

NOTICE OF CONSULTATION

National Electricity Rules – Clause 3.6.5(a)

Five Minute Settlement – TNSP Negative Settlements Residue Procedure

Date of Notice: 01 April 2019

This notice informs all registered Transmission Network Service Providers (TNSPs) that AEMO is consulting on proposed amendments to the NEM Transmission Network Service Provider Negative Settlements Residue Procedure as a result of the Five Minute Settlement (5MS) rule change.¹

The TNSP Negative Settlements Residue Procedure provides for the timing, interval and methodology for payment of negative settlement residues under clause 3.6.5(a)(4) of the National Electricity Rules, and for the recovery of any related interest costs under clause 3.6.5(a)(4A). AEMO must determine these matters following consultation with TNSPs.

5MS Rule

The 5MS rule will align the current 30-minute trading intervals for NEM settlement with five-minute dispatch intervals with effect from 1 July 2021. AEMO is in the process of reviewing and consulting on amendments to a number of procedures impacted by this change.

AEMO's assessment is that the TNSP Negative Settlements Residue Procedure requires only minimal change to accommodate 5MS. The proposed changes are set out below, and a draft of the proposed amended procedure is attached to this notice.

Proposed changes

1. Update worked example in section 6.1 to align quantities with 5 minute trading interval times.
 - Existing Example:

*An interconnector between 2 regions with a flow of 1000MW (i.e. 500MWh per trading interval)
Prices in the regions are \$10,000 and \$100 (flow from higher to lower priced region)
Negative Residue = 500MWh x (\$10,000 - \$100) = \$4.95 Million per trading interval
The residue would be limited by the cumulative price threshold being exceeded, however could reach
\$4.95 Million x 15 = \$74 Million*

The multiple of 15 in the above example relates to the cumulative price threshold (CPT). Currently the CPT is approximately 15 times the market price cap, i.e.:

- MPC = \$14,500
- CPT = \$216,900

¹ National Electricity Amendment (Five minute settlement) Rule 2017 No. 15, available at: <https://www.aemc.gov.au/rule-changes/five-minute-settlement>

- CPT/MPC = 14.96

The multiplier is not exactly 15 because of the way MPC and CPT are rounded when they increase each year.

Under 5MS, the flow per trading interval in the example will be 6 times lower for a five minute interval, and the CPT multiplier will be 6 times higher (see clause 3.14.1(e)).

AEMO's proposed update of the worked example is shown below.

- Updated Worked Example:

An interconnector between 2 regions with a flow of 1000MW (i.e. 83MWh per trading interval)

Prices in the regions are \$10,000 and \$100 (flow from higher to lower priced region)

Negative Residue = 83MWh x (\$10,000 - \$100) = \$0.825 Million per trading interval

The residue would be limited by the cumulative price threshold being exceeded, however could reach \$0.825 Million x 90 = \$74 Million*

**Approximation only. Represents the approximate number of trading intervals for which spot prices could be at the market price cap before reaching the cumulative price threshold.*

2. Template change and update

AEMO is also taking the opportunity to update the TNSP Negative Settlements Residue Procedure to its most recent template. This includes changes to the way in which the introductory details are presented (purpose, scope, definitions, background etc.), and how relevant rules and defined terms are referenced, but does not involve any substantive amendments.

Related documents considered

- AEMO has considered the impact of 5 minute intervals on the \$100,000 prepayment threshold in regard to shortfall risk. This threshold was chosen to avoid small negative residue amounts from being prepaid where non-payment would not have any significant impact on AEMO's ability to pay generators. The value applies to the entire billing week (not individual trading intervals), and so is not impacted by a change from 30-minute to 5-minute.
 - AEMO concluded that the current risk matrix is sufficient and still largely valid, therefore no change is necessary.
 - As a result no amendment in consulted TNSP Negative Settlements Residue procedure, and related procedure Dispatch SO_OP_3705 in regard to the \$100,000 threshold.
- The TNSP Negative Settlements Residue Procedure also references the AEMO guidance document: Methodology for the Allocation and Distribution of Settlements Residue. AEMO has not identified any necessary changes related to this guide as a result of 5MS implementation.

Consultation Process

AEMO invites TNSPs to provide feedback by 3 June 2019 on:

- AEMO's proposed changes to the worked examples in section 6.1 of the Transmission Network Service Provider Negative Settlements Residue Procedure.

- Whether any other changes or clarifications to the procedure should be considered to accommodate 5MS.
- Whether any changes may be required to the related documents referenced in the procedure, namely Dispatch SO_OP_ 3705² and the Methodology for the Allocation and Distribution of Settlements Residues.³

Any submissions should be made in writing and emailed to 5ms@aemo.com.au by 5.00pm (Melbourne time) on 3 June 2019.

² Dispatch SO_OP_ 3705 procedure available at: https://www.aemo.com.au/-/media/Files/Electricity/NEM/Security_and_Reliability/Power_System_Ops/Procedures/SO_OP_3705---Dispatch.pdf.

³ Methodology for the Allocation and Distribution of Settlements Residues available at: https://www.aemo.com.au/-/media/Files/PDF/Methodology_for_the_Allocation_and_Distribution_of_Settlements_Residue_July_14.pdf