

IMPACT & IMPLEMENTATION REPORT – SUMMARY SECTION

Issue Number	IN003/16 (Audit items)		
Impacted Jurisdiction (s)	South Australia		
Proponent	AEMO	Company	AEMO
Affected Gas Markets(s) <ul style="list-style-type: none"> ▪ Retail ▪ Wholesale ▪ Bulletin Board ▪ STTM 	Retail	Consultation process (Ordinary or Expedited)	Ordinary
Industry Consultative forum(s) used	GRCF	Date Industry Consultative forum(s) consultation concluded	n/a
Short Description of change(s)	Replace the requirement in Section 177(2) of the South Australian Retail Market Procedures (RMP) for AEMO to re-calculate and publish the value of each co-efficient used in the Heating Degree Day (HDD) calculation to at least once every five years or following a change in the source of weather data used.		
Procedure(s) or Documentation impacted	Section 177(2) of the South Australian RMP.		
Summary of the change(s)	Replace the requirement in Section 177(2) of the South Australian RMP for AEMO to re-calculate and publish the value of each co-efficient used in the HDD calculation to at least once every five years or following a change in the source of weather data used.		
I&IR Prepared By	Taryn Maroney	Approved By	Alicia Volvricht
Date I&IR published	29 August 2016	Date Consultation under 135EE or 135EF concludes	11 October 2016
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IMPACT & IMPLEMENTATION REPORT – DETAILED REPORT SECTION

CRITICAL EXAMINATION OF PROPOSAL

1. Description of change(s) and reasons for change(s)

Under Section 177(2) of the South Australian RMP, AEMO is to re-calculate the value for each co-efficient used in the HDD calculation at least every 12-months using linear regression of historic weather data. AEMO is also required to publish the updated co-efficients.

The methodology used to calculate the temperature sensitivity varies between South Australia and other jurisdictions. In South Australia, the HDD calculation is used in the '*temperature sensitivity heating rate*'. In other jurisdictions, the *effective degree day* (EDD) is used to calculate the temperature sensitivity factor.¹ There is no requirement in the Victorian RMP, NSW/ACT RMP and Queensland RMP for AEMO to re-calculate and publish parameters to annually calculate the temperature sensitivity.

In 2015, market auditors identified that AEMO's current operational practice is inconsistent with its requirements under section 177(2) of the South Australian RMP. AEMO acknowledges the inconsistency and notes this requirement is not required in other jurisdictions. Further, AEMO considers there to be little market benefit in annually re-calculating and publishing the amended values for each co-efficient in the HDD calculation.

In response to stakeholder feedback on the Proposed Procedure Change (PPC), AEMO agrees that it should re-calculate the value of the HDD co-efficients at least every five years or when a change in the source of weather data (a weather station) occurs. For further information, refer to AEMO response to stakeholder submissions in Attachment B.

AEMO notes that it intends undertaking a review of the EDD and HDD mechanisms, including those used for the RMPs as it has found that energy consumers, and the industry generally, is transforming in a way that is quite different from the past.² As noted in the PPC, AEMO intends to consult with stakeholders on the process to review the formulation, coefficients and operation of EDD and HDD mechanisms that AEMO use in its operational processes. AEMO will consult with stakeholders through AEMO's Forecasting Reference Group and will collaborate with agencies such as the CSIRO and the Department of Environment. This review is proposed to commence with scope identification in July 2016 and be completed in 2017.

¹ Victoria RMP, refer to Attachment 6 – Net System Profile Methodology section 3, NSW/ACT RMP, refer to Attachment 2 Approved Estimation Methodology A2.3, and Queensland RMP, refer to Attachment 4 – Net System Profile Methodology section 3.

² Major transformational forces include the decline of energy intensive manufacturing, improvements in energy efficiency, climate change, trends in gas-to-electric appliance switching, energy bill inflation, amongst others.

	Given these changes, this consultation is not seeking to change the HDD methodology included in the Section 177(2) of the South Australian RMP or expand the scope of changes beyond what AEMO proposed in the PPC.
<p>2. Reference documentation</p> <ul style="list-style-type: none"> ▪ Procedure Reference ▪ GIP/Specification Pack Reference ▪ Other Reference 	South Australian RMP, Section 177(2).
<p>3. The high level details of the change(s) to the existing Procedures</p> <p>This includes:</p> <ul style="list-style-type: none"> ▪ A comparison of the existing operation of the Procedures to the proposed change to the operation of the Procedures ▪ A marked up version of the Procedure change (see Attachment A) 	<p>Replace the requirement in Section 177(2) of the South Australian RMP for AEMO to re-calculate and publish the value of each co-efficient used in the HDD calculation to at least once every five years or following a change in the source of weather data used.</p> <p>A marked-up version of the proposed Section 177(2) of the South Australian RMP changes is in Attachment A.</p>
<p>4. Explanation regarding the order of magnitude of the change</p> <p>(eg: material, non-material or non-substantial)</p>	AEMO is proposing minor amendments to the South Australian RMP which would align with other jurisdictional RMPs.

ASSESSMENT OF LIKELY EFFECT OF PROPOSAL

5. Overall Industry Cost / benefit (tangible / intangible / risk) analysis and/or cost estimates	None identified.
6. The likely implementation effect of the change(s) on stakeholders (e.g. Industry or end-users)	AEMO has not identified any market or stakeholder impact resulting from implementing the proposed changes. It is intended that there will be no system or business process impacts as a result of the proposed changes.
7. Testing requirements	None identified.
8. AEMO's preliminary assessment of the proposal's compliance with section 135EB: - consistency with NGL and NGR, - regard to national gas objective - regard to any applicable access arrangements	<p><u>Consistency with NGL and NGR:</u></p> <p>AEMO's view is that the proposed South Australian RMP changes is consistent with the NGL and cover matters that the RMP may deal with under Section 135EA(1) of the NGR.</p> <p><u>National Gas Objective</u></p> <p>"Promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas."</p> <p>AEMO considers the proposed change promotes efficient operation of natural gas services by:</p> <ul style="list-style-type: none"> • Improving accessibility and regulatory certainty by ensuring the South Australian RMP reflect market operations. • Ensuring the calculation of HDD co-efficients are reviewed following appropriate triggers. <p><u>Applicable Access Arrangements</u></p> <p>Not relevant.</p>
9. Consultation Forum Outcomes (e.g. the conclusions made on the change(s) whether there was unanimous approval, any dissenting views)	On 20 July 2016, the PPC was published on AEMO's website and circulated to GRCF stakeholders. Attachment B includes stakeholder's consolidated feedback and AEMO's response.

RECOMMENDATION(S)	
<p>10. Should the proposed Procedures be made, (with or without amendments)?</p>	<p>The proposed changes should be made with the following amendments to clause 177(2) of the South Australian RMPs:</p> <ul style="list-style-type: none"> • Replace the annual requirement on AEMO to re-calculate and publish the value of each co-efficient used in the HDD calculation to at least once every five years. • Include a requirement on AEMO to re-calculate and publish the value of each HDD co-efficient following a change in the source of weather data used. • Minor wording changes to ensure the clause is clear.
<p>11. If applicable, a proposed effective date for the proposed change(s) to take effect and justification for that timeline.</p>	<p>AEMO will publish its decision by 11 October 2016 with the expected South Australian RMP changes to take effect on 1 November 2016.</p>

ATTACHMENT A – DOCUMENTATION CHANGES (SEE SECTION 3)

Blue represents additions Red and strikeout represents deletions – Marked up changes

(2) ~~From time to time~~ AEMO must ~~may, and at least once per calendar year~~ AEMO ~~must and~~ at least once every five years or following a change in the source of weather data used, ~~as a reasonable and prudent person~~, recalculate the value for each coefficient listed in clause 177(1) using linear regression of historic weather data. As soon as practicable after the recalculation, AEMO must publish to participants an update to Appendix 11 specifying the recalculated values.

ATTACHMENT B – Consolidated List of Stakeholder Feedback to Proposed Procedure Change

STAKEHOLDER	CLAUSE/SECTION REF.	ISSUE/COMMENT	PROPOSED TEXT RED STRIKEOUT MEANS DELETE AND <u>BLUE UNDERLINE</u> MEANS INSERT	AEMO RESPONSE
AGL	General Comment	<p>Like the Victorian calculation, these calculations should be handled as part of a larger process of consolidating the various calculations and coefficients into a document referenced by the procedures but outside the procedures.</p> <p>The purpose of suggesting these proposed changes is to:</p> <ol style="list-style-type: none"> 1. Ensure a consistent approach starts to be driven into the procedures; <p>Ensure a consistent process both for AEMO and industry in managing these various data sources and coefficients in both a transparent but efficient</p>		<p>This is out of scope.</p> <p>In light of AEMO's EDD and HDD review, it is pre-emptive to make this change.</p>

STAKEHOLDER	CLAUSE/SECTION REF.	ISSUE/COMMENT	PROPOSED TEXT RED STRIKEOUT MEANS DELETE AND <u>BLUE UNDERLINE</u> MEANS INSERT	AEMO RESPONSE
		manner.		
AGL	177(2)	<p>Removing the need for annual review is acceptable, but no review is not acceptable. These impact of these coefficients can change over time and there should be some sort of review mechanism to ensure they are generating results which are as closely consistent with demand as possible.</p> <p>The coefficients should also be reviewed say after one year if the source of weather data changes to ensure that the coefficients are operating correctly.</p>	<p>(2) From time to time AEMO may, and at least once per calendar year <u>AEMO must and at least once every five years or one year after the source of weather data changes must</u>, as a reasonable and prudent person, recalculate the value for each coefficient listed in clause 177(1) using linear regression of historic weather data, and as soon as practicable after the recalculation, AEMO must publish to participants an update to Appendix 11 specifying the recalculated values.</p>	<p>Agreed. AEMO considers that it is appropriate to review the HDD coefficients at least every five years or if a weather station changes. Noting that this allows AEMO the discretion to review the HDD co-efficients more frequently than every five years if it considers the medium and long-term factors that HDD is based on change.</p> <p>Refer to Attachment A of the Impact and Implementation Report for AEMO's proposed amendments.</p>
Origin	177(2)		<p><u>From time to time when a change in data source occurs, and at least once every three years, AEMO</u></p>	<p>Refer to comment above.</p> <p>AEMO also agrees that if “change in data source” (a weather station) occurs</p>

STAKEHOLDER	CLAUSE/SECTION REF.	ISSUE/COMMENT	PROPOSED TEXT RED-STRIKEOUT MEANS DELETE AND <u>BLUE UNDERLINE</u> MEANS INSERT	AEMO RESPONSE
			must as a reasonable and prudent person, recalculate and publish the value for each coefficient listed in clause 177(1) using linear regression of historic weather data, and as soon as practicable after the recalculation, AEMO must publish to participants an update to Appendix 11 specifying the recalculated values.	this should initiate a re-calculation of the HDD coefficients. Refer to Attachment A of the Impact and Implementation Report for AEMO's proposed amendments.
AGL	177(6)	New clause – publish the source of the weather data used	<u>AEMO must publish the source of the weather data used by clause 177(3) and the associated coefficients for that source.</u>	No change. AEMO does not consider it necessary to include a procedural requirement to publish the “source of the weather data”. Instead of creating a new requirement, this can be dealt with operationally whereby stakeholders request this information from AEMO. This provides a reasonable balance between what is included in procedures and what occurs in practice.
AGL	177(7)	New Clause – update and recalculate the coefficients if the source of the weather	<u>If the source of the weather data changes, AEMO must, within 5 business days :</u>	As previously discussed, following replacement of a weather station, AEMO agrees this should initiate

STAKEHOLDER	CLAUSE/SECTION REF.	ISSUE/COMMENT	PROPOSED TEXT RED STRIKEOUT MEANS DELETE AND <u>BLUE UNDERLINE</u> MEANS INSERT	AEMO RESPONSE
		information changes	(i) <u>locate a new source of weather data;</u> (ii) <u>recalculate the coefficients for the new source of weather data;</u> <u>publish a notice identifying the changed source of weather data and new coefficients associated with that source of weather data.</u>	<p>re-calculation of the HDD coefficients.</p> <p>A further requirement does not need to be included in the SA RMP to address replacement of a “source of weather data” as clause 117 already requires AEMO to use historic weather data from the Bureau of Meteorology (BoM) or (other external agency). If a weather station is replaced by the BoM, AEMO must find and use another data source to fulfill its requirement under clause 177 to calculate the HDD co-efficients.</p> <p>AEMO considers that any requirement on it to re-calculate the HDD co-efficients should refer to AEMO doing this as soon as practicable, this is already in clause 177(2).</p> <p>Further, clause 177(2) already requires AEMO to publish any updated HDD co-efficients, There is no need to include a further requirement to notify a change as this would be undertaken as a part of operational practice.</p>