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| Intervention Pricing Methodology |
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| DRAFT REPORT AND DETERMINATION |
| Published: **September 2018** |  |  |

NOTICE OF SECOND STAGE CONSULTATION – Intervention Pricing Methodology

National Electricity Rules – Rule 8.9

Date of Notice: 3 September 2018

This notice informs all Registered Participants and interested parties (Consulted Persons) that AEMO is commencing the second stage of its consultation on the Intervention Pricing Methodology.

This consultation is being conducted under clause 3.9.3(e) of the National Electricity Rules (NER), in accordance with the Rules consultation requirements detailed in rule 8.9 of the NER.

Invitation to make Submissions

AEMO invites written submissions on this Draft Report and Determination (Draft Report).

Please identify any parts of your submission that you wish to remain confidential, and explain why. AEMO may still publish that information if it does not consider it to be confidential, but will consult with you before doing so.

Consulted Persons should note that material identified as confidential may be given less weight in the decision-making process than material that is published.

Closing Date and Time

Submissions in response to this Notice of Second Stage of Rules Consultation should be sent by email to michael.sanders@aemo.com.au, to reach AEMO by 5.00pm (Melbourne time) on 18 September 2018.

All submissions must be forwarded in electronic format. Please send any queries about this consultation to the same email address.

Submissions received after the closing date and time will not be valid, and AEMO is not obliged to consider them. Any late submissions should explain the reason for lateness and the detriment to you if AEMO does not consider your submission.

Publication

All submissions will be published on AEMO’s website, other than confidential content.

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Executive Summary

The publication of this Draft Report and Determination (Draft Report) starts the second stage of the Rules consultation process conducted by AEMO to improve the Intervention Pricing Methodology.

The proposed improvements to the Intervention Pricing Methodology change the calculation of the RHS of feedback constraints in the intervention pricing run, and identify generators that have:

* tripped or partially tripped;
* been trapped in an FCAS trapezium; or
* offered zero ramp rates

and modify their initial operating points accordingly in the intervention pricing run.

These improvements were identified in collaboration with the Intervention Pricing Working Group formed to provide industry input to AEMO’s intervention pricing processes.

In the first stage of consultation AEMO received two submissions that were wholly supportive, and no submissions that objected to any of the proposed changes.

AEMO’s draft determination is to amend the Intervention Pricing Methodology in the form published with this Draft Report as **Attachment 1**.

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# Stakeholder Consultation Process

As required by clause 3.9.3(e) of the NER, AEMO is consulting on Intervention Pricing Methodology in accordance with the Rules consultation process in rule 8.9.

AEMO’s indicative timeline for this consultation is outlined below. Future dates may be adjusted depending on the number and complexity of issues raised in submissions.

|  |  |
| --- | --- |
| Deliverable | Date |
| Notice of first stage consultation and Issues Paper published | 29 June 2018 |
| First stage submissions closed | 6 August 2018 |
| Draft Report & Notice of second stage consultation published | 3 September 2018 |
| Submissions due on Draft Report | 18 September 2018 |
| Final Report published | 1 October 2018 |

The publication of this Draft Report marks the start of the second stage of consultation.

Note that there is a glossary of terms used in this Draft Report at **Appendix A**.

# Background

## NER requirements

The following NER clauses are relevant to this consultation.

**3.9.3 Pricing in the event of intervention by AEMO**

(b) Subject to paragraphs (c) and (d), *AEMO* must in accordance with the methodology or assumptions *published* pursuant to paragraph (e) set the *dispatch price* and *ancillary service prices* for an *intervention price dispatch interval* at the value which *AEMO*, in its reasonable opinion, considers would have applied as the *dispatch price* and *ancillary service price* for that *dispatch interval* in the relevant *region* had the *AEMO intervention event* not occurred.

(e) Subject to paragraph (g), *AEMO* must develop in accordance with the *Rules consultation procedures* and *publish* details of the methodology it will use, and any assumptions it may be required to make, to determine *dispatch prices* and *ancillary service prices* for the purposes of paragraph (b).

## Context for this consultation

AEMO directions for system strength in South Australia led to anomalous prices in NSW and Queensland in February 2017. AEMO subsequently engaged consultants (SW Advisory and Endgame Economics) to undertake a comprehensive review of intervention pricing in June 2017. The consultant’s final report[[1]](#footnote-1), produced in October 2017, outlined recommendations for changes to the directions process as well as alternative methodologies for intervention pricing.

AEMO established the Intervention Pricing Working Group (IPWG) to seek industry feedback on the recommended alternative approaches for the Intervention Pricing Methodology. The IPWG was open to all interested parties in the energy industry and consisted of representatives from 14 organisations, including thermal and renewable generators, settlement residue unit holders and the AEMC.

AEMO held five meetings with the IPWG between November 2017 and May 2018. The issues and proposed changes to the methodology were discussed extensively at the IPWG meetings, leading to different and preferred changes to the Intervention Pricing Methodology from those recommended by the consultants. There was strong support from the IPWG at the final 30 May 2018 meeting for AEMO to proceed with consultation on the modifications to the Intervention Pricing Methodology that were identified by the IPWG.

## First stage consultation

AEMO issued a Notice of First Stage Consultation on 29 June 2018[[2]](#footnote-2). The accompanying Issues Paper[[3]](#footnote-3) explained the proposed changes to the Intervention Pricing Methodology arising from the work of the IPWG.

AEMO received two written submissions in the first stage of consultation.

Copies of both written submissions have been published on AEMO’s website at: <http://www.aemo.com.au/Stakeholder-Consultation/Consultations/Intervention-Pricing-Methodology-Consultation?Convenor=AEMO%20NEM>.

# Summary of Material Issues

The key material issues arising from the proposal and raised by Consulted Persons are summarised in the following table:

|  |  |  |
| --- | --- | --- |
| No. | Issue | Raised by |
|  | Feedback constraint inputs in the intervention pricing run | AEMO |
|  | Identification of tripped generators in the intervention pricing run | AEMO |
|  | Untrapping generators in the intervention pricing run | AEMO |
|  | Generators with zero ramp rates in the intervention pricing run | AEMO |

A detailed summary of issues raised by Consulted Persons in submissions, together with AEMO’s responses, is contained in **Appendix B**.

# Discussion of Material Issues

## Feedback constraint inputs in the intervention pricing run

### Issue summary and submissions

The current calculation of the RHS of feedback constraints in the pricing run can lead to anomalous pricing results.

When AEMO intervenes in the market NEMDE performs two runs:

* An outturn run, which includes the effects of the intervention, and which is used to dispatch the market; and
* A pricing run, which attempts to exclude the effects of the intervention, and which is used to price the market.

AEMO proposes to use the same RHS for feedback constraint equations in the outturn and pricing runs.

The purpose of a network constraint equation is to manage the flow across a network element within its limits (rating or stability limits). The RHS of the constraint equation reflects the limit across the network element. The technical envelope for a network element in the outturn and pricing runs should be the same, and therefore the RHS of constraint equations reflecting network limits in both runs should also be the same.

The proposed solution involves using the same RHS in the outturn and pricing runs for thermal feedback and stability (transient or voltage) feedback constraint equations. The RHS calculation would use measured values of generator and interconnector operating points to best represent the prevailing state of the power system. Further information and analysis is available in the Issues Paper.

The RHS of other generic constraints which are market-related (e.g. negative residue management, non-physical losses, non-conformance, MNSP rate-of-change constraints and FCAS constraints) would continue to be calculated using generator or interconnector targets from the pricing run, and not from measured values. This is because these other constraint equations do not reflect a network limit, but are instead used to manage market outcomes or FCAS requirements – both of which should remain dependent on generator and interconnector operating points in the pricing run.

Both submissions supported this approach.

### AEMO’s assessment

The use of generator and interconnector targets in the RHS of feedback network constraints in the pricing run is known to produce anomalous outcomes. AEMO considers that using measured values of generator and interconnector operating points, as is the case in the outturn run, would better enable AEMO to set prices at the values that would have applied if AEMO had not intervened in the market, as required by NER 3.9.3(b). Preservation of the appropriate price signals during intervention pricing will in turn promote allocative and dynamic efficiency.

The submissions support this approach, and AEMO is not aware of any contrary argument.

### AEMO’s conclusion

AEMO concludes that during an AEMO intervention, the RHS of thermal and stability feedback constraint equations in the pricing run should be calculated using measured values of generator and interconnector operating points, as is currently the case for the outturn run. Details of how this would work are contained in the Draft Intervention Pricing Methodology included as **Attachment 1**.

## Identification of tripped generators in the intervention pricing run

### Issue summary and submissions

The current intervention pricing methodology is unable to identify tripped generators in the pricing run.

During conventional dispatch, AEMO issues dispatch targets for generators and interconnectors for the next five minutes, and five minutes later the actual generator and interconnector operating points are measured and used as a basis for the next set of dispatch instructions. Continual measurement of the actual state of the power system is essential for managing power system security.

During intervention pricing, the dispatch targets for generators and interconnectors are assumed to be met exactly, and are used as the starting point for the next set of dispatch instructions on which the intervention prices are based. There is no measurement of actual generator operating points, and therefore no accounting in the pricing run for any generator trips (or partial trips) other than an eventual rebid. Once the rebid enters the market systems with a zero (or much reduced) availability, the pricing run can reduce the target of the tripped generator no faster than the generator’s ramp down rate. This means that a tripped generator can continue to influence intervention prices long after it has stopped generating.

The proposed solution compares the bid availability and measured output of a generating unit to its previous dispatch target in the pricing run. If both the bid availability and the measured output of a generating unit are less than its previous pricing run dispatch target minus twice the ramp down rate, the unit is deemed to have tripped, and its measured output will be used in the pricing run. Further information and analysis is available in the Issues Paper.

Both submissions supported this approach.

### AEMO’s assessment

The use of generator targets in the pricing run when those generators have already tripped is known to produce anomalous outcomes. AEMO considers that using the measured generator output in the pricing run, when a generator is known to have tripped, would better enable AEMO to set prices at the values that would have applied if AEMO had not intervened in the market, as required by NER 3.9.3(b). Preservation of the appropriate price signals during intervention pricing will in turn promote allocative and dynamic efficiency.

The submissions support this approach, and AEMO is not aware of any contrary argument.

### AEMO’s conclusion

AEMO concludes that when a generator can be identified as having tripped during an AEMO intervention, the previous dispatch target should be replaced with the measured generator output during the pricing run. Details of how this would work are contained in the Draft Intervention Pricing Methodology included as **Attachment 1**.

## Untrapping generators in the intervention pricing run

### Issue summary and submissions

The current intervention pricing methodology allows generators to remain trapped indefinitely in the pricing run while being untrapped in the outturn run.

Generating units may become trapped at the minimum (or maximum) enablement limits of their FCAS trapezium when enabled for FCAS. This is a consequence of the way in which FCAS offers are represented in NEMDE.

Because generators are assumed to meet their dispatch targets exactly in the pricing run, a generator trapped in the pricing run will remain trapped unless they rebid their FCAS trapezium. In the outturn run that same generator may become untrapped through natural variability in its energy output. The issue is exacerbated because generator trapping is a physical manifestation of market operation, and tends to have less visibility when it occurs in the pricing run – where the focus is on prices – than when it occurs in the outturn run.

The proposed solution identifies trapped generators in the pricing run and applies a small change to the assumed operating point of the generator to untrap them. Further information and analysis is available in the Issues Paper.

Both submissions supported this approach.

### AEMO’s assessment

The current intervention pricing methodology allows a generator to be trapped indefinitely in the pricing run while being untrapped in the outturn run. AEMO considers that untrapping generators in the pricing run would better enable AEMO to set prices at the values that would have applied if AEMO had not intervened in the market, as required by NER 3.9.3(b). Preservation of the appropriate price signals during intervention pricing will in turn promote allocative and dynamic efficiency.

The submissions support this approach, and AEMO is not aware of any contrary argument.

### AEMO’s conclusion

AEMO concludes that when a generator is trapped in the pricing run it should be untrapped by applying a small change to the generator’s assumed operating point. Details of how this would work are contained in the Draft Intervention Pricing Methodology included as **Attachment 1**.

## Generators with zero ramp rates in the intervention pricing run

### Issue summary and submissions

The current intervention pricing methodology does not accurately reflect the operation of generators with zero ramp rates.

Generators may offer zero ramp rates. The current intervention pricing methodology assumes that these generators maintain a constant energy output. However, in practice the output from these generators varies over time, and this variation is not reflected in the intervention pricing run.

The proposed solution identifies generators with zero ramp rates, and if a generator has offered a zero ramp rate then its measured output will be used in the pricing run. Further information and analysis is available in the Issues Paper.

Both submissions supported this approach.

### AEMO’s assessment

The current intervention pricing methodology does not accurately reflect the operation of generators that have offered zero ramp rates. AEMO considers that using the measured output in the pricing run for generators that have offered zero ramp rates would better enable AEMO to set prices at the values that would have applied if AEMO had not intervened in the market, as required by NER 3.9.3(b). Preservation of the appropriate price signals during intervention pricing will in turn promote allocative and dynamic efficiency.

The submissions support this approach, and AEMO is not aware of any contrary argument.

### AEMO’s conclusion

AEMO concludes that when a generator offers a zero ramp rate then its measured output should be used in the pricing. Details of how this would work are contained in the Draft Intervention Pricing Methodology included as **Attachment 1**.

# Other Matters

Minor edits have been made to the change-marked Intervention Pricing Methodology that was published at the start of this consultation.[[4]](#footnote-4) The most important of these edits are designed to accommodate the change to five-minute settlement on 1 July 2021 and remove any need for further consultation because of that change. Other edits were made to improve the readability and consistency of the methodology.

# Draft Determination

Having considered the matters raised in submissions, AEMO’s draft determination is to amend the Intervention Pricing Methodology in the form of **Attachment 1**, in accordance with clause 3.9.3(e) of the NER.

1. Glossary

|  |  |
| --- | --- |
| Term or acronym | Meaning |
| FCAS | Frequency Control Ancillary Service  |
| IPWG | Intervention Pricing Working Group |
| MNSP | Market Network Service Provider |
| NEMDE | National Electricity Market Dispatch Engine |
| NER | National Electricity Rules |
| RHS | Right-Hand Side |

1. Summary of Submissions and AEMO Responses

|  |  |  |  |
| --- | --- | --- | --- |
| No. | Consulted person | Issue | AEMO response |
|  | ERM Power  | ERM Power … support the proposed four changes which will remove errors from the current methodology for the calculation of intervention prices as set out in the Issue Paper. | Noted |
|  | ERM Power | We believe it should also be acknowledged that whilst AEMO initially engaged consultants to review the intervention pricing methodology, the changes to the methodology recommended by the consultants were rejected by the IPWG … it was the analysis undertaken during the IPWG process that identified the errors in the current methodology which were the cause of the erroneous pricing outcomes observed during some intervention periods and it was this work that led to the development of the proposed changes as set out in the issues paper. | Agreed |
|  | ERM Power | We recommend that AEMO consider additional AEMO/industry working groups for similar market issues. | Noted |
|  | EnergyAustralia | We support the changes proposed by AEMO to their Intervention Pricing Methodology to fix: - Inconsistent inputs to feedback constraints in the Intervention Pricing run - Identify tripped generators in the Intervention Pricing run - FCAS Trapped generators in the Pricing run - Generators with zero MW/min ramp rates  | Noted |

1. Attachment 1 – Draft Intervention Pricing Methodology

This appendix contains the text that is proposed for inclusion in AEMO’s revised Intervention Pricing Methodology. Once finalised, the Intervention Pricing Methodology will be published in AEMO’s standard template format for NER procedures, including introductory text, definitions and version history.

# National Electricity Rules Requirements for Intervention Pricing

The requirements for intervention pricing in the National Electricity Market (NEM) are specified in Clause 3.9.3 of the National Electricity Rules (NER).

## Intervention Pricing calculation

NER 3.9.3(b) currently requires that Intervention Prices are set:

“…at the value which *AEMO*, in its reasonable opinion, considers would have applied as the *dispatch price* and *ancillary services price* for that *dispatch interval* in the relevant *region* had the *AEMO intervention event* not occurred.”

From 1 July 2021 the Five-Minute Settlement rule changes redefine the current *dispatch prices* as *spot prices*, and the current *dispatch intervals* as *trading intervals*.[[5]](#footnote-5) The relevant parts of this clause will then read:

“…at the value which *AEMO*, in its reasonable opinion, considers would have applied as the *spot price* and *ancillary services price* for that *trading interval* in the relevant *region* had the *AEMO intervention event* not occurred.”

In both cases the Intervention Prices are designed to preserve the market signals that would have existed had AEMO not intervened, and are used as the energy and market ancillary services prices for price setting and settlement.

## Intervention Pricing consistent with price determination principles

NER 3.9.3(f) requires that the Intervention Pricing Methodology must, wherever reasonably practicable, be consistent with the principles for determining energy and market ancillary services prices specified in NER 3.9.1, 3.9.2 and 3.9.2A.

## Intervention Pricing calculated and published every five minutes

The NER require Intervention Prices to be calculated and published every five minutes as part of the central dispatch process.

There is no explicit NER requirement to calculate and publish Intervention Prices for the pre-dispatch process. However, AEMO started publishing Intervention Prices are part of the pre-dispatch process in November 2003. This was later extended to five-minute pre-dispatch.

# Intervention Pricing Process

## Initiation

Every run of both the dispatch and pre-dispatch processes checks for the presence of any AEMO-invoked intervention-type generic constraints applying for any interval over the relevant scheduling period.

If any intervention-type generic constraints are detected an additional Intervention Pricing run of the NEMDE dispatch algorithm is automatically performed in parallel with the base case target run to calculate Intervention Prices.

## Calculation

On initiation of the intervention pricing run, all invoked generic constraints with an "Intervention" status are automatically ignored in the intervention pricing run calculations.

The same inputs that are used in the base case target run are loaded into the intervention pricing calculation, with the exceptions listed below (and outlined in Sections 2.2.3 – 2.2.5):

* The initial loading for each unit is set equal to the “What-if” value of that unit’s dispatch target calculated in the intervention pricing run of the previous interval (if one was performed) rather than using the metered SCADA value.
* The initial operating mode for each fast start unit is set equal to the “What-if” value of that unit’s fast start mode calculated in the intervention pricing run of the previous interval (if one was performed).
* The initial loading for each interconnector is set equal to the “What-if” value of that interconnector’s flow target calculated in the intervention pricing run of the previous interval (if one was performed) rather than using the metered SCADA value.

For the first interval of the first intervention pricing run only the metered SCADA values are available and are therefore used.

The NEMDE dispatch algorithm is then run and all the "What-if" energy and market ancillary services prices, “What-if" unit dispatch targets, and “What-if” interconnector targets are written back to the MMS database for reporting to the market.

The “What-if” run may be performed twice if the Basslink interconnector is capable of transferring market ancillary services. One run is performed with the Frequency Controller “on” and the other run is performed with the Frequency Controller assumed to be “off”. The energy and market ancillary service prices from the “What-if” run with the lower objective function value are published.

### RHS Computation of feedback constraints in Intervention Pricing runs

The Right-Hand Side (RHS) of feedback constraint equations in the Intervention Pricing run are computed the same as the base case target run. In other words, generator and interconnector terms on the RHS of feedback constraint equations in the Intervention Pricing run use metered SCADA values rather than “What-if” dispatch targets or “What-if” flow targets calculated in the previous interval of the Intervention Pricing run. This is because the technical envelope for all network elements between the base case target run and Intervention Pricing run are the same, and hence the RHS of the constraint equations reflecting the network limits are computed the same.

Table 1 below summarizes the inputs for feedback constraint equations in the Intervention Pricing runs.

Table 1 Inputs for feedback constraint equations in Intervention Pricing runs

|  |  |  |
| --- | --- | --- |
| **Generic Constraint****RHS term** | **Input for Outturn run** | **Input for Pricing Run** |
| Rating | Defined Value | Defined Value |
| Scheduled gens/loads | Measured value | Measured value |
| Semi-scheduled gens | Measured value | Measured value |
| Interconnector flows | Measured value | Measured value |
| Intra-regional flows | Measured value | Measured value |

### RHS Computation of non-feedback constraints in Intervention Pricing runs

Other generic constraints which are market-related (e.g. negative residue management, non-physical losses, non-conformance, MNSP ROC, or FCAS constraints) will continue to be determined dynamically, i.e. the RHS for these constraint equations would be determined based on the “What-if” dispatch target or “What-if” flow targets calculated in the previous interval of the Intervention Pricing run. This is because these constraint equations are not reflective of a network limit but are used to manage market outcomes or FCAS requirements, both of which are dependent on generator and interconnector operating points. Table 2 below outlines the approach for each generic constraint type in the Pricing run.

Table 2 Generic constraints RHS computation approach in Pricing runs

|  |  |  |
| --- | --- | --- |
| **Constraint Type** | **Constraint Description** | **Proposed Approach** |
| FCAS | FCAS Requirement Constraints | Dynamic (RHS calculated as per outcomes in Pricing run) |
| Ramping | Network ramping Constraints | Dynamic (RHS calculated as per outcomes in Pricing run) |
| NC | Non-conformance Constraints | Dynamic (RHS calculated as per outcomes in Pricing run) |
| NRM | Negative Residue Management Constraints | Dynamic (RHS calculated as per outcomes in Pricing run) |
| NSA | Network Support Agreement Constraints | Dynamic (RHS calculated as per outcomes in Pricing run) |
| Fixed Loading | Unit fixed loading Constraints | Dynamic (RHS calculated as per outcomes in Pricing run) |
| ROC | Rate of Change (ROC) Constraints | Dynamic (RHS calculated as per outcomes in Pricing run) |
| System Normal | **Feedback Constraints** | **Static (RHS calculated same as Outturn run)** |
| Non-feedback Constraints | Dynamic (RHS calculated as per outcomes in Pricing run) |
| Network Outage | **Feedback Constraints** | **Static (RHS calculated same as Outturn run)** |
| Non-feedback Constraints | Dynamic (RHS calculated as per outcomes in Pricing run) |

### Identifying tripped generators in Intervention Pricing runs

Generators that trip in the base case target run are also treated similarly in the pricing runs. A generator trip may involve a partial trip (actual output reduces well below bid availability but above 0 MW) or a full trip (actual output reduces to 0 MW). A generator that has bid availability **and** Initial MW (actual output in the base case target run) less than the What-If Initial MW (the “What-if” dispatch target calculated in the previous interval of an Intervention Pricing run) by more than twice the rate of change down (ROC Down) rate is treated as a tripped generator i.e. the unit’s What-If Initial MW will be set to Initial MW in the Intervention Pricing run.

The following check in the NEMDE Caseloader will identify tripped generators in the Pricing runs:

***For all generators in each interval:***

***IF*** *[Bid Availability < (What-If Initial MW - 2 x ROC down)* ***AND***

 *InitialMW < (What-If Initial MW - 2 x ROC down)]*

***THEN*** *What-If Initial MW = Initial MW.*

***ELSE*** *What-If Initial MW = What-If Initial MW (no change).*

### FCAS Un-trapping logic in Intervention Pricing runs

To avoid generators being trapped in their FCAS trapeziums for extended periods in the Intervention Pricing run, an FCAS un-trapping logic has been implemented in the NEMDE Caseloader. The logic involves checking whether a unit is trapped at the Enablement maximum or Enablement minimum of each FCAS service trapezium and if so, amending the What-If Initial MW (unit output in pricing run) by a very small amount (0.0001 MW) to move the unit’s What-If output outside the trapezium (thus un-trapping the unit). Figure 1 below shows the proposed un-trapping logic to be applied in Intervention Pricing runs.

Figure 1 FCAS trapezium Untrapping logic



### Generators with zero ramp rates in Intervention Pricing runs

Generating units that offer zero ramp rates will have their What-If Initial MW set to their Initial MW for all intervals in the Intervention Pricing run. This is to reflect the fact that unit output can vary even if zero ramp rates are offered.

## Reporting

After completing the Intervention Pricing run, both the original base case target run and the Intervention Pricing run solutions will be fully reported to the market.

The base case target run solution is flagged as “Intervention=1” and the Intervention Pricing run solution is flagged as “Intervention=0”.

Dispatch prices from the Intervention Pricing run will be used in the averaging calculation of spot prices until the Five-Minute Settlement rule changes come into effect. From 1 July 2021, the dispatch prices will become spot prices. Those spot prices will then be used in the averaging calculation of 30‑minute prices.

#  “What-If” Inputs to the Intervention Pricing Calculation

Apart from the “What-if” inputs, the remaining market-based inputs that are passed to both the target and Intervention Pricing runs of the NEMDE dispatch algorithm (i.e. bids, offers, network constraints, demand) are identical.

Note that as an intervention progresses over time, the values of the “What-if” inputs derived in the Intervention Pricing run may differ significantly from the values of the corresponding inputs used in the base case target run, with this difference potentially increasing the longer the intervention continues.

1. The consultant’s report (‘Intervention Pricing Final report’) is included in the IPWG Meeting 1 – Meeting Pack available at: <https://www.aemo.com.au/Stakeholder-Consultation/Industry-forums-and-working-groups/Other-meetings/Intervention-Pricing-Working-Group> [↑](#footnote-ref-1)
2. <http://www.aemo.com.au/-/media/Files/Stakeholder_Consultation/Consultations/Electricity_Consultations/2018/Intervention-Pricing/Notice-of-First-Stage-Consultation---Intervention-Pricing-Methodology.pdf> [↑](#footnote-ref-2)
3. <http://www.aemo.com.au/-/media/Files/Stakeholder_Consultation/Consultations/Electricity_Consultations/2018/Intervention-Pricing/Intervention-Pricing-Methodology_Issues-Paper.pdf> [↑](#footnote-ref-3)
4. <http://www.aemo.com.au/-/media/Files/Stakeholder_Consultation/Consultations/Electricity_Consultations/2018/Intervention-Pricing/Intervention-Pricing-Methodology_Change-Marked.pdf>. [↑](#footnote-ref-4)
5. <https://www.aemc.gov.au/sites/default/files/2018-07/ERC0201%20note%20and%20amending%20rule.pdf>. [↑](#footnote-ref-5)