



16 January 2023

Submitted electronically: GWCF Correspondence@aemo.com.au

## RE: Wholesale Gas Market Parameters - Draft Determination

## **About Shell Energy in Australia**

Shell Energy is Shell's renewables and energy solutions business in Australia. Shell Energy delivers business energy solutions and innovation across a portfolio of electricity, gas, environmental products and energy productivity for commercial and industrial customers. Our residential energy retailing business Powershop, acquired in 2022, serves more than 185,000 households and small business customers in Australia. The company's generation assets include 662 megawatts of gas-fired peaking power stations in Western Australia and Queensland, supporting the transition to renewables, and the 120 megawatt Gangarri solar energy development in Queensland. Further information about Shell Energy and our operations can be found on our website here

## **Comments on the Draft Determination**

Shell Energy appreciates the rigorous process that AEMO and Market Reform have taken with this review. In particular, the transparency provided, responsiveness to input and feedback regarding stakeholder input has been greatly appreciated. However, we remain concerned by the inconsistency between the cumulative price threshold (CPT) setting in the declared wholesale gas market (DWGM) in Victoria and the short term trading markets (STTM) in the other states. We consider that by not removing, or at least reducing, this inconsistency the potential for inefficient market outcomes like those observed during Winter 2022 remain. We consider market settings that exacerbate the need for market intervention by AEMO to be suboptimal and an outcome that should be avoided by this review.

This submission describes a change to the calculation of the CPT in the DWGM that would better align the CPT calculation across all markets. It would also reduce the potential for market inefficiencies due to market intervention.

In calculating the CPT in the DWGM, the modelling considers that when a market price cap price is posted in one of the scheduling and pricing periods in the DWGM this applies to all gas traded in the DWGM regardless of the scheduling and pricing interval in which the price is posted. Whilst this could be considered correct for the 06:00 scheduling and pricing interval, as set out in Section 9 of AEMO's DWGM Technical Guide<sup>1</sup>, at the subsequent four scheduling and pricing intervals during a gas day, the price as set only applies to deviations in gas consumption from the previous withdrawal schedule. As such the current methodology allows the DWGM to exceed the CPT due to prices in these final four dispatch and pricing intervals absent any change in gas actually being settled at that price. This cannot occur in the STTM as all gas is settled on the single daily price.

Shell Energy proposes that consistency between the DWGM and the STTM could be improved by amending the calculation of the CPT in the DWGM to be based on the cumulative *volume weighted* price as opposed to the current simple time weighted price. The volume used in the calculation would be the volumes calculated and

<sup>&</sup>lt;sup>1</sup> Technical Guide to the Victorian Declared Wholesale Gas Market (aemo.com.au)





issued by AEMO Gas Operations Group through the gas day. For the 6:00am period this volume would be the Scheduled Withdrawal volume, for subsequent periods the volume would be the Deviation volumes.

Worked Example - based on Table 7 in AEMO's DWGM Technical Guide and gas data published for Gas Day 16 June 2022

| Schedule | Scheduled<br>Withdrawal<br>(TJ) | Deviation<br>from<br>Previous<br>Schedule<br>(TJ) | Gas<br>Price<br>(\$/GJ) | Scheduling<br>Period<br>Settlement<br>Amount (\$) | Cumulative<br>Settlement<br>Amount<br>(\$) | Cumulative<br>Volume<br>Weighted<br>Gas Price<br>(\$/GJ) | Current CPT<br>Calculated<br>Value | Revised CPT<br>Calculated<br>Value |
|----------|---------------------------------|---|-------------------------|---|--|--|------------------------------------|------------------------------------|
| 06:00    | 982                             | 0   | 35.50                   | 34,861,000  | 34,861,000                                 | 35.50  | 35.50                              | 35.50                              |
| 10:00    | 971                             | -11   | 34.80                   | -382,800  | 34,478,200                                 | 35.51  | 70.30                              | 71.01                              |
| 14:00    | 1022                            | 51  | 40.00                   | 2,040,000   | 36,518,200                                 | 3 <i>5.7</i> 3   | 110.30                             | 106.74                             |
| 18:00    | 1040                            | 18  | 39.00                   | 702,000   | 37,220,200                                 | 35. <i>7</i> 9   | 149.30                             | 142.53                             |
| 22:00    | 1016                            | -24   | 38.77                   | -930,480  | 36,289,720                                 | 35 <i>.</i> 72   | 188.07                             | 178.25                             |

In the next table, prices at the 14:00 and 18:00 schedule are adjusted to \$800/GJ to illustrate the change from the current time weighted average calculation.

| Schedule | Scheduled<br>Withdrawal<br>(TJ) | Deviation<br>from<br>Previous<br>Schedule<br>(TJ) | Gas<br>Price<br>(\$/GJ) | Scheduling<br>Period<br>Settlement<br>Amount (\$) | Cumulative<br>Settlement<br>Amount<br>(\$) | Cumulative<br>Volume<br>Weighted<br>Gas Price<br>(\$/GJ) | Current CPT<br>Calculated<br>Value | Revised CPT<br>Calculated<br>Value |
|----------|---------------------------------|---|-------------------------|---|--|--|------------------------------------|------------------------------------|
| 06:00    | 982                             | 0   | 35.50                   | 34,861,000  | 34,861,000                                 | 35.50  | 35.50                              | 35.50                              |
| 10:00    | 971                             | -11   | 34.80                   | -382,800  | 34,478,200                                 | 35.51  | 70.30                              | 71.01                              |
| 14:00    | 1022                            | 51  | 800.00                  | 40,800,000  | 75,278,200                                 | 73.66  | 870.30                             | 144.67                             |
| 18:00    | 1040                            | 18  | 800.00                  | 14,400,000  | 89,678,200                                 | 86.23  | 1670.30                            | 230.9                              |
| 22:00    | 1016                            | -24   | 38.77                   | -930,480  | 88,747,720                                 | 87.35  | 1709.07                            | 318.25                             |

Whilst two \$800 price intervals were set during the day, based on the equivalent settlement price calculation for the STTM, gas consumers in the DWGM would have paid an average of \$86.23 per GJ at the time the administered pricing period was declared. This is well below prices consumers in the STTM would have incurred prior to an administered price period being declared.

The proposed change in calculation methodology will still result in the CPT being triggered for sustained high prices in the DWGM in exactly the same way as would occur for settlement in the STTM. The proposed change also prevents the CPT being triggered in the event of two high prices in pricing and scheduling periods where the volume of gas traded (the deviation amount) is relatively small. The proposed change could also





allow the value of the CPT to be lowered to a value closer to the current and proposed market price cap in the DWGM.

For further detail or questions regarding this submission please contact Peter Wormald (peter.wormald@shellenergy.com.au).

Yours sincerely,

Libby Hawker GM Regulatory Affairs and Compliance