Electricity Authority

Service Report and User Guide

May 2020

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 1st business day delivered to Authority SFTP directory	02Jun20 at 03:14	Yes	
Maximum number of concurrent users for month		902	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		100.00%	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.		100.00%	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.		100.00%	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 24 May Production deploy/MS patching. 2) Scheduled outage 24 May server maintenance 3) Scheduled outage 26 May DR test. 4) Scheduled outage 28 May Production deploy.	*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 =99.97% 208 0.03%	*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 =99.88% 0.12%	*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	31May20 22:04	*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 6th 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 6th 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	02Jun2020 00:29	*Yes*	Clause 11.24
By 16:00 on 4th business day deliver to the reconciliation manager the ICP days report	16:00 on 4th business day	05Jun2020 01:49	*Yes*	Clause 11.26
By 16:00 on 4th business day deliver to the reconciliation manager the loss factors report	16:00 on 4th business day	03Jun2020 00:00	*Yes*	Clause 11.26
By 16:00 on 4th business day deliver to the reconciliation manager the balancing area report	16:00 on 4th business day	03Jun2020 00:00	*Yes*	Clause 11.26
By 16:00 on 4th business day deliver to the reconciliation manager the half hour identifiers report	16:00 on 4th business day	05Jun2020 05:12	*Yes*	Clause 11.26
By 16:00 on 1st 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 1st business day	02Jun2020 00:02	*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	0.9
Distributor Maintenance	4089	4089	8.7
Metering Maintenance	1878	1878	11.9
NSP Mapping Maintenance	31	31	8.9
Report - Audit Compliance	58	58	2267.1
Report - Breach Current	394	394	1.2
Report - Current Details	175	175	375.0
Report - Event Detail	19735	19735	106.6
Report - File Audits	2	2	0.6
Report - File Handler Status	3	3	0.1
Report - ICP List	3914	3914	212.4
Report - Loss Factor Codes	34	34	5.9
Report - Maintenance Breach	192	192	1.8
Report - Metering Installation Information	365	365	1430.7
Report - Missing Metering Data	5	5	311.4
Report - NSP Mappings	31	31	3.9
Report - Switch Breach History	152	152	49.6
Request - Switch Resend	26	26	1.8
Switch AC	630	630	0.3
Switch AN	10890	10890	0.3
Switch AW	1535	1535	0.6
Switch CS	9560	9560	1.5
Switch MN	227	227	1.8
Switch NT	14310	14310	0.3

Switch NW	1896	1896	0.3
Switch RR	1028	1028	0.2
Trader Maintenance	1723	1723	7.0
Totals	72884	72884	51.6
Number of Reports successfully Re-Processed	17		

Batch File Statistics

Total	Complete	Completed by 07:30	Not completed by 07:30
71646	71646	71646	0

Details of Batch File Reports not completed by 07:30 Report	

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 2020 (Jade Tracker #855251 refers);

1. Testing of the phone system by enacting call plan 5 and placing a test call to the line then immediately restoring to call plan 4.

2. 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) Grant Benvenuti - Manager Market Operations - 04 460 8849 or 027 652 4854

b) Jade BCM Manager.

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

Summary of Incidents

There was an issue (Jade Bug) with the DR test on 26th May which resulted in the system having to be moved back from the Chc host to the Akl host. Another DR test will be scheduled in June.

Software Related Fixes and Enhancements

ID	Description	Response
ER-1051	Upgrade of CardSchema library to latest recommended version (4.0.02.005). Also amend changed parameter requirements for call to GetEnvironmentId occurring as a result of the upgrade	Release 20.05
ER-1057	DR takeover on 26May failed. Appears to be an issue with a map (database) file. Jade plant recommends application of Jade hot patch 64 to allow faster identification of the map file affected (faster than the alternative of going through the process dump which is several GB in size). Fix of the actual file, once identified, will be a simple compaction (/rewrite) that can be done online	Release 20.05.01

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-1059	CR-1238 Discontinue EIEP Access	Medium	In Progress
ER-1058	Files delivered twice	Medium	Submitted
ER-1057	Apply Jade hot patch 64 to identify issue with Map file header	Medium	In Progress
ER-1056	CR1180: SR breach using elapsed days when should use business days	Medium	In Progress
ER-1055	Powerco (CKHK) FTP issues	Medium	Submitted
ER-1054	Report scheduler file name convention	Medium	Submitted
ER-1053	CR-1240 Report scheduler additional Date Selection option	Medium	Submitted
ER-1052	Exception handler for non ascii characters	Medium	Submitted
ER-1051	Cardschema upgrade amendment to environmentId library	Medium	Closed

Database Transactions Production
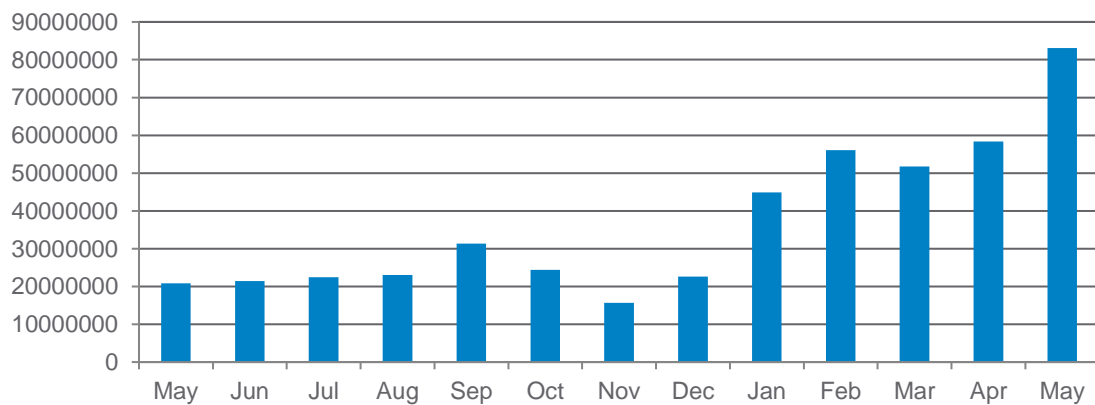
Transaction Volumes

Transaction name	This Month	Last Month	Percentage Change
All Transactions	83,131,896	58,379,957	42%

Database Size Production (GB)
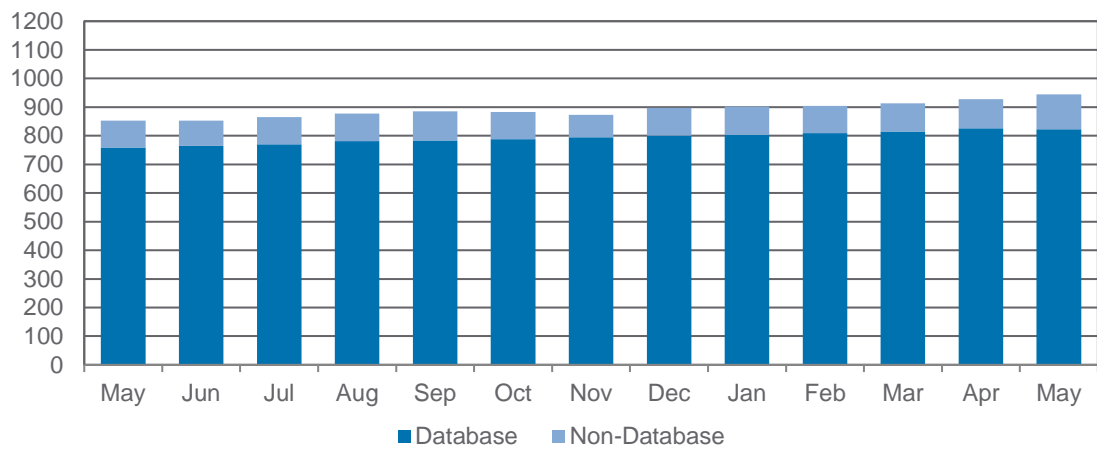
Database Growth

Class	This Month MB	Last Month MB	Change MB
Database	842,780	845,659	-2,879
Non-database	124,404	104,379	20,025
Total	**967,184**	**950,038**	**17,146**

Service Disruptions

There were no unscheduled service disruptions.

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

Performance Measure	
Availability	100.00%
Number of Scheduled Outages	4
Number of Unscheduled Outages	0
Last Unscheduled Outage	Sep 2018

Application Release Activities

Day	Detail	Authoriser
24May20 03:00 – 04:30	Production deploy 20_05 and Microsoft patching.	marcsm
28May20 03:00 – 03:11	Production deploy 20_05_01.	marcsm

Other Activities

Day	Detail	Duration hh/mm	Authoriser
24May20 21:30 – 21:50	Production server maintenance	00:20	Authority
26May20 03:00 – 05:19	DR test cutover Akl – Chc. There was an issue and the system had to be returned to the Akl host.	02:19	Authority

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

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Electricity Authority Contact Information

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

Contact Name / Role	Contact Details
Manager Market Operations	Grant Benvenuti P: 04 460 8849 M: 027 652 4854 E: grant.benvenuti@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, Grant Benvenuti requires to be contacted.

Status of Functional Specification

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

Version 22.29 released to Production 26th April 2020.

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-1180	Switch Breach Analysis	With the Authority to answer questions from Craftware.
CR-1194	NSP Table entry delete	On hold. Authority waiting on response from new RM at NZX
CR-1195	Distributor switching	On hold. Awaiting results of Authority consultation
CR-1196	Switch Breach Inquiry screen	On Hold. The Authority to have a meeting to discuss whether this is progressed.
CR-1197	EIEP hub access for non-participants	On hold. Authority: pending consultation with interested parties.
CR-1206	ATH installation reporting	On hold. Unlikely to proceed
CR-1208	Integrate EIEP 5A into the Registry	With the Authority to finalise recommendation.
CR-1221	Training Data Generator	On Hold. Proposal and pricing documents with the Authority awaiting review/sign-off.
CR-1222	Inquiry only restful web services	On Hold. Cost estimate with the Authority. The Authority to schedule a meeting to discuss this with Jade.
CR-1224	Amendments to Trader Default for Registry Manager	The Authority will need to make a change to the Code for this to progress.
CR-1229	Send registry files to participant file server	On Hold. Jade has sent questionnaire to the Authority to email to participants.
CR-1231	Breach Analysis Report Documentation	With the Authority for review. May require some changes as a result of CR-1180 audit review.

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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-1236	UAT Support for Authority Testing of CR-1180	Draft pricing document to be finalised on completion of the Authority's testing of CR-1180 Breach Analysis.
CR-1238	Discontinue EIEP Access	Development in Progress. Targeting 20_06 release.
CR-1239	Registry Email Lists	Development complete will be in 20_06 release.
CR-1240	Report Scheduler – Previous Months	Draft pricing document with the Authority. Sign-off is being delayed while Jade provide a pricing estimate to also add ability to specify name of output file (ER-1054)

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 2020.

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);

CR-1224/ER-860 RR Amendments to Trader Default by Registry Manager. The Authority has identified that this will require an amendment to the Code.

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 14 November 2019.

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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.

Replication Technologies

The use of replication technologies such as Volume Shadow Copy Service (VSS) and VMware copy processes with JADE databases is NOT supported and must not be used. The Jade Care service provides automated scheduled backups.

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.