



# Electricity Authority

Service Report and User Guide  
April 2016

Prepared by Jade Operations



| business solutions

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## Performance Standards

Measurement	Requirement	Actual	Met	Rule Ref
Number and detail of service provider rule or agreement breaches and details	Report delivered to EA detailing breaches	0	Yes	
Disaster recovery and backup obligations as set out in section 5 of operational requirements			Yes	Section 5 Operational Requirements
Number and details of participant rule breaches	Report on 1 <sup>st</sup> business day delivered to EA SFTP directory	02May16 at 02:53	Yes	
Maximum number of concurrent users for month		1549	Yes	
<p>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 99.5 per cent of the time in any one month. This statistic considers that planned outages will not count against availability level targets. See 4.1 (f) and 4.3 of Operational Requirements.</p> <p><b>NOTE;</b></p> <p><b>The actual percentage recorded is in accordance with the SPA.</b></p> <p><b>The outages recorded were planned outages as agreed with the Authority.</b></p>		100.00%	Yes	Operational Requirements 4.1 a
<p>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. See 4.1 (f) and 4.3 of Operational Requirements.</p>		100.00%	Yes	Operational Requirements 4.1 b
<p>The Registry must use its best endeavours to provide a service availability of 99.8 per cent or better, with nil or minimal outages.</p> <p><b>NOTE;</b></p> <p><b>The actual percentage recorded is in accordance with the SPA.</b></p> <p><b>The outages recorded were planned outages as agreed with the Authority.</b></p>		100.00%	Yes	Operational Requirements 4.1 c

Measurement	Requirement	Actual	Met	Rule Ref
There must be no more than four unplanned outages in any one month		0	Yes	Operational Requirements 4.1 d
<p>There must be no more than two planned outages, undertaken only with prior approval from the Authority, per month. However, under the amendments clause 4.1(f) of the operational requirements allows the Authority to approve additional outages where necessary.</p> <p>Planned outages must be for no more than 2 hours' duration and must be undertaken outside regular service hours. Planned outages do not include necessary daily housekeeping and can be excluded from the calculation of availability.</p> <p><b>NOTE;</b></p> <p><b>The actual number of outages recorded is in accordance with the SPA.</b></p> <p><b>The outages recorded were planned outages as agreed with the Authority.</b></p>		<p>1) Scheduled outage 24 April for production application deploy. This did not proceed.</p> <p>2) Scheduled outage 29 April for production application deploy.</p>	Yes	Operational Requirements 4.1 e
The Registry must measure service response time at regular intervals (every 1–5 minutes as agreed between the Authority and the provider) during the regular service hours			Yes	Operational Requirements 4.2 a
Response time will be measured by the provider executing a representative sample of simulated transactions from another host system, external to the Registry ISP, on the production system. The types of transaction to be used and the frequency of sampling will be agreed with the Authority			Yes	Operational Requirements 4.2 b
Service response time will be measured from the point at which a user transaction is executed to the point at which a valid response is received at the point the transaction originated			Yes	Operational Requirements 4.2 c
Ninety-five per cent of all sampled transactions will have a response time of less than 2 seconds and 80 per cent 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>&lt;2 =99.92%</p> <p>&lt;1 =99.79%</p>	Yes	Operational Requirements 4.2 d
Help desk available	7:30 to 19:30 hours each business day	100%	Yes	Rule Ref none noted Clause 11.20

Measurement	Requirement	Actual	Met	Rule Ref
Registry reports to participants day 1 09:00	09:00 hours on the first business day of the month	30Apr2016 20:29	Yes	Rule Ref Part E rule 19.1 Clause 11 of schedule 11.1
Issuing of confirmation notices within 4 hours of receipt of information provided			Yes	Rule Ref Part E rule 22.1 Clause 11.21
Number of customers changing retailers	16:00 on the 6 <sup>th</sup> business day of the month		Yes	Rule Ref Part E rule 23.2 Clause 11.23
Such other information as may be agreed from time to time between the Registry and the Board [*3]	16:00 on the 6 <sup>th</sup> business day of the month		Yes	Rule Ref Part E rule 23.3 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	02May2016 00:15	Yes	Rule Ref Part E 24.1 Clause 11.24
By 16:00 on 4 <sup>th</sup> business day deliver to the reconciliation manager the ICP days report	16:00 on 4 <sup>th</sup> business day	03May2016 01:55	Yes	Rule Ref E 24.2.1 Clause 11.26
By 16:00 on 4 <sup>th</sup> business day deliver to the reconciliation manager the loss factors report	16:00 on 4 <sup>th</sup> business day	03May2016 00:00	Yes	Rule Ref E24.2.2 Clause 11.26
By 16:00 on 4 <sup>th</sup> business day deliver to the reconciliation manager the balancing area report	16:00 on 4 <sup>th</sup> business day	03May2016 00:00	Yes	Rule Ref E 24.2.3 Clause 11.26
By 16:00 on 4 <sup>th</sup> business day deliver to the reconciliation manager the half hour identifiers report	16:00 on 4 <sup>th</sup> business day	03May2016 04:56	Yes	Rule Ref E 24.2.4 Clause 11.26
By 16:00 on 1 <sup>st</sup> business day deliver to the market administrator (EA) a report summarising event that have not been notified to the Registry with specified time frames	16:00 on 1 <sup>st</sup> business day	02May2016 00:01	Yes	Rule Ref E24.3 Clause 11.27
Copies of reports provided	Within 4 hours of request during business hours		Yes	Rule Ref E25 Clause 11.28

Measurement	Requirement	Actual	Met	Rule Ref
Notifications or change within the Registry to participants affected	Same day		Yes	Rule Ref E26 Clause 11.29
Registry to publish schedule of loss category code and loss factors	Within one day of notification of change		Yes	Rule Ref E1 rule 5.5 Clause 21 of schedule 11.1
Registry to publish schedule of mapping between NSP's and balancing areas	Within 1 business day of notification of change		Yes	Rule Ref E1 rule 7.3 Clause 24 of schedule 11.1
Registry to publish schedule of all NSP identifiers and supporting information	Within 3 business days of notification of change		Yes	Rule Ref E1 rule 8.3 Clause 30 of schedule 11.1

## Adhoc Reporting Statistics

Report	Run	Complete	Average time (seconds)
Change Network Creation Date	4	4	2.0
Distributor Maintenance	960	960	26.2
Metering Maintenance	2701	2701	5.0
NSP Mapping Maintenance	34	34	5.0
Report - Breach Current	254	254	3.7
Report - Current Details	143	143	233.7
Report - Distributor Annual Levy Report	2	2	3968.7
Report - Event Detail	25734	25734	52.7
Report - File Audits	1	1	0.5
Report - File Handler Status	1	1	0.4
Report - ICP List	2802	2802	183.3
Report - Loss Factor Codes	3	3	7.6
Report - Maintenance Breach	6	6	5.2
Report - Metering Installation Information	34	34	2067.4
Report - Missing Metering Data	10	10	393.1
Report - NSP Mappings	3	3	4.5
Report - Switch Breach History	71	71	199.2
Report - Trader Annual Levy Report	1	1	6901.4
Request - Notify Resend	2	2	6.6
Request - Switch Resend	90	90	0.3
Switch AC	542	542	0.4
Switch AN	7828	7828	0.7
Switch AW	2286	2286	2.0

Report	Run	Complete	Average time (seconds)
Switch CS	8837	8837	3.8
Switch MN	349	349	2.3
Switch NT	12533	12533	0.8
Switch NW	2060	2060	0.8
Switch RR	842	842	0.4
Trader Maintenance	1129	1129	24.8
Totals	69262	69262	30.8
Number of Reports successfully Re-Processed	10		

## Batch File Statistics

Total	Complete	Completed by 07:30	Not completed by 07:30
67962	67962	67962	0

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

## Other Information

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

- ICP's energized, de-energized, decommissioned and switched by Retailer and NSP
- ICP's energized, de-energized, decommissioned and switched by Retailer
- ICP's energized, de-energized, 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)

## Summary Of Incidents

There were no incidents.

## Development Access

Jade Development staff have continuous access to the Production Electricity Registry System for support purposes.

Staff Member	Date accessed
Peter Smith	

Staff Member	Date accessed
Greg Matthews	
Pieter Bremmers	
Laura Jarquin	
Julian Brown	
Patrick Gleeson	

## Software Related Fixes

ID	Description	Response
ER-475	Enhancement: Maintain daily archive setting in admin app	Patched in release 16.04 (29/04/2016)
ER-477	Enhancement: upgrade pkzip to winrar for use by Registry housekeeping processes (participant files will continue to use pkzip)	Patched in release 16.04 (29/04/2016)
ER-481	A timing hole allowed files, with the same name. to occasionally not be copied back to the FTP server.	Patched in release 16.04 (29/04/2016)
ER-482	Web created MN events displaying the participant as the user instead of the user id	Patched in release 16.04 (29/04/2016)
ER-484	Rendering in MS Edge altered Registry Audit Search display	Patched in release 16.04 (29/04/2016)
ER-485	Enhancement: EIEP Sender search combo now rebuilds after each search	Patched in release 16.04 (29/04/2016)
ER-489	Enhancement: store processed count on file audit objects for reporting tasks to aid tracking progress by admin helpdesk	Patched in release 16.04 (29/04/2016)
ER-490	Admin help desk when requesting a manual copy back of file from server to FTP server and unintentional space was added to end of file name	Patched in release 16.04 (29/04/2016)
ER-492	AN event not appearing in EDA report. Cause is almost simultaneous processing of AN/CS where AN has it's event date adjusted by the CS. Causes the AN audit to be loaded twice to the event detail visibility indexes. Small data cleanup required to remove unnecessary audit.	Patched in release 16.04 (29/04/2016)
ER-493	Enhancement: Duplicate file name convention may be amended. A supervisor may assign the ability to amend the default duplicate file renaming convention, for example <ul style="list-style-type: none"> <li>• "LISTheReturnFile.txt.001" may be changed to return as</li> <li>• "LISTheReturnFile_001.txt".</li> </ul>	Patched in release 16.04 (29/04/2016)
ER-496	Documentation correction to functional specification Error in header of PR-030 input file example.	Patched in release 16.04 (29/04/2016)
ER-497	Unable to input update to price category code. Incorrect interpretation of functional specification, rules around setting end date changed to match the specification	Patched in release 16.04 (29/04/2016)

ID	Description	Response
ER-498	EMCO (Authority) users unable to update email groups. Update capability deliberately excluded, this restriction has been removed.	Patched in release 16.04 (29/04/2016)
ER-499	Enhancement: investigations into occasional deadlocks when traders reinstate MEP nomination trader events. A further reserveLock now taken for moving out of MEP switch in progress	Patched in release 16.04 (29/04/2016)
ER-500	Object not found in web application. A defined sequence of failed updates can leave a validated event date in the trader parser which assumes a validated trader event exists for that date. Change made to ensure event date is removed from parser if no event for that date exists.	Patched in release 16.04 (29/04/2016)
ER-504	Enhancement: modify upgrade agent to include new Register Content Codes	Patched in release 16.04 (29/04/2016)
ER-510	User manual addition of EIEP formats definition	Patched in release 16.04 (29/04/2016)
ER-513	Administration help desk filter text box - modified setting to allow scroll horizontal.	Patched in release 16.04 (29/04/2016)
ER-515	Unable to nominate a new MEP if previously nominated MEP has accepted nomination, but not supplied metering, where: <ul style="list-style-type: none"> <li>• Trader event date for previously nominated MEP post-dates the event date for the new nomination</li> </ul> This is as a result of validation introduced in part10 development.	Patched in release 16.04 (29/04/2016)
ER-493	Enhancement: A supervisor may assign the ability to amend the default duplicate file renaming convention used in sFTP and EIEP when the Registry detects a duplicate file name situation, for example <ul style="list-style-type: none"> <li>• "LISTheReturnFile.txt.001" (the default) may be changed to return as</li> <li>• "LISTheReturnFile_001.txt".</li> </ul>	Patched in release 16.04 (29/04/2016)
ER-501	The event detail report determines the smallest index to read based on the participant filters provided in the parameters. However once an audit is found the report must refer back to the submitting participants index to verify the audit is visible to the submitting party. The report was occasionally returning event information that should not have been visible to the submitting participant.	Patched in release 16.04 (29/04/2016)
ER-516	PR220 report stopped reporting interim certified metering due to the interim certification static data table entry being end dated to 31/03/2016. The interim metering must still be reported.	Patched in release 16.04 (29/04/2016)
CR-1186 Metering certification Interim		
For compliance purposes, report to the Authority instances where interim metering has been supplied, after the effective end date of the interim attribute, for a removal read		

## Data Fixes

Number and details of incidents requiring data fixes.

ID	Description	Severity	Response
ER-492	Data cleanup required to remove redundant switch audits.	High	Completed

## Schedule Of Faults Raised

A summary of faults raised during the month.

**Note** that a change to the Jira instance during October 2014 has meant that the ID and Severity fields have changed. ID has changed from PR-xxx to ER-xxx and Severity has changed from 1-5 to Low, Medium, High and Critical.

ID	Description	Severity	Response
ER-520	647 Error - 0001401300TG11C	Low	Fixed
ER-519	Invalid MN breaches	Low	Unresolved
ER-518	Tidy up a handful of transient leaks	Low	Fixed
ER-517	Switch timer removed for HH switch	Medium	Unresolved
ER-516	PR-220 report not longer reporting I metering certification ICP	Medium	Fixed
ER-515	Unable to nominate MEP	Medium	Fixed
ER-514	Webservice ignoring Boolean value of False	Medium	No Problem Identified
ER-513	Admin screen (NSPMapRemoval) missing scroll horizontal	Low	Fixed
ER-512	Webservice returning incorrect price category code details	Medium	No Problem Identified
ER-511	Cleanup remiander - pre CR-1171 consumption search agent methods	Low	Unresolved
ER-510	User Manual - add EIEP file name convention	Low	Fixed

## Server Disk Utilisation

### MARAKLS3 (Production - MARPREG application)

Server	Drive	Content	Size (GB)	GB Available	Prior Period
MARAKLS3	C	Operating System	100	30	31
	R	JADE Database	1331	704	254
	U	JADE Journals (logs)	300	222	201
	V	Backup	1869	624	727

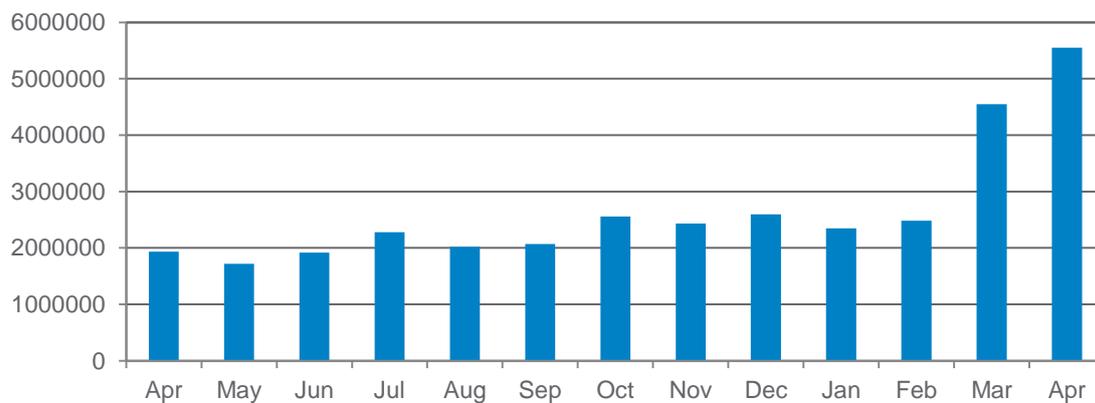
### MARCHCS1 (DR-MARPREG secondary)

Server	Drive	Content	Size (GB)	GB Available	Prior Period
MARCHCS1	C	Operating System	136	71	72
	R	JADE Database	1166	550	571
	U	JADE Journals (logs)	300	213	192
	V	Backup	1748	1134	1155

### MARCHCS3 (Test - MARUREG Primary Application, MARUREG secondary)

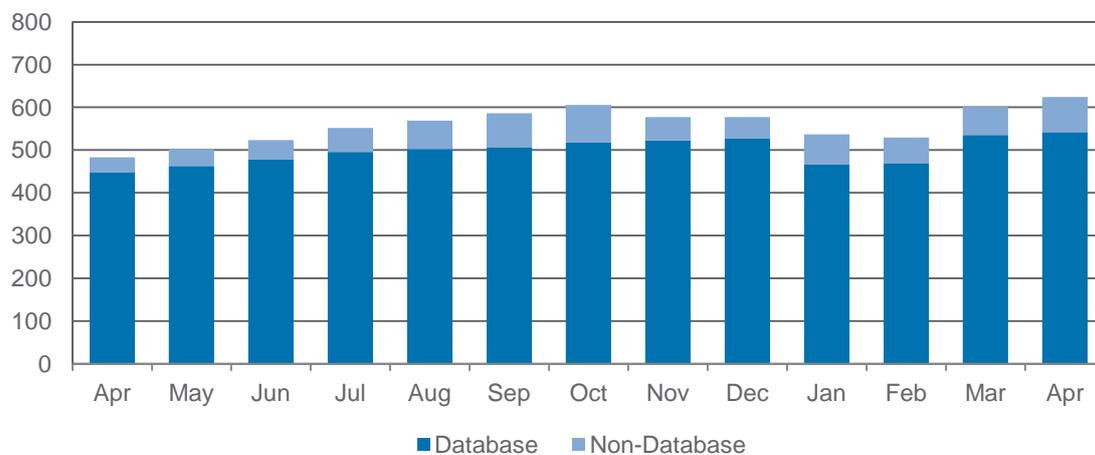
Server	Drive	Content	Size (GB)	GB Available	Prior Period
MARCHCS3	C	Operating System	158	71	75
	R	JADE Database	2012	1398	933
	U	JADE Journals (logs)	400	323	348
	V	Backup	3014	1184	1306

### Database Transactions Production



**NOTE re March;** The large number of web service calls to the Registry from the Retail Data project API Manager caused the increase in database transactions as shown in the graph above.

### Database Size Production (GB)



## Service Disruptions

There were no recorded operational incidents during the period. Scheduled outages are excluded from the calculation of the Availability Percentage.

Performance Measure	
Availability	100.00%
Number of Scheduled Outages	1
Number of Unscheduled Outages	0
Last Unscheduled Outage	Mar 2016

## Application Release Activities

Day	Ref	Detail	Duration hh/mm	Authoriser
24Apr16 21:00	Jari #106	Release 16.04. This did not proceed due to an unexpected error and will be rescheduled.	00:00	David Burt
29Apr16 23:00 – 00:03	Jari #107	Release 16.04.	00:63	David Burt

## Other Activities

Day	Detail	Duration hh/mm	Authoriser

## Managed Components

Name	Type
MARAKLS3	Production Database Server
MARCHCS1	DR Database Server Secondary
MARCHCS3	Test Database Server
CNWAKLS205	Web Server
MARPREG	Production System

Name	Type
MARUREG	UAT System

## Transaction Volumes

Transaction name	This Month	Last Month	Percentage Change
All Transactions	5,549,427	4,551,590	22%

**NOTE;** The large number of web service calls last month to the Registry from the Retail Data project API Manager caused the increase in database transactions. Refer Summary of Incidents on page 11 for further details.

## Database Growth

Class	This Month MB	Last Month MB	Change MB
Database	555,020	548,413	6,607
Non-database	83,892	66,944	16,948
<b>Total</b>	<b>638,912</b>	<b>615,357</b>	<b>23,555</b>

## Backup Performance Production

Backup Type	Run days	Run Time	Expected Duration hh/mm	Tape Restore Test Date
Disk	ALL	20:00	01:15	10Apr16
Tape	ALL	01:00	05:00	

## Electricity Authority Contact Information

The customer operations contacts are for Jade Care personnel to contact the Electricity Authority staff for day-to-day procedures or any unexpected events.

Contact Name / Role	Contact Details
<b>Manager Market Operations</b>	Grant Benvenuti P: 04 460 8849 M: 027 652 4854 E: <a href="mailto:grant.benvenuti@ea.govt.nz">grant.benvenuti@ea.govt.nz</a>

## Jade Care Contact Information

Role	Contact Details
<b>Central Systems</b> Central Systems is the single point of contact for Jade Care. Central Systems will co-ordinate the involvement of the necessary staff from elsewhere in the Jade organisation.	E: <a href="mailto:csystems@jadeworld.com">csystems@jadeworld.com</a> P: 0800 65 22 66 or +64 3 365 22 66 or +64 21 225 8122 A: Jade Software Corporation 21 Sheffield Crescent P.O. Box 20159 Christchurch, New Zealand
<b>Client Services Manager</b> The Client Services Manager provides a more formal channel of communications between the two organisations. The Client Services Manager is responsible for scheduling non-routine activities with the customer, acts as the primary point of fault escalation and also produces the monthly reporting.	David Burt E: <a href="mailto:dburt@jadeworld.com">dburt@jadeworld.com</a> P: 03 367 8337 – Office 021 225 8137 – Mobile
<b>Business Manager</b> The Business Manager takes overall responsibility for the customer relationship with Jade.	Richard Cattell E: <a href="mailto:rcattell@jadeworld.com">rcattell@jadeworld.com</a> P: 09 600 6326 – Office 021 834 877– Mobile

## **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, then Grant Benvenuti would like to be contacted.

## 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 from time to time. The target date for delivery is the 5th working 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.