



Electricity Authority

Service Report and User Guide

June 2021

Prepared by Jade Operations

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OPERATIONAL ITEMS

Performance Standards

Measurement	Requirement	Actual	Met	Ref
Number and detail of service Provider Code or agreement breaches and details	Report delivered to Authority detailing breaches		Yes	Schedule 2 Non-functional requirements 5.2 table 1
Disaster recovery and backup obligations			Yes	Schedule 2 Non-functional requirements Section 7 (7.1 and 7.4)
Number and details of participant rule breaches	Report on 1 st business day delivered to Authority SFTP directory	01Jul21 at 02:31	Yes	
Maximum number of concurrent users for month		1357	Yes	Schedule 2 Non-functional requirements 2.7
During regular service hours (0730 hours to 1930 hours each day), the provider must ensure that the system is available to participants for no less than 99.9 per cent of the time in any one month. This statistic considers that planned, pre-approved, non-urgent maintenance outages are not included in the calculation of availability		100%	Yes	Schedule 2 Non-functional requirements 5.2 table 1
Outside regular service hours (between 1930 hours and 0730 hours) the provider must ensure that the system is available to participants for no less than 98.0 per cent of the time in any month. This statistic considers that planned outages will not count against availability level targets.		100%	Yes	Schedule 2 Non-functional requirements 5.2 table 1
The Registry must use its best endeavours to provide a service availability of 99.8 per cent or better, with nil or minimal outages.		100%	Yes	

Unless otherwise approved in writing in advance by the Authority (such timely approval not to be unreasonably withheld) there must be no more than two planned outages per month, one of which is reserved for the monthly production release of software. Each planned outage must be at a time to be agreed by the parties and be no more than 2 hours in duration. Any planned outage of more than 2 hours duration must have the prior approval of the Authority, such timely approval not to be unreasonably withheld. Approved, pre-planned outages do not count against service level targets.		1) Scheduled outage for production deploy 27 June.	Yes	Schedule 2 Non-functional requirements 5.3
Service response time of transactions sampled at regular intervals (every 1–5) minutes as agreed between the Authority and the Provider) during regular service hours for the system at the delineation point of the system to external communications providers			Yes	Schedule 2 Non-functional requirements 5.2 table 1
96% of all sampled transactions will have a response time of less than 2 seconds for all the components managed by the system at the delineation point of the Registry network. Longest time period in seconds Percentage of transactions exceeding 2 seconds		<2 =99.77% 48 0.23%	Yes	Schedule 2 Non-functional requirements 5.2 table 1
90% will have a response time of less than 1 second for all the components managed by the system at the delineation point of the Registry network Percentage of transactions exceeding 1 second		<1 =99.53% 0.47%	Yes	Schedule 2 Non-functional requirements 5.2 table 1
Number of password lockout alerts. Investigation of all repeated lockout alerts required.		0		Schedule 2 Non-functional requirements 25.1 (n)
Help desk available	7:30 to 19:30 hours each business day	100%	Yes	Clause 11.20
Registry reports to participants day 1 09:00	09:00 hours on the first business day of the month	30Jun21 20:12	Yes	Clause 11 of Schedule 11.1
Issuing of confirmation notices within 4 hours of receipt of information provided			Yes	Clause 11.21
Number of ICP's changing traders	16:00 on the 6 th business day of the month		Yes	Clause 11.23

Such other information as may be agreed from time to time between the Registry and the Board	16:00 on the 6 th business day of the month		Yes	Clause 11.23
Reports to the clearing manager and systems manager by 16:00 on first business day of the month	16:00 on first business day	01Jul2021 00:26	Yes	Clause 11.24
By 16:00 on 4 th business day deliver to the reconciliation manager the ICP days report	16:00 on 4 th business day	06Jul2021 01:30	Yes	Clause 11.26
By 16:00 on 4 th business day deliver to the reconciliation manager the loss factors report	16:00 on 4 th business day	02Jul2021 00:00	Yes	Clause 11.26
By 16:00 on 4 th business day deliver to the reconciliation manager the balancing area report	16:00 on 4 th business day	02Jul2021 00:00	Yes	Clause 11.26
By 16:00 on 4 th business day deliver to the reconciliation manager the half hour identifiers report	16:00 on 4 th business day	06Jul2021 04:38	Yes	Clause 11.26
By 16:00 on 1 st business day deliver to the market administrator (Authority) a report summarising events that have not been notified to the Registry with specified time frames	16:00 on 1 st business day	01Jul2021 00:01	Yes	Clause 11.27
Notifications or change within the Registry to participants affected	Same day		Yes	Clause 11.29
Registry to publish Schedule of loss category code and loss factors	Within one day of notification of change		Yes	Clause 22 of Schedule 11.1
Registry to publish Schedule of mapping between NSP's and balancing areas	Within one business day of notification of change		Yes	Clause 24 of Schedule 11.1
Registry to publish Schedule of all NSP identifiers and supporting information	Within one business day of notification of change		Yes	Clause 30 of Schedule 11.1

Adhoc Reporting Statistics

Report	Run	Complete	Average time (seconds)
Change Network Creation Date	1	1	0.4
Distributor Maintenance	3534	3534	2.9
Metering Maintenance	1966	1966	2.1
NSP Mapping Maintenance	29	29	6.7
Price Category Maintenance	1	1	6.8
Report - Audit Compliance	112	112	1626.5
Report - Breach Current	369	369	1.3
Report - Current Details	140	140	435.5
Report - Event Detail	25452	25452	68.4
Report - File Audits	1	1	0.7
Report - File Handler Status	11	11	0.1
Report - ICP Days	1	1	4079.7
Report - ICP List	4393	4393	197.5
Report - Loss Factor Codes	33	33	5.0
Report - Maintenance Breach	180	180	0.2
Report - Metering Installation Information	402	402	814.2
Report - Missing Metering Data	5	5	329.3
Report - NSP Mappings	32	32	3.2
Report - Switch Breach History	102	102	35.8
Report - Trader Default General Information	1	1	3.7
Report - Trader Default Status Report	16	16	34.1
Request - Switch Resend	22	22	1.0
Switch AC	1040	1040	0.2

Switch AN	14354	14354	0.3
Switch AW	2517	2517	0.5
Switch CS	13995	13995	1.2
Switch MN	320	320	1.2
Switch NT	16795	16795	0.3
Switch NW	2584	2584	0.2
Switch RR	1357	1357	0.2
Trader Maintenance	2902	2902	5.8
Totals	92667	92667	35.1
Number of Reports successfully Re-Processed	07		

Batch File Statistics

Total	Complete	Completed by 07:30	Not completed by 07:30
91215	91215	91214	1

Details of Batch File Reports not completed by 07:30 Report	Event Detail Participant: [REDACTED] Arrival: 10/06/2021 14:50:06 Start: 10/06/2021 14:50:13 End: 11/06/2021 08:14:46 Elapsed: 62673.0 seconds Processor: DFP3

Provider Code or agreement breach

Date	Number and detail of Provider Code or agreement breaches and details (ref Schedule 2 Non-functional requirements 5.2 table 1)

Other Information

The following reports/files are supplied to the Authority by the 6th business day of each month (unless otherwise specified) to the SFTP server:

- ICP's electrically connected, electrically disconnected, decommissioned and switched by Retailer and NSP
- ICP's electrically connected, electrically disconnected, decommissioned and switched by Retailer
- ICP's electrically connected, electrically disconnected, decommissioned and switched by Distributor
- Report PR-130 as defined in functional specification
- Details of participant rule breaches (supplied on first business day)
- Details of participant switch breaches (supplied on first business day)

Business Continuity Plan Test

The following annual tests were completed in April 2021 (Jade Tracker #918553 refers);

1. Placing 2 test calls to the people below advising them that this is a test call to confirm contactability in a Business Continuity event

a) Saki Hannah – Acting Manager Market Operations - 04 460 8877

b) Jade BCM Manager.

2. Have a Jade Developer log in from home to confirm connectivity.

Summary of Incidents

There was an issue on 04th June where the Registry received a flood of Web Service requests which seriously impacted the Registry with the browser struggling to respond at times between 13:11 and 15:00.

Software Related Fixes and Enhancements

ID	Description	Response
ER-1136	Functional specification: TD-050 returned acknowledgement example incorrect format	Release 21.06
ER-1144	Chrome obscuring the last character in the ICP Number label on ICP Summary screen. Other browsers unaffected.	Release 21.06
ER-1146	Training Data generator download label (on downloads screen) has last character obscured (download itself unaffected)	Release 21.06
ER-1153	A buildup of temp files noted in a folder on the server traced to an incorrect ini file setting. Setting corrected by operations. Note: this is a partial release as additional housekeeping processes are still required to complete temp file cleanup	Release 21.06
ER-1156	A malformed header line in an input list request file caused a decimal precision error as the parser tried to read the "number of input lines" field (which was incorrectly positioned).	Release 21.06
ER-1157	CR1253: the audit record created from the administration application did not capture the reserved for internal use indicator correctly. Issue identified in UAT during change request audit.	Release 21.06
ER-1132	CR-1253: internal loss codes "DEF" and "DRL" to be useable by NZX only. Loss Category Codes DEF and DRL are used by the Reconciliation Manager in internal processing. Receiving these codes from a Distributor would cause issues and potential delays in the reconciliation process. The static data table has been enhanced to provide a Reserved Entity facility, codes DEF /DRL set as "Reserved for Internal use" when supplied by a distributor as a Loss Category Code.	Release 21.06
ER-1137	Training Data Generator guide "draft" watermark removed. Official document release	Release 21.06
ER-1149	HEDL require separate SFTP folder structure in UAT. Modifications have been made to the UatSetupAgent to build/setup the revised folder name. This change affects UAT only, and only HEDL participant	Release 21.06

Documentation Updates

Functional Specification v22.35

Training Data Generator User Guide

Data Fixes

Number and details of incidents requiring data fixes.

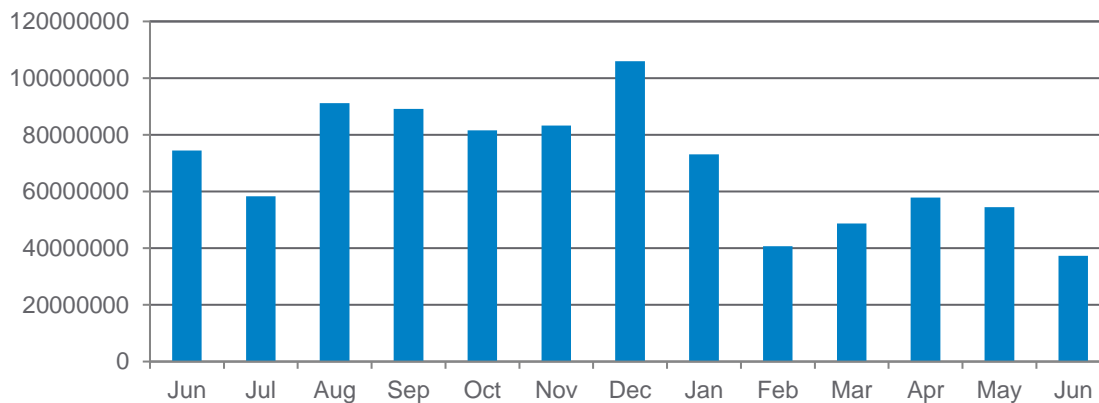
ID	Description	Severity	Response
NIL			

Schedule of Issues Raised

A summary of issues raised during the month.

ID	Description	Severity	Response
ER-1163	Malformed web service requests	Low (Priority I)	In Progress
ER-1162	Cleanup of tmp files on sftp server	Low (Priority I)	Verification
ER-1161	upgrade agent: reserved entity (loss factor code) should default to true	Medium (Priority C)	Passed
ER-1160	UE 1090 in app RegistrySchema::MariaWebR of MARPREG	High (Priority B)	Fixed
ER-1159	Clarify the static data table with regard to reserved entities	Medium (Priority C)	Fixed
ER-1158	Enquiry about ICPDays file	High (Priority B)	No Problem Identified
ER-1157	CR1253 - Audit of reserved not picking up current value	High (Priority B)	Fixed
ER-1156	Flood of decimal precision errors due to invalid file header record	Medium (Priority C)	Fixed
ER-1155	Rename into processed folder in server failed with error 5015 (5015 : Attempt to rename a file failed)	Medium (Priority C)	Fixed
ER-1154	CS Breach query	Low (Priority I)	No Problem Identified
ER-1153	Potential temp files left over from EIEP Upload	High (Priority B)	Fixed
ER-1152	CR-1253 Loss factor category code reserved for reconciliation manager use	Medium (Priority C)	Done

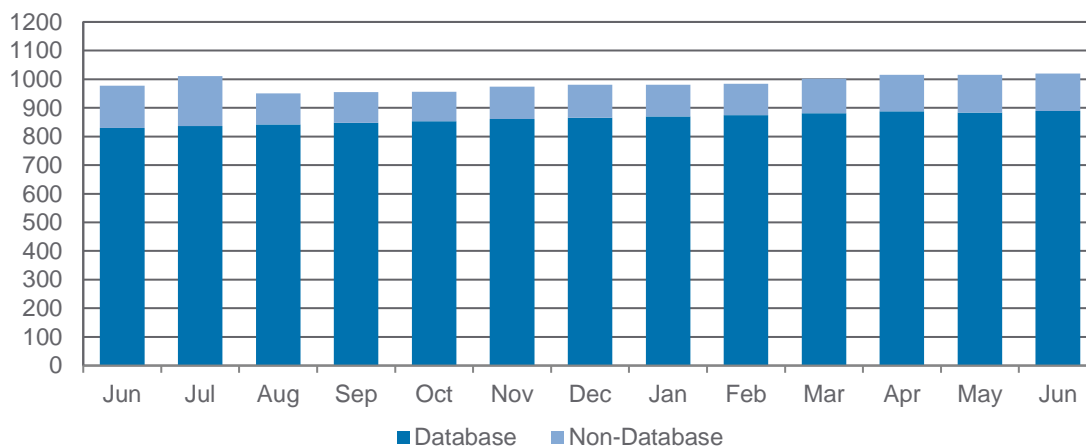
Database Transactions Production



Transaction Volumes

Transaction name	This Month	Last Month	Percentage Change
All Transactions	37,328,647	54,477,959	-31%

Database Size Production (GB)



Database Growth

Class	This Month MB	Last Month MB	Change MB
Database	910,865	904,883	5,982
Non-database	133,200	134,539	-1,339
Total	1,044,065	1,039,422	4,643

Service Disruptions (Production)

On 04th June the Registry received a flood of Web Service requests which seriously impacted the Registry with the browser struggling to respond between 13:11 and 15:08.

Scheduled outages are excluded from the calculation of the Availability Percentage.

Performance Measure	
Availability	100%
Number of Scheduled Outages	1
Number of Unscheduled Outages	0
Last Unscheduled Outage	May2021

Application Release Activities

Day	Detail	Authoriser
27Jun21 03:00 – 03:23	Production deploy 21.06_01	marcsm

Other Activities

Day	Detail	Duration hh/mm	Authoriser

Backup Performance Production

The backup requirements were met this month.

Backup Type	Run days	Run Time	Expected Duration hh/mm
Disk	ALL	20:00	01:00
Tape	ALL	01:00	05:00

Electricity Authority Contact Information

Contact for day-to-day procedures or any unexpected events.

Contact Name / Role	Contact Details
Acting Manager Market Operations	Saki Hannah P: 04 460 8877 M: N/A E: saki.hannah@ea.govt.nz

Automated Fault Escalation Profiles – Priority A Incidents

In the event of a “priority A incident” where the hardware or the application has an unscheduled outage the Electricity Authority has advised that escalation via email or text is not required.

However, if there is an unusually long outage impacting participants, Saki Hannah requires to be contacted.

Status of Functional Specification

(i.e., a report on the status of the functional specification);

Version 22.34 released to Production 13th April 2021.

Status of CR's and SDA's

(i.e., a summary report of the status of all CRs and SDAs);

CR Identifier	Description	Status
CR-1195	Distributor switching	On hold. Awaiting results of Authority consultation
CR-1196	Switch Breach Inquiry screen	On Hold. Low priority.
CR-1197	EIEP hub access for non-participants	On hold. Authority: pending consultation with interested parties.
CR-1206	ATH installation reporting	On hold. The Authority to determine if it is required.
CR-1208	Integrate EIEP 5A into the Registry	With the Authority to finalise format.
CR-1222	Inquiry only restful web services	Approved. With Jade to write technical solution proposal.
CR-1229	Send registry files to participant file server	On Hold. Jade has sent questionnaire to the Authority to email to participants.
CR-1234	Advanced Registry Training Course Material	Jade has completed initial cut of their sections. With the Authority to complete their sections prior to workshop in Christchurch.
CR-1250	Real-time Data Synchronization – White Paper	Approved. With Jade to write white paper.
CR-1251	EIEP Transfer Hub – White Paper	Approved. With Jade to write white paper.
CR-1253	Loss Category Code reserved for internal use	Released in 21.06
CR-1254	ICP Identifier Validation	Released in 21.05
CR-1255	Batch load of loss factor code	Solution proposal in progress

CR-1256	Trader Default Technical and User documentation	Draft technical documentation with Authority for review.
CR-1257	Trader Default software changes	Draft solution proposal with Authority for review.
CR-1258	Alert notices to participants	Audit complete. Scheduled in release 21.07.
CR-1259	(Config) Reserved for internal use.	Config proposal with Authority for sign-off.

Design Consultation

This is outside the normal CRs and pertains more to design work required by market design.

Design consultation chargeable hours

Resource	Hours this month	Hours to date – since 01 May 2017
ACCES (MD-1212) – Project Management/Architect/Consultant/Designer	0.0	90.50
Prohibit Saves and Winbacks (MD-1233) – Project Management/Architect/Consultant/Designer	0.0	26.25
Total	0.0	116.75

Provider initiated Audits

(i.e., essentially the annual audits. Also, any other audit (relevant to the registry) Jade has initiated. Does not include CRs).

- An audit was carried out by Grant Thornton New Zealand Ltd in March 2021.

Breaches

There were no breaches reported this month.

Code Changes to be considered

(i.e., events that may highlight an area where a change to the Code may need to be considered);

User Group Meetings

(i.e., a summary of any user group meetings held and the items discussed);

The most recent user group meeting was on 12 November 2020.

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AGREED PROCEDURES

Change Control

All significant changes will be notified to the Electricity Authority, and a Tracker work request will be created to record authorisation, schedule, and implementation detail.

Change requests must be approved within 1 month of the request being submitted.

In exceptional circumstances, for example where Jade Care consider server integrity to be under significant and immediate threat, changes may be applied with little or no notice.

Application Release Authorisation

Releases are automated through the Jade Care toolset. Submission and authorisation are separate functions, and the authorisation facility may be extended to the Electricity Authority or may be applied by the Client Service Manager where the Electricity Authority chooses not to use this facility.

Application Restarts

Requests for restart of applications or servers must be made in writing. In exceptional circumstances, and where the requestor is known to Jade Care staff, a verbal request may be sufficient, provided it is confirmed in writing shortly after the request is made.

Hardware Fault Reporting

SNMP traps will be enabled for all servers. Traps will result in alerts being raised at Jade Care and Tracker incident records being created. Automated escalation can be applied to these calls to alert the Electricity Authority and third parties to the event.

Arrangements may be put in place to allow Jade Care to contact hardware service organisations directly in the event of hardware issues. Contact and call identification details will be required as a prerequisite to implementation.

Anti-Virus Product

Anti-virus product is installed on all managed servers. Engine and pattern updates are applied on receipt, and full scans are run weekly.

Recovery Procedures

Application Recovery

The environments are set up to perform automatic application recovery in the event of a server undergoing a non-scheduled restart.

If there is a physical failure on the hardware where the VM is hosted on, the VM will be moved to a different physical VMware host. In the event of a catastrophic site failure, an SDS takeover will occur to the DR site upon approval by the Electricity Authority.

Server Recovery

Server recovery should never take place unless agreed by the Electricity Authority, Jade Care and hardware service representatives.

If a server operating system needs to be rebuilt, Central Systems will assist the onsite technician in rebuilding the server configuration and operating system to a state where Jade Care access is restored. Recovery of the full configuration, the applications and other third party software will be undertaken by Jade Care.

Server Integrity

The Electricity Authority servers are configured and maintained to Jade Care standards. This configuration is critical to the operation of the process automation and monitoring software.

It is essential that all changes to the server or application software is either performed by, or with the fore-knowledge and agreement, of Jade Care.

Reporting

Systems Management Report

This systems management report is to be provided by email to customer staff as advised. The target date for delivery is the 10th business day of the month following the calendar month to which the report relates.

Incident Reports

An incident report will be prepared for each unscheduled outage and will be emailed to customer staff as advised from time to time within 3 working days of any outage. These reports relate only to those items managed by Jade Care; e.g. network issues and hardware failures will not be subject to a report.

Jade Care Recommendations

Where Jade Care has recommendations for changes to hardware or the operating environment, these recommendations will be submitted to the Electricity Authority management. Implementation of such recommendations will be formalised through the change control process and documented through the systems management report in summary form.

Software Licences and Media Storage

All software media and licences must be kept in secured storage in reasonable proximity to the servers.

Personnel and Contact Details

The Electricity Authority must advise Jade Care of changes in personnel and contacts details where individuals are named as direct contacts. Fault escalations are pre-defined and automated to individual email addresses and SMS capable devices. Leave coverage and personnel changes must be advised for these functions to be effective.