23 FEBRUARY 2023



# **SOLUTION PROPOSAL**

**Electricity Authority**CR-1208 EIEP5A Registry Format



#### Request for a change to the services provided under terms of agreement

This change request from the Electricity Authority (Authority) requests variation(s) under the terms of the agreement, services, or system, as applicable, in accordance with Clause 7 of the Registry Manager Service Provider Agreement - (MOSPA).

Version	Date	Reason for Change	Changed By
draft	30/11/2017	Initial	Jade Software Corporation
Draft v2	11/05/2018	Comments from consultation	Jade Software Corporation
Draft v3	06/06/2018	Comments from consultation	Jade Software Corporation
Draft v4	23/08/2018	Draft for EIEP consultation	Authority
Draft v5	13/11/2018	Final draft for EIEP consultation	Authority
Draft v6	7/05/2019	Post consultation draft	Authority
Draft v6.1	26/06/2020	Decision paper draft	Authority

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## **Objective**

Distributors are required to notify affected consumers directly and/or provide planned service interruption information to Traders to enable the Trader to:

- notify its affected customers
- record details in its customer information system so it can: (i) proactively contact or respond to queries from critical customers, and (ii) respond with correct information to 'no power' calls from customers.

With the decision to make EIEP5A a regulated EIEP, the planned service interruption information provided to Traders will have to comply with EIEP5A.

Currently, EIEP5A files are required to contain all affected ICPs and are delivered to each Trader via email (the default) or via the Registry EIEP transfer hub (where agreed).

The Authority is proposing an enhanced delivery mechanism, as outlined in this solution proposal, that provides for:

- MEPs to be able to elect to receive EIEP5A files
- alternative delivery channels for distributors, Traders, and MEPs
- customisation of output files to reflect Trader preferences (e.g. Traders may elect to receive files containing all ICPs or only those ICPs of interest to the Trader (split files))
- functionality to address the risks associated with split files of missed notifications arising from Trader switches (including backdated switches and switch withdrawals) completing during the notification window.

To standardise the provision of planned service interruption information to Traders that provides the above customisation and functionality, the EIEP5A format will be consolidated into the Registry. Distributors will supply planned service interruption information to the Registry which will then distribute the information to affected participants including both Traders and MEPs.

The Registry uses a standard header (HDR) record which is incompatible with the existing EIEP5A HDR record. To avoid cost on Distributors who have invested in using the EIEP5A format and EIEP hub, the Registry will accept files from either the Registry SFTP server or EIEP hub.

Files received from the EIEP hub will be transferred to the Registry SFTP server to allow processing to commence at a common entry point. If necessary, the Registry will automatically create and insert a standard Registry HDR record.

Results of file validations (HDR and DET lines) will be returned to the file's point of origin (including both the Distributor and Distributor's agent if the sender is an agent which has used a valid participant identifier or non-participant identifier that is known to the Registry).

#### **User Story**

As a Trader in the electricity market, I want to receive planned service interruption notifications and information via a channel and in a form (customised to some extent to reflect our

preferences) that enables us to efficiently process and record details of notifications to existing customers and customers who switch to us with a completion date within the notification window (including backdated switches and switches subsequently withdrawn). I would also like to be able to access specific planned service interruption information at any time on the Registry and be confident that it is up to date and relevant to the relationship I have, or wish to have, with an ICP.

## **Brief Description**

Distributors (or their agent) will submit a list of ICPs to the Registry with a set of planned service interruption times, the Registry will ensure affected participants are notified of the planned service interruption.

An affected participant includes:

- the current Trader;
- the current MEP;
- if a Trader switch is in progress (including backdated switches and switches subsequently withdrawn): the gaining Trader involved in the switch (only applicable where the Trader has elected to receive initial advice files containing only ICPs for which it is responsible);
- if a MEP switch is in progress: the gaining MEP involved in the switch.

A Distributor may amend previously supplied planned service interruption information at any time prior to the planned service interruption, and the Registry will convey the revised information to the affected participants. Amendments may include:

- Variations to the interruption dates and/or times
- Addition of new ICPs
- Removal of previously supplied ICPs
- Cancellation of interruptions to previously supplied ICPs

The Registry will monitor ICPs affected by planned service interruptions, and where a change in responsibility occurs the Registry will ensure the gaining participant is informed of the planned service interruption (only applicable for Traders where the Trader has elected to receive initial advice files containing only ICPs for which it is responsible).

# **Related Documents**

CR-1208 EIEP5A Appendix A.docx

## **Business Requirements**

Planned Service Interruption (PLINT) A Distributor (or its agent) may submit a file in either the EIEP5A file format using the EIEP hub, or the Registry file format using the standard batch interface.

The Registry must process a Planned Service Interruption File when

- a) a file is submitted using the EIEP transfer hub and the Registry is the recipient; or
- b) at any time where a file is submitted using the standard batch interface

Where a file is submitted by an agent on behalf of the Distributor, acknowledgements, and confirmations will be returned to both the agent (as 'Sender' in the EIEP5A filename and header) provided the agent has used a participant identifier or non-participant identifier that is known to the Registry, and the Distributor (as owner of information in the file with the Distributor's network participant identifier used in the 'Sent on behalf of participant' field).

The Registry must use the EIEP5A header (HDR) to determine who the Distributor is and who the agent is in order to send acknowledgements and confirmations to the correct party, and for EIEP5A there may be additional acknowledgements and confirmations sent depending on the header information, as follows:

- If 'Sent on behalf of participant' is Null, it indicates the Distributor has submitted the file and 'Sender' in the file name and header must be the Distributor's network participant identifier. Acknowledgements and confirmations must be sent to the Distributor.
- If 'Sent on behalf of participant' is a participant identifier, it indicates an agent has submitted the file and 'Sender' in the file name must be the agent's valid participant identifier or non-participant identifier that is known to the Registry. Acknowledgements and confirmations must be sent to both the agent and Distributor ('Sent on behalf of participant' must be the Distributor's network participant identifier).
- For the avoidance of doubt:
  - If an agent submits a file using its own EIEP directory then the 'Sender' in the file name must be its own valid participant identifier or non-participant identifier that is known to the Registry, otherwise the Registry will reject the file.
  - If an agent submits a file using the Distributor's EIEP directory it must ensure the 'Sender' in the file name is the Distributor's network participant identifier.

#### Load of PLINT Information using Standard Batch Interface

The Registry must provide a batch interface allowing a Distributor (or its agent) to upload Planned Service Interruption (PLINT) files.

The file submitted by a Distributor (or its agent) must contain:

a standard Registry header (HDR) line; followed by

- a second header (HDR) line (in accordance with the EIEP5A header (HDR) line requirements); followed by
- 1 or more detail (DET) lines (in accordance with the EIEP5A detail (DET) line requirements). Note; for a cancellation, as per business requirement 13 in EIEP5A, the cancellation must be by means of the appropriate communication type code in EIEP5A and the file may include all ICPs affected. To ensure backward compatibility for participants, the Registry will ignore any DET lines included in a cancellation file.

The Registry must validate the header (HDR) lines. If information provided in either HDR line fails validation the entire file must be rejected, all detail lines must be rejected with an error stating failure is due to an error in a HDR record.

A Distributor must supply a Distributor Event Number which uniquely identifies each new planned service interruption for that Distributor; that is:

the Registry must identify for each new planned service interruption file that the
 Distributor Event Number is unique (i.e., not reused from a previous planned service
 interruption that has completed for that Distributor), by a combination of the
 Distributor's network participant identifier and Distributor Event Number

if the Registry identifies a Distributor Event Number already exists for that Distributor and is not unique, and the planned service interruption that used the same Distributor Event Number has completed, the entire file must be rejected. The Registry must validate individual detail (DET) lines.

SI-020 (Maintain ICP planned service interruption information) provides more information regarding validations to be performed by the Registry.

The Registry must return an acknowledgement file to the submitting Distributor's fromreg folder on the Registry SFTP (and agent's Registry fromreg folder on the Registry SFTP if sender in the file name is an agent with a valid participant identifier or non-participant identifier that is known to the Registry). The file must contain an acknowledgement for the HDR and DET input lines stating either:

- Success error code 0
- Failure non-zero error code.

The Registry must load interruption information for all valid DET lines.

Where all DET lines fail validation, the Registry must reject the entire file; that is a minimum of 1 DET line must pass validation for the file information to be loaded to the Registry.

#### Load of PLINT Information using EIEP Hub

An EIEP5A file submitted by a Distributor (or its agent) to the Registry participant identifier; that is where the recipient is RGST, must:

 a) be delivered to the Registry EIEPIn box with acknowledgments and confirmations generated to the sender (including both the agent and Distributor if sender is an agent with a valid participant identifier or non-participant identifier that is known to the Registry) considering the Distributor's EIEP notification settings; and b) transferred to the Registry participant's SFTP input batch directory to be processed in the same manner as a file submitted using the standard batch interface.

The Registry must validate the HDR and DET lines in the EIEP5A format file as for a Registry format file submitted using the standard batch interface, and a file of validation results must be returned to the submitting Distributor's EIEP hub (and agent's EIEP hub if sender is an agent with a valid participant identifier or non-participant identifier that is known to the Registry). The format of the results file is the input file name with ".result" appended.

A file may be submitted to the EIEP hub in EIEP5A format (that is excluding the standard Registry HDR line), or to the EIEP hub in Registry file format (that is including the standard Registry HDR line). If submitted in Registry file format the Registry must validate both HDR lines and the DET lines.

#### File submitted to EIEP Hub in EIEP5A format

Before transferring the file to the Registry participant's SFTP input batch directory, the Registry must insert a valid standard Registry header (HDR) line as the first line of the file, so the file conforms with the Registry file format definition. File submitted to EIEP Hub in Registry standard format

The Registry must transfer the file to the Registry batch toreg directory.

#### **Revision of PLINT Information**

A Distributor may revise non-historical PLINT information, by the Distributor (or its agent) submitting a replacement file with a Distributor Event Number matching an existing Distributor Event Number.

A replacement file is treated as a complete replacement of the existing PLINT information.

The Registry must validate a replacement file in the same manner as the initial advice file. If the replacement file is successfully validated:

- existing matched PLINT information must be replaced by the latest information, with a match obtained against the ICP identifier
- any additional ICPs must be added to the planned service interruption
- ICPs not present in the replacement file must be removed.

#### Cancellation of PLINT information

A Distributor may cancel non-historical PLINT information, by the Distributor (or its agent) submitting a cancellation file with a Distributor Event Number matching an existing Distributor Event Number.

A cancellation file must have communication type code PLC in the EIEP5A header and may include detail lines for all ICPs affected. To ensure backward compatibility for participants, the Registry will ignore any DET lines included in a cancellation file.

The Distributor must not reuse the Distributor Event Number in a subsequent file.

#### PLINT notification options

#### Planned Service Interruption receipt options

A Trader may elect to receive planned service interruption notifications via its:

- EIEP hub input directory (the default), and in either:
  - EIEP5A file format (that is excluding the standard Registry batch file HDR line); or
  - Registry file format (that is including the standard Registry batch file HDR line);
    and/or
- fromreg folder on the Registry SFTP server, in Registry file format (that is including the standard Registry batch file HDR line).

A MEP may elect to receive planned service interruption notifications via its:

- fromreg folder on the Registry SFTP server (the default), in Registry file format (that is including the standard Registry batch file HDR line); and/or
- EIEP hub input directory, and in either:
  - o EIEP5A file format (that is excluding standard Registry batch file HDR line); or
  - o Registry file format (that is including the standard Registry batch file HDR line).

#### Participant Planned Service Interruption receipt file output options

A MEP may elect to:

- not receive planned service interruption information; or
- receive planned service interruption information (the default), including additional notifications as the gaining MEP where a MEP switch has a completion date between the initial notification and the start date of the planned service interruption, with the notification to include:
  - o no description (DES) line (the default); or
  - a description (DES) line sitting below the standard batch interface header (HDR) line and above the EIEP5A header (HDR) line

A Trader may elect to receive notification of a planned service interruption with the notification to include:

• all ICPs affected (the default); or

- only ICPs the Trader is responsible for, including additional notifications as the gaining Trader where a Trader switch has a completion date between the initial notification and the start date of the planned service interruption
- no description (DES) line (the default); or
- a description (DES) line sitting below the standard batch interface header (HDR) line and above the EIEP5A header (HDR) line.

## Registry Notifies of a planned service interruption

Subject to the relevant elections and defaults, a Trader/MEP must be notified of a PLINT where that PLINT contains at least 1 ICP where the Trader/MEP is:

- a) the current Trader
- the gaining Trader following a Trader switch with a completion date between the initial notification and the start date of the planned service interruption, but only where the Trader has elected to receive notifications containing only the ICPs it is responsible for
- c) the current MEP
- d) the gaining MEP following a MEP switch with a completion date between the initial notification and the start date of the planned service interruption.

Subject to the relevant elections (and defaults), the Registry must generate a notification file and deliver the Registry format file to the participant's fromreg folder on the Registry SFTP server (the default for MEPs) or an EIEP5A format file to the participant's EIEPIn folder on the EIEP hub (the default for Traders), or both.

Where a participant performs multiple roles on an ICP and uses the same participant identifier for both roles, for example where it is both a Trader and MEP with a common participant identifier, they must receive a separate planned service interruption notification for each role..

Where a planned service interruption has been cancelled notifications must only be sent to participants previously notified.

It is noted that EIEP5A specifies that significant changes to the ICPs affected by a planned service interruption should be processed as a cancellation and a new planned service interruption, rather than a revision. This business rule will not be enforced by the Registry.

#### Registry Notifies due to change of responsibility

Where an ICP is subject to a change in Trader/MEP responsibility occurring at a point after the load of PLINT information but before the start date of the planned service interruption the Registry must notify the gaining Trader/MEP provided the gaining Trader/MEP has not already been notified (e.g. gaining Trader is not to be notified if it has elected to receive EIEP5A files containing all affected ICPs).

For the purposes of additional notifications to the gaining Trader/MEP following completion of a Trader/MEP switch, the 'start date of the planned service interruption' means:

 for an event with a single service interruption, start date or alternate date (whichever is later) of interruption 1; or

• for an event with multiple service interruptions, start date or alternate date (whichever is later) of the final interruption.

#### Participant ad-hoc request for Planned Service Interruption information

#### Batch and EIEP interface

A Distributor, Trader or MEP may request a resend of planned service interruption notifications. The resend request may be submitted by either batch file or on-line. The participant may request to receive information for:

- a specific Distributor; that is all planned service interruption events supplied by the Distributor; or
- a specific Distributor Event Number; that is a specific planned service interruption event supplied by a Distributor; or
- all distributors; that is all planned service interruption events supplied by all distributors

The Registry must create a notification file and deliver each file to the participant in accordance with their notification and file format settings.

#### Web Service interface

Jade will provide a WSDL (SOAP) allowing participants to build a client application to call an API to return impending planned service interruptions.

The web services interface for planned service interruption information will be dedicated to PLINT information.

All responses must reflect the participant's notification parameters (e.g. all ICPs or only ICPs the participant is responsible for).

To access planned service interruption information:

- 1. A participant will poll the Registry supplying a logon, password and
  - a. ICP identifier; or
  - b. Distributor Event Number; or
  - c. Network participant identifier.
- 2. The Registry will validate
  - a. the supplied credentials, and
  - b. that the participant has authorisation to access the web service.
- 3. The Registry will send a response, the response will contain:
  - a. An error stating

- i. access denied if the participant does not have authorisation to use the web service; or
- ii. invalid credentials have been supplied; or
- current and impending planned service interruption information supplied for the ICP identifier; or
- c. current and impending planned service interruption information supplied for the Distributor Event Number: or
- d. current and impending planned service interruption information supplied for the network participant identifier; or
- e. a "No current or impending planned service interruptions for the ICP supplied" response; or
- f. a "No ICPs for which the requester has responsibility are included in any current or impending planned service interruption with this Interruption Reference Number" response; or
- g. a "No ICPs for which the requester has responsibility are included in any current or impending planned service interruption on this network" response.

There may be 0, 1 or more sets of planned service interruption information returned (e.g., if ICP is involved in > 1 planned service interruption). The Registry may be required to set limits or enforce multiple calls to retrieve the information. This would depend on the size of the information.

## Display ICP Current and Impending Planned Interruption Information

The Registry must display, on the ICP summary page, summarised information concerning current and impending planned service interruptions. The information must be for non-cancelled interruptions only; that is where PLINT communication type code is one of:

- PLS (initial advice)
- PLI (Initial advice for information only)
- PLR (Revision)

#### Display all ICP Service Interruption Information

The Registry must display a complete list of planned service interruption records for an ICP. The list may be filtered to show impending, current, historical or all planned service interruptions.

#### **ICP Summary Screen**



Where a complete set of summarised information cannot be displayed (due to space constraints) the summation information must indicate this by display of 3 full stops i.e. "...".

Summarised information must include current and impending planned service interruption periods; that is historical planned service interruptions are excluded.

Where an ICP has impending non-cancelled planned service interruptions the user must be able to navigate to a screen displaying a complete (non-summarised) set of information (Planned Service Interruptions for ICP).

#### All Planned Service Interruptions for ICP (indicative)

Planned service interruption information for an ICP may be filtered to show impending, current, historical or all.

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#### Planned Service Interruptions for ICP 00001234568AA12

Planned Service Interruptions (PLINT) record instances where an ICP may experience disconnection from the grid. These records are provided by the distributor to the Registry which then distributes the information to participants who may be affected so they may record details in their customer information systems and notify affected customers.

▼ Outage Start	▼ Outage End	▼ Alternate Start Date
25/12/2017 00:00	25/12/2017 10:30	26/12/2017
01/01/2018 00:00	01/01/2018 4:30	02/01/2018
08/01/2018 00:00	08/01/2018 23:00	09/01/2018
15/01/2018 00:00	15/01/2018 00:30	16/01/2018

## Registry PLINT Retention period

The Registry must retain planned interruption information for a period of 100 working days after the final planned service interruption period end date.

The Registry must retain the Distributor Event Number for a defined period (default 1095 days or 3 years) after which it may be reused.

# Impact on Market Operations Service Provider (MSOP) systems or processes

No impact

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# Implementation

## Schedule

To be agreed with the Authority.

#### Resources

Project resources are available

## Risk

None identified