



Electricity Authority

Service Report and User Guide

May 2026

Prepared by Jade Managed Services

Jade Software Corporation Limited cannot accept any financial or other responsibilities that may be the result of your use of this information or software material, including direct, indirect, special or consequential damages, or loss of profits. There are no warranties extended or granted by this document or software material.

You should be very careful to ensure that the use of this software material and/or information complies with the laws, rules, and regulations of the jurisdictions with respect to which it is used. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the express written permission of Jade Software Corporation Limited.

The information contained herein is subject to change without notice. Revisions may be issued to advise of such changes and/or additions.

© 2026 Jade Software Corporation Limited.

All rights reserved.

JADE is a trademark of Jade Software Corporation Limited. All trade names referenced are the service mark, trademark, or registered trademark of the respective manufacturer.

Table of Contents

- Service Report..... 4
 - Current Service Status 4
 - Data Safety and Resilience 7
 - Production System Performance 7
 - Electricity Authority Reporting 9
 - AGREED PROCEDURES 16
 - Anti-Virus Product 17
 - Recovery Procedures 17
 - Server Integrity 18
 - Reporting 18
 - Jade Care Recommendations 18
 - Software Licences and Media Storage 18

Service Report

Current Service Status

SLA Achievement

Measurement	Requirement	Result	Result Expanded	Ref
Number and detail of service Provider Code or agreement breaches and details	Report delivered to Authority detailing breaches	✓		Schedule 2 Non-functional requirements 5.2 table 1
Disaster recovery and backup obligations		✓		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	✓	02 June 2026, 03:22	
Maximum number of concurrent users for month		✓	832	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%	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%	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.		✓	99.87%	

Measurement	Requirement	Result	Result Expanded	Ref
<p>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.</p> <p>Approved, pre-planned outages do not count against service level targets.</p>		✓	<p>1) Deploy of Hotfix 018 to marPreg on May 8th at 23:00</p> <p>2) Deploy of Application Release 26_05 to marPreg on Sunday May 24th at 03:00</p> <p>3) DR Cutover of marPreg from MARAKLS3 to MARCHCS1 on May 28th at 03:00</p>	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		✓		Schedule 2 Non-functional requirements 5.2 table 1
<p>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.</p> <p>Longest time period in seconds</p> <p>Percentage of transactions exceeding 2 seconds</p>		✓	<p><2 =99.84%</p> <p>55.85</p> <p>0.16%</p>	Schedule 2 Non-functional requirements 5.2 table 1
<p>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</p> <p>Percentage of transactions exceeding 1 second</p>		✓	<p><1 =99.60</p> <p>0.4%</p>	Schedule 2 Non-functional requirements 5.2 table 1
<p>Number of password lockout alerts.</p> <p>Investigation of all repeated lockout alerts required.</p>		✓	0	Schedule 2 Non-functional requirements 25.1 (n)
Help desk available	7:30 to 19:30 hours each business day	✓	100%	Clause 11.20

Measurement	Requirement	Result	Result Expanded	Ref
Registry reports to participants day 1 09:00	09:00 hours on the first business day of the month	✓	31 May 2026, 21:50	Clause 11 of Schedule 11.1
Issuing of confirmation notices within 4 hours of receipt of information provided		✓		Clause 11.21
Number of ICP's changing traders	16:00 on the 6 th business day of the month	✓		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	✓		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	✓	02 June 2026, 07:36	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	✓	05 June 2026, 01:44	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	✓	03 June 2026, 00:02	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	✓	03 June 2026, 00:02	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	✓	05 June 2026, 07:15	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	✓	02 June 2026, 00:16	Clause 11.27
Notifications or change within the Registry to participants affected	Same day	✓		Clause 11.29
Registry to publish Schedule of loss category code and loss factors	Within one day of notification of change	✓		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	✓		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	✓		Clause 30 of Schedule 11.1

✓ indicates the requirement was met

✗ indicates the requirement was not met.

Data Safety and Resilience

Backup Operations

Backup Type	Run days	Start Time	Expected Duration	Failed this Period
Disk	ALL	19:00	01:00	0
Tape	ALL	01:00	05:00	0

Production System Performance

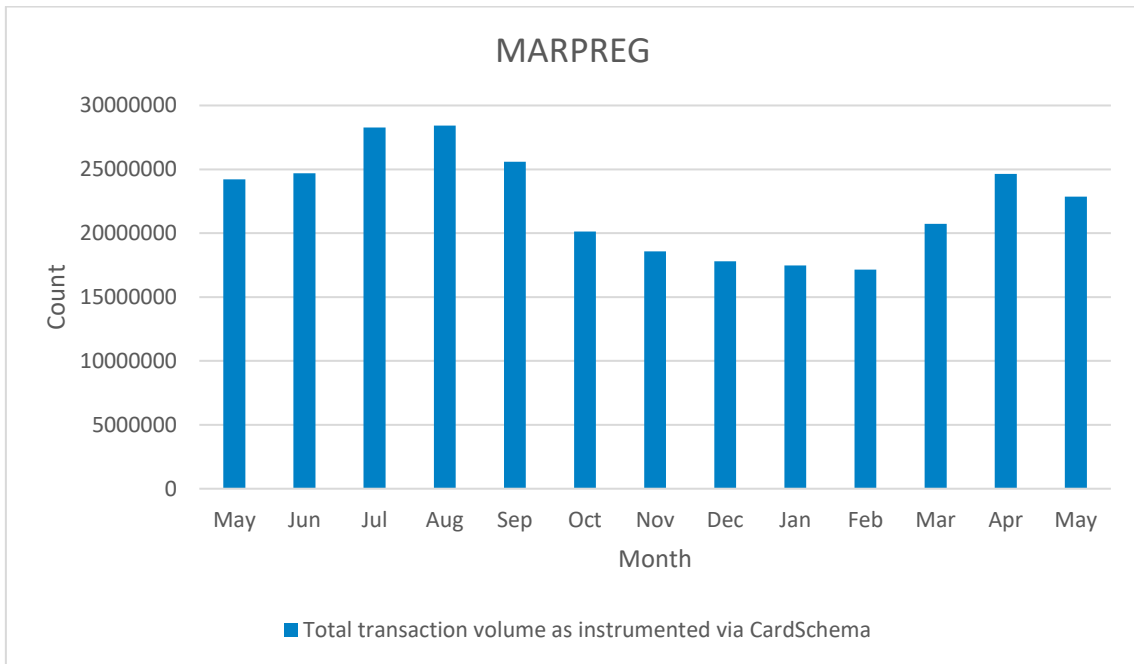
Unscheduled Outages

Day	Ref	Detail	Outage Duration
07May26 07:59 – 08:13	1280169	Unscheduled outage due to memory exhaustion issue	00:14
07May26 10:07 – 10:12	1280169	Unscheduled outage due to memory exhaustion issue	00:05

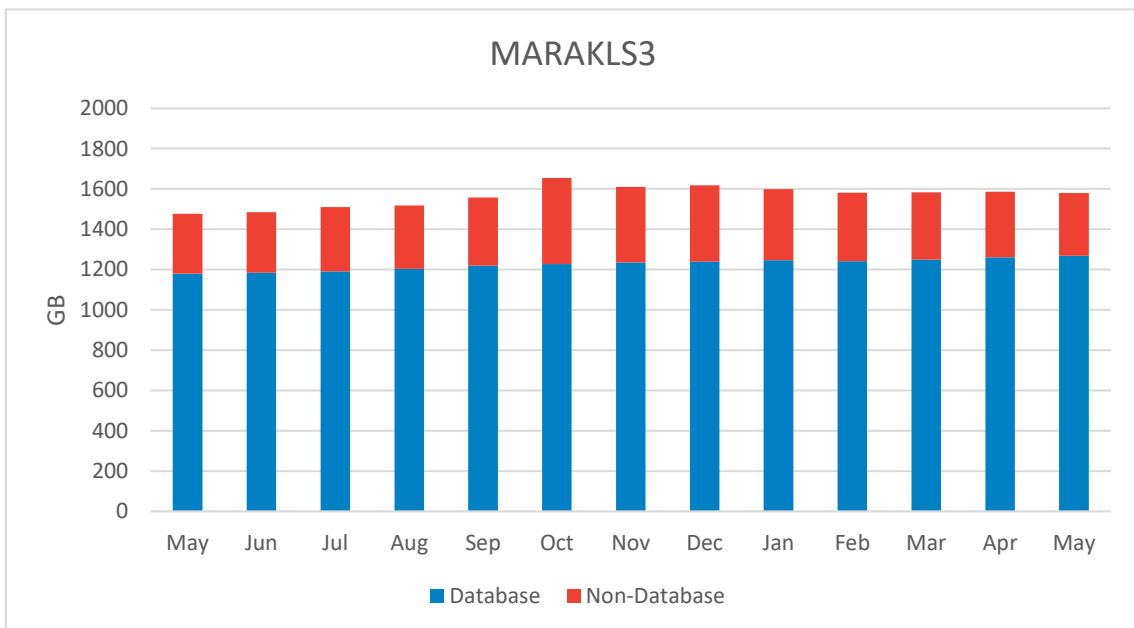
Scheduled Outages

Day	Ref	Detail	Outage Duration	Authorised By
08May26 23:00 – 23:23	1280273	Deploy of Hotfix 018 to marPreg	00:23	Simon Procter
23May26 03:00 – 03:41	1276275	MS Patches applied to MARAKLS3, CNWAKLS405	00:41	Simon Procter
24May26 03:00 – 03:39	1283153	Deploy of Release 26_05 to marPreg	00:39	Simon Procter
28May26 03:00 – 07:27	1274491	DR Cutover of marPreg from MARAKLS3 to MARCHCS1	04:27	Simon Procter

Instrumented Transactions



Database Size



Electricity Authority Reporting

Adhoc Reporting Statistics

Report	Run	Complete	Average time (seconds)
DER Maintenance	1426	1426	0.3
Distributor Maintenance	4842	4842	2.5
Metering Maintenance	1094	1094	12.2
NSP Mapping Maintenance	31	31	14.5
Planned ICP Service Interruption	3049	3049	2.0
Report - Active NSPs List	1	1	726.9
Report - Audit Compliance	261	261	1348.3
Report - Breach Current	325	325	1.0
Report - Current Details	102	102	821.8
Report - Event Detail	34729	34729	133.2
Report - File Handler Status	6	6	0.1
Report - ICP List	5805	5805	527.2
Report - Loss Factor Codes	186	186	8.2
Report - Metering Installation Information	971	971	956.3
Report - NSP Mappings	95	95	4.3
Report - NSP Trading Statistics	1	1	313.2
Report - Planned ICP Outage Report	1	1	6.1
Report - Switch Breach History	87	87	16.7
Report - Trader Default Status Report	1	1	1.8
Request - Notify Resend	31	31	0.6
Request - Switch Resend	1	1	1.8

Report	Run	Complete	Average time (seconds)
Switch AC	457	457	0.3
Switch AN	18171	18171	0.2
Switch AW	2127	2127	0.5
Switch CS	16666	16666	1.6
Switch MN	350	350	1.8
Switch NT	34947	34947	0.3
Switch NW	2120	2120	0.3
Switch RR	724	724	0.2
Trader Maintenance	3231	3231	3.7
Totals	131838	131838	69.4
Number of Reports successfully Re-Processed	44		

Batch File Statistics

Total	Complete	Completed by 07:30	Not completed by 07:30
129297	129297	129289	8

Details of Batch File Reports not completed by 07:30		
<p>Report - Event Detail</p> <p>Participant: MTRX</p> <p>Arrival: 04/05/2026 19:27:19</p> <p>Start: 04/05/2026 19:27:55</p> <p>End: 05/05/2026 20:26:28</p> <p>Elapsed: 89913.3 seconds</p> <p>Processor: DFP5</p>	<p>Report - Event Detail</p> <p>Participant: MTRX</p> <p>Arrival: 05/05/2026 13:09:10</p> <p>Start: 05/05/2026 20:28:17</p> <p>End: 06/05/2026 08:21:40</p> <p>Elapsed: 42803.7 seconds</p> <p>Processor: DFP5</p>	<p>Report - Event Detail</p> <p>Participant: MTRX</p> <p>Arrival: 05/05/2026 13:10:01</p> <p>Start: 05/05/2026 21:44:48</p> <p>End: 06/05/2026 12:50:05</p> <p>Elapsed: 54316.6 seconds</p> <p>Processor: DFP7</p>
<p>Report - Event Detail</p> <p>Participant: MTRX</p> <p>Arrival: 05/05/2026 13:10:40</p> <p>Start: 06/05/2026 08:21:41</p> <p>End: 07/05/2026 03:04:43</p> <p>Elapsed: 67381.7 seconds</p> <p>Processor: DFP8</p>	<p>Report - Event Detail</p> <p>Participant: MTRX</p> <p>Arrival: 05/05/2026 15:48:47</p> <p>Start: 06/05/2026 12:55:14</p> <p>End: 06/05/2026 13:27:00</p> <p>Elapsed: 1906.1 seconds</p> <p>Processor: DFP1</p>	<p>Report - Event Detail</p> <p>Participant: MTRX</p> <p>Arrival: 05/05/2026 15:49:43</p> <p>Start: 06/05/2026 13:27:00</p> <p>End: 06/05/2026 14:57:40</p> <p>Elapsed: 5439.5 seconds</p> <p>Processor: DFP7</p>
<p>Report - ICP List</p> <p>Participant: MTRX</p> <p>Arrival: 05/05/2026 15:12:34</p> <p>Start: 06/05/2026 12:50:06</p> <p>End: 06/05/2026 12:52:44</p> <p>Elapsed: 158.1 seconds</p> <p>Processor: DFP6</p>	<p>Report - ICP List</p> <p>Participant: MTRX</p> <p>Arrival: 05/05/2026 15:17:34</p> <p>Start: 06/05/2026 12:52:44</p> <p>End: 06/05/2026 12:55:14</p> <p>Elapsed: 150.0 seconds</p> <p>Processor: DFP6</p>	

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 2026 (Jade Tracker #1274455 refers);

1. Placing 2 test calls to the people below advising them that this is a test call to confirm their ability to be contacted in a Business Continuity event
 - a) Peter Taylor - Commercial Manager - 04 460 8866 or 027 281 7672 (Alternative is Simon Procter)
 - b) Jade BCM Manager.
2. Have a Jade Developer log in from home to confirm connectivity.

Summary of Incidents

On Tuesday April 28th at 17:23, the Production environment crashed due to a memory exhaustion event. This crash occurred again at 19:00, and again on Wednesday April 29th at 15:05 during troubleshooting attempts. Jade Development and Plant teams have traced this issue back to a memory leak within the Jade 2025's third party "jadejsonparser" library and have implemented a hotfix to immediately resolve this issue.

Software Related Fixes and Enhancements

ID	Description	Response
Er-1663	EIEP (for Planned interruption) incorrectly sending ake and confirm files to participants	Release 26_05
Er-1666	Memory leak identified in browser application during the swap to a secure session (used to avoid session fixation attack)	Release 26_05
Er-1667	Housekeeping application unable to initiate switch report. Root cause traced to trader default changes and introduction of type-2 retailers. These changes interfered with default and mandatory parameter setup for new participants.	Release 26_05
Hot patch 18	Hot patch 18 formal release to address memory leak in Rest service	Release 26_05

Data Fixes

Number and details of incidents requiring data fixes.

ID	Description	Severity	Response
----	-------------	----------	----------

Schedule of Issues Raised

A summary of issues raised during the month.

ID	Description	Severity	Response
ER-1672	Identify/fix leaks in browser application	Medium (Priority C)	In progress
ER-1671	Amend Registry to make local setup easier and create readme instructions	Medium (Priority C)	Verification Pending
ER-1670	Unable to select some traders in Breach Reports	Medium (Priority C)	Submitted
ER-1669	Mandatory notifications are not being created when new participants are created.	High (Priority B)	In progress
ER-1668	Fix memory leak in SOAP notifications API call	Medium (Priority C)	Submitted
ER-1667	Housekeeping controller application unable to identify a user required switch notification	Medium (Priority C)	Closed
ER-1666	Investigate excessive memory usage: MariaWebR	Medium (Priority C)	Closed
ER-1665	New Email Group REJCHG created.	Medium (Priority C)	Submitted
ER-1664	Store overlapping SCIM tokens	Medium (Priority C)	Submitted

Application Release

Day	Version	Authorised By
24May26	Deploy of Release 26_05 to marPreg	Simon Procter

Change Control

Date	Authorised By	Detail
15May26	Simon Procter	MS Patches applied to MARCHCS3
16May26	Simon Procter	MS Patches applied to MARCHCS1, CNWCHCS405
23May26	Simon Procter	MS Patches applied to MARAKLS3, CNWAKLS405
28May26	Simon Procter	DR Cutover of marPreg from MARCHCS1 to MARAKLS3

Status of Functional Specification

(i.e., a report on the status of the functional specification);
Version 22.45 released to UAT and Prod 8 April 2026

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-1196	Switch Breach Inquiry screen	On hold. Low priority.
CR-1256	Trader Default Technical and User documentation	On hold. In CR development, not signed off yet. With Authority for review.
CR-1257	Trader Default software changes	On hold. In CR development, not signed off yet. With Authority for review.
CR-1260	Remove Automated Logon	Released to the dedicated secure test system (marSreg) 01/10/2021 Release pending to UAT and Production
CR-1293	Maximum Permitted Generation Capacity	In development

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
	0.0	0.0
Total	0.0	0.0

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 February 2026.

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 29th July 2025

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.

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.

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 services 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.

Database Refreshes

This process applies when the Electricity Authority require a 'refresh', or copy, of data from one system to another (typically from Production to Test, often performed before an upgrade).

All refresh requests should be made by email or direct Tracker to Jade Care Central Systems (csystems@jadeworld.com) and with a copy to the CSM contact. If urgent, please follow up with a phone call to Central Systems.

Unless otherwise stated the refresh will use the most recent backup of the source system. I.e., The production backup occurs at 19:00. If a refresh request is made at 21:00 it will use the 19:00 backup from the previous day, as this is the most recent backup available. If you require the most up to date data please either schedule refreshes to occur shortly after the production backup or request an ad-hoc backup as part of the refresh request.

Following a successful database refresh from Production, database masking will take place to ensure the client data remains secure.

NB Where the source system has automated or scheduled functions embedded in the system, care must be taken to ensure these settings are adjusted in the target system before the target system is started to avoid processes in test corrupting production data or interacting with external systems.

The following minimum information should be provided:

- Start Date/Time
- Time Zone (if no time zone specified local server time will be assumed)
- Latest completion date/time
- Action to take if Refresh completion time is not met
- Source (from) Environment
- Target (To) Environment
- Whether an ad-hoc backup of the target environment is required before the refresh?
- List of Contacts to notify by email on completion
- Applications to be started in the target environment after the refresh completes

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.