM. AGN expresses concern about reducing Sale CTM pressure too far below the contract pressure, especially in the morning peak where it is critical. Outside of this time it may be able to go down to 4,500 kPa without loss of supply to customers.
06:51	AEMO reconfigures the DTS	AEMO reduced DCG outlet pressures to 2,600 kPa to further increase LMP survival time and prevent Sale CTM pressure breach.
07:00	Esso calls AEMO	Esso advises that it will have more accurate information at 08:30 and will be re-evaluating the constraint. Current best estimate is that Longford will not be at full rate in 3 hours. Currently working on restarting Gas Plant 1 and Gas Plant 3 in the next 2 hours.
07:15	AEMO models the DTS	With current Longford constraint information, AEMO runs a gas pipeline model showing potential for Sale CTM pressure issues at 2pm.
07:30	AEMO reconfigures the DTS	Adjusted the DTS configuration to bring linepack from the Northern Zone into the Melbourne metropolitan ring main and the Wollert to Pakenham Pipeline.
07:38	Esso calls AEMO	Esso advises that it is close to providing a revised constraint. AEMO emphasises that the constraint should be conservative.
08:00 (approx.)	Esso	Esso advises that it expects Longford to recommence operations at approx. 11:00. AEMO advises that pressures in east Gippsland are likely to be breached and that it has worked with the distributors to reduce the minimum required pressure, however, AEMO will need to intervene in the market to ensure supply can be maintained given the changing time for the return to service,
08:14	AEMO calls Jemena	AEMO discusses likely hourly VicHub-DTS injections given its dependence on EGP linepack. Jemena to call back.
08:27	AEMO models the DTS	With current Longford constraint information and still no flow from Longford, AEMO runs a gas pipeline model indicating that Sale CTM will breach contract pressures between 10:00 and 10:30. AEMO commences preparation for an ad hoc OS.
08:28	Jemena calls AEMO	Jemena advises that EGP linepack will last until 11:00 or 12:00 at the current rate of withdrawals before it needs to call Contingency Gas for the STTM Sydney hub.
08:29	AEMO calls Esso	Esso will provide an update in 15-20 minutes. AEMO advises Esso that it is preparing to declare a threat to system security and run an ad hoc OS. Esso requests 5 more minutes to determine quantities. AEMO will use a conservative estimate capacity if Esso is unable to provide a firm quantity.
08:32	Esso calls AEMO	Esso estimates that the total Longford capacity for the day will be 540 TJ and will start ramping up at 11:00, highlighting that this was plant capacity and that injections still needed to be split between the DTS and EGP as per shipper instructions.
08:37	Esso calls AEMO	Advises that 220 TJ will be made available to Victoria, and confirms it will send confirmation of the quantity via email. AEMO advises it is now declaring a threat to system security.
08:40	AEMO notifies market	AEMO declares a threat to system security.
08:41	AEMO calls Jemena	AEMO asks likely hourly VicHub-DTS injections. Jemena advises that a maximum rate of 4 TJ/hour could flow initially but advises that it will advise how much can be injected in total.
09:03	AEMO approves schedule	9:00 AM Ad hoc OS published Current Gas Day Schedule Approved



Time (AEST)	Event/Action	Details
09:15	AEMO notifies market	<p>A Victorian Gas Update teleconference was held in accordance with the Victorian Energy Emergency Communications Protocol (VEECP).</p> <ul style="list-style-type: none"> • Esso advised that the expectation is to return Longford to a third of full capacity by 1100 hrs, then progressively ramp up over a 12 hour period to full capacity. • AEMO advised there is an unplanned outage north of the connection point between NSW and VIC anticipated to be lifted by 14:00. This meant VIC cannot receive gas from NSW until this is lifted • AEMO's modelling indicates that if Longford does not come back on as anticipated (with the quantity of LNG being injected) the system could maintain pressure until approximately 4-5pm. After that point, AEMO would start looking at curtailment in the Gippsland area.
09:26	Esso emails AEMO	Esso advises an updated SDPC for Gas Day 1 October 2016 of 220,000 GJ due to operational requirements.
09:54	AEMO approves schedule	10:00 AM Current Gas Day Schedule Approved
10:00	Esso to AEMO	Esso advises that it has spoken with its customers and a limit of 255 TJ will apply for later schedules
10:45	AEMO observation	Longford commences flow at approximately 2 TJ/hr into the DTS ramping up to 4 TJ/hr by 11:15
11:30	AEMO notifies market	<p>A Victorian Gas Update teleconference was held in accordance with the VEECP.</p> <ul style="list-style-type: none"> • AEMO advised an ad hoc OS was produced between the 6am and the 10am scheduling windows, allowing for additional supply from Iona and LNG. • LNG is injecting at a rate of 8 TJ/hr until 2pm then a lower rate after 2pm. • Minimum operating pressure was breached around Sale, however additional supply from Iona and LNG have propped up pressures and the system is beginning to stabilise. • Unplanned outage north of the connection point between NSW and VIC is still on track of being lifted by 14:00 today. APA is attempting to expedite the work. • Esso advised that Longford had started and the expectation is to return it to a third of full capacity by 12:30, then progressively ramp up over a 12 hour period to full capacity.
14:30	AEMO notifies market	<p>A Victorian Gas Update teleconference was held in accordance with the VEECP.</p> <ul style="list-style-type: none"> • Esso advised Longford is currently operating at a third of full capacity and will progressively ramp up over a 16 hour period to full capacity – this is over a slightly longer period than first expected. • AEMO is comfortable with the current state of the DTS if Longford continues to inject at or above their current rate. • All minimum operating pressure are currently being met.



APPENDIX B – SYSTEM WIDE NOTICES ON GAS DAY 1 OCTOBER 2016

B1 - SWNs sent for gas day 1 October 2016

Time	System Wide Notices
04:57:30	Constraint applied at Culcairn inj and wdl meter 0 GJ/hr from 06:00 to 14:00 due to unplanned maintenance in NSW system.
06:23:37	Constraint applied at Longford inj 0GJ/hr 06:00 - 09:00, 514 TJ/day due to gas plant issues.
08:46:39	CRITICAL AEMO has declared a Threat to System Security. AEMO will schedule out of merit order injections in the next schedule in response. Please see MIBB attachment.
08:54:42	CRITICAL AEMO is declaring a threat to system security. AEMO will publish an ad-hoc schedule to remove this threat to system security. Please see MIBB attachment.
09:04:09	Be advised that AEMO has approved and published an ad-hoc schedule
10:33:21	Constraint revised at Longford inj meter to 220 TJ/day due to gas plant issues
11:00:09	Dandenong LNG - Odorant off spec. Low Mitigate 2.93 mg/m3 at 10:42
11:06:03	Longford odorant off spec Low Notify 3.68 MG/M3 at 05:52
12:16:18	Longford odorant returned to compliance at 12:15
12:26:19	CRITICAL - Constraint applied to LNG meter, Priority RED. LNG requested above 100 t/hr from 10:00 - 14:00 due to threat to system security
14:07:53	Constraint revised at Culcairn inj and wdr meters to 0 GJ/h from 14:00 to 15:00 at request of the facility operator.
18:27:04	Constraint revised at Longford inj meter to 218.9 TJ/d at request of the facility operator
18:32:03	Constraint applied at Culcairn inj and wdr meters to 0 GJ/h from 18:00 to 05:00 due to unplanned maintenance in the NSW transmission system
18:51:16	Longford Hydrogen Sulphide off spec high mitigate 5.93 mg/m3 at 18:38
20:58:53	Longford - Hydrogen Sulfide returned to compliance at 20:17
21:54:31	Constraint revised at Culcairn. Wdl capacity 3600 GJ/hr 22:00 - 06:00. Constraint removed on Injection meter.
21:58:34	Constraint applied at Bassgas. 42,357 GJ/day
22:45:44	Dandenong 2800 line odorant concentration off spec Low Notify 4.75 mg/m3 at 22:22



B2 - Additional SWNs that should have been sent for gas day 1 October 2016

Approximate time SWN should have been sent	Content of SWN
08:20 – 08:45	VicHub DFPC
08:55 – 09:04	LMP Linepack condition to amber
08:55 – 09:04	Revised Longford capacity and profiled injections. 0 TJ flows from 06:00 to 18:00 and Minimum Hourly Quantity.
08:55 – 09:04	Operational LNG scheduled and the relevant SDPC
18:28 – 18:32	Line pack green condition – DTS/LMP returned to Normal status.



APPENDIX C – MIBB ATTACHMENTS FOR THE AD HOC SWN SENT

C.1 MIBB attachment for SWN uploaded at 0844hrs

GP-2013-F04: Notice of a Threat to System Security

Threat to System Security – Ad hoc schedule

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 due to a supply shortfall in the Declared Transmission System.

AEMO advises that the threat to system security is due to:

- Facility not meeting schedule
- A supply and demand imbalance exists such that the projected inlet pressure at Sale CG may breach the 4800 kPa minimum operating limit.
- The supply shortfall is expected to occur from 05:00 AEST 01/10/2016 01/10/2016

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 | | |

AEMO has determined that there is insufficient time for the market to coordinate a response to the threat and that an immediate response using an ad hoc operating schedule is required.

AEMO intends to alleviate the threat by increasing of out-of-merit-order injections from Dandenong LNG Facility and Iona CPP at 09:00.

There will be a market notice to advise the removal of the threat to system security.

Issued on 1/10/2016

Damien Sanford
General Manager Real Time Operations
Australian Energy Market Operator



C.2 MIBB attachment for SWN uploaded at 0840hrs

Notice of Threat to System Security (Ad Hoc Schedule)

Notice of threat to system security for an ad hoc schedule

Reference: National Gas Rules (NGR), Subdivision 5, System security threat

Under clause 341 of the NGR, AEMO is declaring a threat to system security due to a supply shortfall in the declared transmission system (DTS). The threat to system security will be addressed by AEMO through an ad hoc (revised operating) schedule under clause 215(4) of the NGR. The approval and publishing of the ad hoc schedule by AEMO will remove the threat to system security unless otherwise advised by AEMO.

AEMO advises that:

- The threat to system security is being declared to enable the issuing of an ad hoc schedule to avert a supply-demand imbalance event.
- There will be no market notice to advise the removal of the threat to system security. The approval and publishing of the ad hoc schedule will remove the threat to system security.
- The market response to the ad hoc schedule will address the supply-demand imbalance.
- Issuing an ad hoc schedule is considered a market intervention in accordance with clause 215 (5) of the NGR.
- The ad hoc schedule will be published shortly.

Issued on 01 October 2016

Damien Sanford
General Manager RTO
AEMO|



GLOSSARY

Term	Definition
AEMO	Australian Energy Market Operator
AEST	Australian Eastern Standard Time
APA	APA Group
CG	Contingency Gas
CTM	Custody Transfer Meter
DCG	Dandenong City Gate
DFPC	Directional Flow Point Constraint
DTS	Declared Transmission System
DWGM	Declared Wholesale Gas Market
EGP	Eastern Gas Pipeline
Esso	Esso Australia Resources
GSP	The Wholesale Market Gas Scheduling Procedures
Jemena	Jemena Eastern Gas Pipeline
kPa	kilopascals
LNG	Liquefied Natural Gas
Longford	Longford Gas Plant
LMP	Longford to Melbourne Pipeline
MIBB	Market Information Bulletin Board
NFTC	Net Flow Transportation Constraint
NGL	National Gas Law
NGR	National Gas Rules
OS	Operating Schedule
PS	Pricing Schedule
SDPC	Supply and Demand Point Constraint
SSC	Supply Source Constraint
STTM	Short Term Trading Market
SWN	System Wide Notice
TJ	Tera joule
VEECP	Victorian Energy Emergency Communications Protocol In response to the supply shortfall into Victoria, AEMO convened Victorian Gas teleconferences under the Victorian Energy Emergency Communications Protocol. Attendees are Victorian gas industry representatives.