

STANDALONE POWER SYSTEMS (SAPS)

ISSUES PAPER

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EXECUTIVE SUMMARY

The publication of this Issues Paper commences the first stage of the Rules consultation process conducted by AEMO to determine the appropriate IT design options to support the Standalone Power Systems (SAPS) Priority One Framework under the National Electricity Rules (NER).

AEMO has prepared this Issues Paper to facilitate informed debate and feedback by industry about the most efficient way to meet the objectives for implementing the SAPS Framework in AEMO Retail Electricity Market and Settlement procedures. AEMO has considered three options so that a participant can identify in MSATS a NMI that is connected to a SAPS. These options are:

1. Identifying SAPS NMIs using Transmission Node Identifier (TNI) Code with a SAPS Flag against it which appears in MSATS.
2. Identifying SAPS NMIs using TNI Codes with special convention or format for SAPS TNI Codes (a SAPS flag will be used against the TNI Codes only internally and will not appear to the participants in MSATS).
3. Identifying SAPS NMIs using a new SAPS ID field.

AEMO considers that there are advantages and disadvantages of implementing each of the three options.

AEMO invites stakeholders to suggest alternative options where they do not agree that AEMO's proposals would achieve the relevant objectives.

AEMO also asks stakeholders to identify any unintended adverse consequences of the proposed changes.

Stakeholders are invited to submit written responses on the issues and questions identified in this paper by 5.00 pm (Sydney time) on 6 April 2022, in accordance with the Notice of First Stage of Consultation published with this paper.



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1. STAKEHOLDER CONSULTATION PROCESS

As required by the NER, AEMO is consulting on SAPS in accordance with the Rules consultation process in rule 8.9.

AEMO's indicative timeline for this consultation is outlined below. Dates may be adjusted depending on the number and complexity of issues raised in submissions and any meetings with stakeholders.

Deliverable	Indicative date
Issues Paper published	Tuesday, 1 March 2022
Submissions due on Issues Paper	Wednesday, 6 April 2022
Draft Report published	Monday, 9 May 2022
Submissions due on Draft Report	Tuesday, 24 May 2022
Final Report published	Tuesday, 5 July 2022

Prior to the submissions due date, stakeholders can request a meeting with AEMO to discuss the issues and proposed changes raised in this Issues Paper.

During the consultation process AEMO also intends to work with the Electricity Retail Consultative Forum (ERCF) to work through the options for implementing the SAPS framework described in this Issues Paper.



2. BACKGROUND

2.1 NER requirements

AEMO is responsible for the establishment and maintenance of metering procedures specified in Chapter 7 except for procedures established and maintained under NER 7.17.

The procedures authorised by AEMO under NER Chapter 7 must be established and maintained by AEMO in accordance with the NER, including NER 7.16.7.

2.2 Context for this consultation

On 28 May 2020, the AEMC published the Final Report and Proposed Rules for Updating the regulatory frameworks for the distributor-led Stand-Alone Power Systems (SAPS) Priority 1. The Final Report set out a national framework that facilitates the provision of SAPS by DNSPs to their existing customers, where these offer a lower cost substitute to investing in, and maintaining, traditional network solutions.

AEMO will need to consult on changes to several procedures relating to the Retail Electricity Market and Settlement.

Prior to drafting the changes to the procedures, AEMO must first decide the appropriate way to identify in MSATS that a NMI is connected to a SAPS.

AEMO has identified three options for this, each option is discussed in more detail below. There are advantages and disadvantages with each of the three options.

AEMO has no clear preference for any of the three options. Through this consultation, AEMO is seeking guidance as to the preferred approach for industry, the preferred option will influence consequential procedure changes required to support the preferred option.



3. OPTIONS FOR IDENTIFYING A NMI IS CONNECTED TO A SAPS

A NMI connected to a SAPS will have a different wholesale settlement price to other NMIs in a region, as such, the NMI will need to be identifiable and discoverable by market participants and AEMO.

AEMO has come up with three options for identifying that a NMI is connected to a SAPS as follows:

1. Identifying SAPS NMIs using TNI Code with a SAPS Flag against it which appears in MSATS.
2. Identifying SAPS NMIs using TNI Codes with special convention or format for SAPS TNI Codes (a SAPS flag will be used against the TNI Codes only internally and will not appear to the participants in MSATS).
3. Identifying SAPS NMIs using a new SAPS ID field.

3.1 Option 1: TNI Code with a SAPS Flag

Under this option, MSATS would include a "SAPS Flag" which would identify to participants that the NMI is supplied through a SAPS. This flag would be discoverable.

3.1.1 High Level Impacts

AEMO systems	
Registration	TNI Codes for each SAPS would be created in the Registration management Client (RMC) system with an on/off SAPS Flag against it to indicate if the TNI Code is for a SAPS or not.
MSATS	<p>TNI Codes along with their SAPS flags will be pushed to MSATS from RMC and replicated automatically into the MSATS TNI Codes table.</p> <p>DNSPs will be able to identify the SAPS TNI Codes by reviewing the TNI Codes table which would have SAPS flags against each TNI Code (where appropriate). The DNSPs would be able to use that information to select the correct TNI Code when creating a new SAPS NMI or converting an existing NMI to a SAPS NMI.</p> <p>TNI Codes SAPS flags would appear in NMI Discovery for participants to be able to determine if a NMI is a SAPS NMI.</p> <p>This would potentially require two changes to the schema, one for adding the SAPS Flag into the TNI Codes table, and one for adding the SAPS flag into NMI Discovery.</p>
Settlements	<p>The AEMO settlements system would be able to filter SAPS NMIs and its metering data by checking the SAPS flag against the TNI Codes in RMC.</p> <p>No changes would be required to Meter Data Management (MDM) files or Profile Allocation Engine (PAE) as the TNI Codes exist already in the MDM files.</p> <p>Less implementation and integration costs will be required in this option as compared to option 3.</p>

3.1.2 Participant impacts

Participants would need to be educated about the new SAPS Flag to be applied against the TNI Code in MSATS which they would be able to reference in the MSATS TNI Codes table, and in NMI discovery.



Participants would be required to perform schema changes in their systems for the new SAPS flag field associated with the SAPS TNI Codes.

If changes are made to NMI Discovery, participants may need to change their systems accordingly.

3.2 Option 2: TNI Codes with special convention or format for SAPS TNI Codes

SAPS NMIs would be identified using TNI Codes with a special naming convention or format for SAPS TNI Codes. That is, a SAPS flag would be used against the TNI Codes internally to AEMO only and would not otherwise be visible to participants in MSATS.

3.2.1 High Level Impacts

AEMO systems	
Registration	<p>RMC system: TNI Codes for each SAPS would be created in the RMC system with an on/off SAPS Flag against it to indicate if the TNI Code is for SAPS.</p> <p>SAPS TNI Codes would have to be created following a specific format or convention for SAPS.</p>
MSATS	<p>SAPS TNI Codes would be created in MSATS using a special format or convention for SAPS. Participants would use that special convention or format to identify the SAPS specific TNI Codes.</p> <p>A list of SAPS specific TNI Codes could be published for participants which can be cross-referenced when they wish to create SAPS NMIs, associate existing NMI with SAPS, or to discover a SAPS NMIs.</p> <p>The RMC SAPS flag associated with the TNI Codes would not appear in MSATS and will only be used internally to AEMO, this means that no schema change would be required in MSATS for this option.</p>
Settlements	<p>The AEMO Settlements system will be able to filter SAPS NMIs and its metering data through checking the SAPS flag against the TNI Codes in RMC.</p> <p>No changes will be required to MDM files or PAE as the TNI Codes exist already in the MDM files.</p> <p>Less implementation and integration costs will be required in this option as compared to option 3.</p>

3.2.2 Participant Impacts

Participants would need to be educated about the special format and naming convention for the SAPS specific TNI Codes. They would need to be informed about the list of published SAPS specific TNI Codes to use when creating, updating, or discovering SAPS NMIs in MSATS.

No Schema change will be required on the participant side.



3.3 Option 3: SAPS ID field

Identifying SAPS NMIs using a new SAPS ID field.

3.3.1 High Level Impacts

AEMO systems	
Registration	Not applicable.
MSATS	<p>A new SAPS ID field would be created in MSATS. A new SAPS ID would be created for each SAPS in MSATS.</p> <p>When creating a new SAPS NMI or changing an existing NMI to be a SAPS NMI, DNSPs would need to set the right SAPS ID value against the NMI in MSATS.</p> <p>Participants would be able to discover the SAPS NMIs in MSATS through the new SAPS ID field appearing against the NMI in NMI discovery.</p> <p>A schema change will be required to add the new SAPS ID field to MSATS.</p>
Settlements	<p>The AEMO settlements system would be able to filter SAPS NMIs and its metering data through checking the SAPS ID field in the MDM files.</p> <p>Changes would be required to MDM files and PAE as the SAPS ID field is a new field that will be added to the MDM files and interfaces between MSATS and the settlements systems,</p> <p>This is a more costly solution for AEMO when it comes to implementation and integration costs for the NEM settlements system when compared to Options 1 and 2.</p>

3.3.2 Participant Impacts

Participants would need to be educated about the new SAPS ID field and how it will be used for creating, updating and discovering the SAPS NMIs in MSATS.

A schema change would be required for participants.

Questions

- Are there other advantages/disadvantages of any of the options that AEMO should have considered?
- Is there another option for identifying a SAPS NMI that AEMO should consider? Why?
- Which of the three options for identifying a SAPS NMI do you prefer and why?



4. SUMMARY OF MATTERS FOR CONSULTATION

In summary, AEMO has prepared this Issues Paper to facilitate informed debate and feedback by industry about the most efficient way to meet the objectives for implementing the SAPS Framework in AEMO procedures. Prior to producing the draft procedural changes, AEMO has considered and is consulting on three options for identifying in MSATS a NMI that is connected to a SAPS are:

1. Identifying SAPS NMIs using TNI Code with a SAPS Flag against it which appears in MSATS.
2. Identifying SAPS NMIs using TNI Codes with special convention or format for SAPS TNI Codes (a SAPS flag will be used against the TNI Codes only internally and will not appear to the participants in MSATS).
3. Identifying SAPS NMIs using a new SAPS ID field.

In this issues paper AEMO seeks comment and feedback on the best way to identify a SAPS NMI.

Submissions on these and any other matter relating to the proposal discussed in this Issues Paper must be made in accordance with the Notice of First Stage of Consultation published with this paper by 5.00 pm (Sydney time) on 6 April 2022.