

This Test Strategy involves the following Test Participants:

- AM Developer
- BPO Host
- National Grid
- Industry
- ELEXON

Tripartite Test Strategy for the November '10 BSC Systems Release

This tripartite Test Strategy details the testing required for the November 2010 BSC Systems Release.



Find the Test Strategy and all about the Release
[November 2010 BSC Systems Release Webpage](#)

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Test Strategy

14 June 2010

Version 1.0

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Any questions?

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About this document:

This test strategy describes the testing that test participants will carry out and their responsibilities for the November 2010 Release (Nov 10 Release).

The test strategy describes the testing which is designed to demonstrate that:

- changes to the BSC Central Systems support the requirements and solutions defined in the P243 and P244 combined Business Requirements Solution (BRS) (Reference 1) and relevant Change Proposals (CPs).
- changes do not adversely impact unchanged Applications and documents that support the trading arrangements; and
- changes conform to the BSC and Code Subsidiary Documents (CSDs).

ELEXON has produced this document in accordance with [Guidelines for Testing Changes to BSC Systems \(Reference 2\)](#).

The November 10 BSC Systems Release PID and Plan (Reference 3) contains full details of the scope, approach and deliverables, including timescales and dates for individual test phases. Any changes to the scope of testing, which are not captured in the Nov 10 Release PID and Plan will be captured in this test strategy.

Changes to BSC Party systems that are impacted by the Nov 10 Release are outside the scope of this test strategy. However, ELEXON will communicate with BSC Parties to ensure they understand the changes required.

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The [Nov 10 Release website](#) contains up to date information on the changes and key testing dates. Below is a table summarising the changes for November 10, and a brief summary of each change that requires testing.

Changes for the November '10 BSC Systems Release		
Change	Impact	Covered under this Test Strategy?
Infrastructure Upgrade: Operating System and Virtualisation Host Upgrade	CVA and SVA systems	Yes
P243 'Publication of Generator Forward Availability by Fuel Type'	BMRS	Yes
P244 'Provision of BritNed flow data to the BMRS'	BMRS	Yes
CP1333 'Improved Reporting of Prices for SO-SO trades'	BMRS	Yes
CP1315 'Maintenance of Outstation Types as part of Compliance and protocol approval'	DTC	No
CP1267 'Registration of UMISO's and MA's in SMRS'	SMRS	No
CP1325 'Removal of Obsolete PARMS Serials'	PARMS	Yes

Infrastructure Upgrade

There will be an operating system and virtualisation upgrade of the servers in the live environment.

P243 'Publication of Generator Forward Availability by Fuel Type'

P243 will publish the following on the BMRS:

- National Output Usable data broken down by Fuel Type and BM Unit for the 2-14 days and 2-52 weeks ahead time periods;
- Output Usable data for Interconnectors. Currently forward availability for Interconnectors is not provided to National Grid but we expect this data will become available to National Grid and the wider industry in the near future. In the interim, the BMRS will report the forward availability for each Interconnector fuel type as zero
- transferring all Output Usable data/Generating Plant Demand Margin data from the BSC website to the BMRS.

P244 'Provision of BritNed flow data to the BMRS'

P244 will:

- include the Netherlands-England Interconnector (BritNed) data on the BMRS as a new fuel category.
- make allowances in the BSC for future Interconnector data to be incorporated into the BMRS without the need for a Modification Proposal

CP1333 'Improved Reporting of Prices for SO-SO trades'

Solution summary:

- A new web page for SO-SO price data that presents it as a table of structured data, rather than unstructured text;
- A new structured Tibco message (that presents the price data in a structured manner, rather than requiring Party systems to extract it from a textual message as currently); and
- A web page for retrieving historical price data (for a particular Settlement Day, Interconnector and/or Settlement Period).
- A new loader which will validate and load the SO-SO files sent from National Grid. The loader will deal with files in xml format.

CP1325 'Removal of Obsolete PARMS Serials'

CP1325 "Removal of obsolete PARMS Serials" will impact November release. CP1325 contains an impact on the Pool Application in relation to the removal of an obsolete PARMS serial. Any CP1325 impacts regarding the Pool Application **will not be part of the November Release and this Test Strategy**. This part of CP1325 will be carried out and tested at a later stage.

Solution summary:

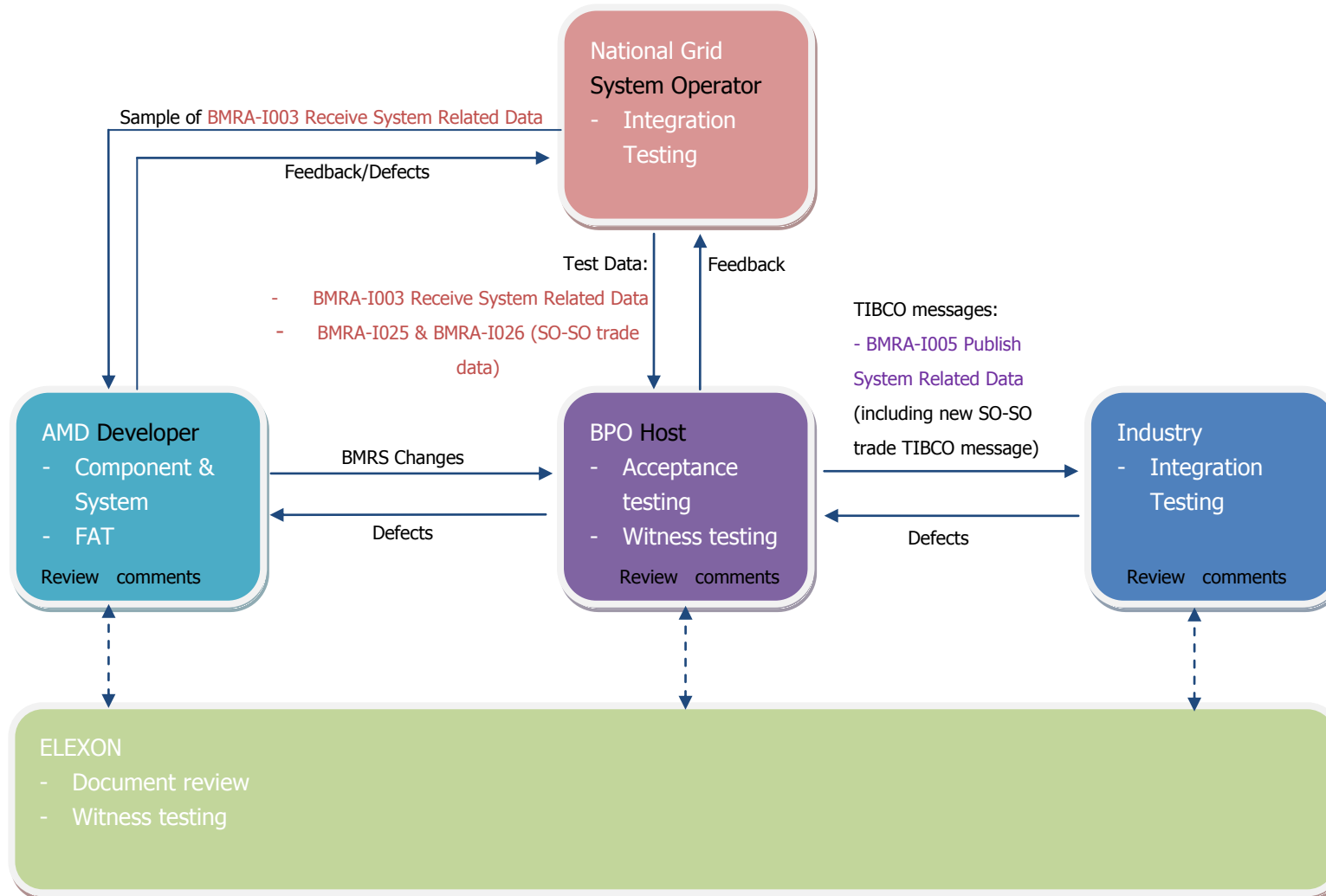
- 14 obsolete PARMS Serials will be removed and the PARMS software will be amended to reject their submission.

2 Testing Framework



Testing Framework

The Testing Framework below shows the test activities that each test participant is responsible for and the interactions between them.



3 Test Participant Activities

ELEXON has used the Testing Guidelines (Reference 1) to identify the types of testing required. Some of these tests will be made up of one or more specific tests as described in the right hand margin. For example, FAT can include change specific, regression and performance or a subset of these tests. Details of the specific tests are in each test participant's section (Section 4 onwards).

Change Reference	Business Risk	Scope	Document Review	Component and System Test	Factory Acceptance Test (FAT)	Acceptance Test	Integration Test	Witness Test	Installation Test
P243/P244	High	Low	A, B, E, I, N	A	A	B	I, N	B, E	A
Infrastructure Upgrade	High	High	A, B, E		A ¹	B			A
CP1333	Low	Low	A, B, E, I, N	A	A	B	I, N	B, E	A
CP1325 excluding impacts on the Pool Application	Low	Low	PA, PB, E	PA	PA		PA	E	PB

Table Key

Abbreviation	Test Participant	Abbreviation	Test Participant
A	Cognizant as Application Manager and Developer	N	National Grid
B	Logica as Business Process Operator and Host	E	ELEXON
I	Industry Participant	PA	Logica as PARMS Application Manager and Developer
PB	Logica as PARMS Business Process Operator and Host		

¹Cognizant will carry out FAT testing which will consist of regression testing major functionality in the CVA and SVA systems. The purpose of this testing is to provide assurance that the CVA and SVA systems function correctly within the upgraded infrastructure.



Test Types

FAT may include:

- Change Specific
- Regression
- Performance Testing

Acceptance testing may include

- Software Acceptance
- Operational Acceptance
- Parallel Run Testing

Integration testing may include

- Service Integration
- Interface Testing
- End-to-End Testing

Installation testing may include

- Deployment testing
- Back-out testing
- Data Migration Testing



Test Scope

The AMD will update its infrastructure to match that of the BPO's Live environment and define, manage and execute FAT. Following the upgrade, the AMD and BPO will produce a manual detailing the process for setting up such an environment in future.

For P243, P244 and CP1333, the AMD will define, manage and execute Component, System and FAT testing as detailed below. Additionally, the AMD will support the BPO during OAT. All AMD testing will take place by Cognizant's offshore testing team and will be managed by Cognizant onshore.

Component and System testing

P243/P244/CP1333

The AMD will execute component and system testing to ensure all the changes conform to the BMRS module specifications. The AMD will compile and review all test evidence and provide ELEXON with a plan to resolve all outstanding defects prior to FAT.

The AMD may be requested to provide evidence of the testing carried out during Component and System testing.

FAT

Infrastructure Upgrade

Regression testing on the infrastructure upgrade will test that major functionality on the CVA and SVA systems has not changed with the infrastructure upgrade. The AMD will:

- verify connectivity and configuration of the devices in the new environment;
- execute regression testing on the BMRA/XSec/Comms applications prior to the upgrade to establish a baseline; and
- execute regression testing on CVA and SVA applications following the upgrade to ensure existing functionality remains intact.

P243/P244/CP1333

The AMD will execute FAT testing on the P243, P244 and CP1333 changes on the pre-upgrade (FAT dry run) and post-upgrade (FAT main run) test environments. See Appendix 1 for details on the test environment configuration.

The AMD will provide the BPO with a copy of the software at the beginning of the FAT main run, along with a draft release note and SRDN. Once FAT is complete, the AMD will handover the updated software with the Release note and SRDN for Acceptance testing by the BPO.

The AMD will update the FAT pack (including expected results, test scripts etc.) and prepare the test environment(s). All FAT testing material will be subject to ELEXON review and approval prior to executing FAT testing. The BPO will witness the AMD's FAT testing remotely at the ELEXON office using the necessary facilities such as WEBEX and

teleconference. AMD onshore staff will support the witness testing. The BPO will also review FAT materials and provide input into test scenarios.

The following test types will be carried out for FAT.

FAT summary	
Change Specific	
<p><u>P243/P244/CP1333:</u> Change specific test scripts will be developed and run to test the National Data, Zonal Data, BMU data, System Zone Maps requirements as defined in the combined P243 and P244 BRS; Appendix 2 contains further scenarios. The AMD will execute:</p> <ul style="list-style-type: none"> • two runs of change specific testing of the changes on the pre-upgrade environment (this will be the dry run); and • two runs of change specific testing post-upgrade (this will be the main run). 	
Regression testing	
<p><u>Infrastructure upgrade:</u></p> <ul style="list-style-type: none"> • one run on BMRA/Xsec/Comms pre-upgrade; and • one run on CVA and SVA applications post-upgrade in parallel with the pre-upgrade run. <p><u>P243/P244/CP1333:</u></p> <ul style="list-style-type: none"> • Following regression testing for the infrastructure upgrade (above) the AMD will deploy the changes on the pre and post upgrade environments, and execute in parallel: one run of regression test on the pre-upgrade and one run on the post-upgrade environments; appendix 3 contains the list of regression tests. • There is no specific regression testing related to CP1333 as this creates new parallel functionality. However, since CP1333 and P243/P244 will be developed and tested in conjunction, regression testing will cover the CP1333 changes. This regression testing will be separate and distinct from the regression testing carried out for the infrastructure upgrade. 	
Performance testing	
P243/P244 performance testing (limited volume testing) will cover performance testing for CP1333	

FAT testing will be complete when, following completion of all tests, the changes meet ELEXON's acceptance criteria. The AMD will inform ELEXON as soon as it becomes aware of a defect.

Installation testing

The AMD will execute the following tests as part of installation testing for all changes as part of its build phase:

Installation Testing summary	
Deployment Testing	
Verification	Testing
Verify the deployment process on test environments is successful by ensuring correct environment configuration	Implement the deployment processes to create test environments for dry and main run tests.

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Back out Testing	
Verification	Testing
Verify the back out processes on test environments is successful by ensuring correct environment configuration	Implement the back out processes on test environments at the end of FAT execution (following the dry and main run).

During the BPO's Acceptance and Integration testing, the AMD will agree a plan with the BPO and ELEXON to resolve outstanding defects.

The AMD will develop CP1333 changes and P243/P244 changes separately, therefore no additional back out testing is required if CP1333 is not approved.

5 BPO Host

Test Scope

The BPO will upgrade its infrastructure prior to testing P243, P244 and CP1333 changes. The BPO will modify existing OAT scripts and execute OAT on the new infrastructure, focusing on performance and failover tests.

The BPO will define, manage and execute Acceptance and Integration testing for P243, P244 and CP1333 on the new infrastructure (post-upgrade) as detailed in the sections below. The BPO will execute Acceptance and Integration testing in parallel.

In addition to providing the BPO Host service, Logica also provides the service for the Performance Assurance Monitoring and Reporting System (PARMS) AMD and PARMS BPO Host. For CP1325, the PARMS AMD and BPO will execute, Component, System, FAT, Integration and Installation testing, also detailed under the CP1325 PARMS AMD and CP1325 PARMS BPO headings below.

Acceptance Testing

P243/P244/CP1333

For its Acceptance testing, the BPO will amend the OAT test pack and execute OAT using the configuration specified in Appendix 1, along with the activities listed in the table below. The OAT test pack will contain additional change specific test scripts as there will be no SAT. The BPO will monitor performance closely throughout OAT. The BPO will review all AMD FAT material and witness the FAT.

Acceptance test summary	
Test	Notes
FAT	<ul style="list-style-type: none"> Remotely witness all change specific tests and a selection of regression tests during the main run from ELEXON's office review AMD FAT materials provide input into FAT scenarios witness the AMD's installation and FAT



BPO Host

Failover test

A backup operation that automatically switches to a standby database, server or network if the primary system fails or is temporarily shut down for servicing.

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Installation and back-out verification	Installation and confidence testing using the early software drop from the AMD, draft release note and deployment instructions (SRDN).
OAT	<p>Executed using software following completion of the FAT main run.</p> <ul style="list-style-type: none"> • includes receipt of SO-SO trade data from National Grid if CP1333 is approved. Databases will be a snapshot of the Live environment taken close to the planned test start date • Performance and failover (infrastructure upgrade) • Additional change specific tests: <ul style="list-style-type: none"> ▪ Loading and rejection of data files ▪ Data publishing ▪ Webpage display and data values ▪ Webpage auto refresh functionality (web-cache and page invalidations) ▪ New XML and CSV downloads ▪ XML file processing through new XML infrastructure

Integration Testing

P243/P244/CP1333

The BPO will complete Integration testing to test the process from start to end in parallel with its OAT. For its integration testing, the BPO will execute End-to-End testing as this will involve testing the receipt of data flows from National Grid, processing them and publishing the relevant information on the BMRS and to participants via TIBCO. ELEXON will provide the End-to-End test specification.

Integration testing will be complete when the test flows conform fully to the IDD and participants receive the flows containing to the data sent to them.

End-to-End test flows			
Flow	From	To	Change
P243/P244: BMRA-I003	National Grid	BPO via High Grade link	New System related data
P243/P244: BMRA-I005	BPO	Participants via TIBCO	Publishing new System related data
CP1333: SO-SO trade data (BMRA-I025 and BMRA-I026)	National Grid	BPO via High Grade link	System Operator Trade Data
CP1333: ² SO-SO price data	BPO	Participants via TIBCO	SO-SO price data

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CP1325 PARMS AMD testing

The PARMS AMD will execute FAT covering change specific and regression testing, however focussing on regression testing as no new functionality will be added as part of this change. It will also execute End-to-End testing to ensure obsolete serials are not processed and reported on the PARMS. ELEXON will witness the PARMS AMD testing.

CP1325 PARMS BPO testing

The PARMS BPO will execute deployment and back out testing as part of its installation testing.

6 National Grid

Test Scope

P243, P244 and CP1333 will require National Grid to amend and test its systems and Interface Specifications. National Grid's testing of its systems changes is outside the scope of this test strategy; however ELEXON, the AMD and the BPO will review the following National Grid interface specifications:

- BMRA & SAA Interface Specification; and
- ELEXON Interface Specification.

To assist the AMD in its FAT testing, National Grid will provide sample BMRA-I003, BMRA-I025 and BMRA-I026 flows in time for the AMD's FAT testing in July (please see section 9 'Testing timeline') and the BPO's OAT. National Grid will also take part in End-to-End testing.

7 Industry

Test Scope

ELEXON will invite Industry members to participate in End-to-End Testing for P243, P244 and CP1333. Participants will receive the updated BMRA-I005 flow via TIBCO. ELEXON will advertise dates and further information early in November 10 implementation.

8 ELEXON

Test Scope

ELEXON will conduct the following activities:

1. Review relevant documentation and testing material (CSDs, design and test scripts/documents) produced for changes by the AMD, BPO and National Grid. All reviews will be subject to ELEXON's Quality plan; AMD and BPO documents will be subject to their respective quality plans.
2. Witness the BPO's OAT and PARMS AMD testing and record any tests it witnesses in ELEXON's witness test report;
3. Amend the BMRA URS, Word IDD and reporting catalogue and issue this for Industry review and approval;
4. Draft the End-to-End test specification; and
5. Coordinate End-to-End testing and witness the BPO's tests. ELEXON will publish End-to-End testing dates on its website and request participants via its change circulars and Newscast.

9 Testing timeline



The following diagram illustrates the dependencies between various test phases:



10 Test Management

Test Procedures

Where one of the above participants identifies defects, ELEXON will notify the AMD in accordance with ELEXON's procedures and the contracts in place with Cognizant and Logica.

ELEXON will use the test procedures at the appropriate level to meet the quality requirements of the Release. The AMD and BPO will ensure that any test phases they manage and execute will follow good industry practice and their own test procedures. All

necessary hardware, software, data and results are prepared and available. In addition, the AMD will use separate environments for development, build and testing.

In general, defects raised during one phase of testing will be cleared by the start of the next phase. The Release manager may choose to progress to the next phase with outstanding defects of low business impact (i.e. no Severity 1 or 2 defects outstanding), rather than delay the start of the next phase. The AMD and BPO will agree and obtain acceptance for a plan to resolve outstanding defects with ELEXON and log any remaining defects on to the BSC Service Desk. The table below describes defect severity levels for the AMD and BPO.

Defect Severity Levels	
Severity	Description
T1	Testing phase cannot continue where ELEXON, AMD or the BPO are conducting testing of Software or Hardware.
T2	Testing results generated are incorrect but testing has not been prevented from continuing where ELEXON, AMD or the BPO are conducting testing of Software or Hardware.
T3	Any Incident related to testing that is not of Severity 1, 2 or 4.
T4	Testing produces incorrect results that are of minor or cosmetic nature where ELEXON, AMD or the BPO are conducting testing of Software and general queries regarding testing.

Test Deliverables

The Release Manager will approve Release deliverables. Following authorisation, if any member finds a defect against an approved product, ELEXON will manage it as appropriate. Any defects leading to incorrect results will be corrected and re-tested prior to implementation; other, less severe defects will be corrected if they do not adversely impact the Nov 10 Release. ELEXON will conduct a full quality review prior to document authorisation, therefore believes this risk to be small.

The table below summarises the key test deliverables and the parties responsible for producing them. The AMD and BPO will submit their deliverables to ELEXON for review and approval.

Test deliverables	
Report	Responsibility
Email confirming early code drop installation	BPO
Email confirming PARMS acceptance	PARMS BPO
Weekly defect summary reports (FAT, Installation, OAT, E2E)	AMD, BPO
Checkpoint updates	AMD, BPO, ELEXON
Test Strategy and Plan (test approach)	AMD, BPO
FAT scripts	AMD
FAT pack	AMD

OAT Specification and plan	BPO
OAT scripts	BPO
OAT pack	BPO
End-to-End test specification	ELEXON
Full test report	AMD, BPO, PARMS BPO, ELEXON
FAT witness test report	BPO
Release witness test report	ELEXON



This section details relevant Release assumptions, their associated risks and any issues that are present. Each assumption corresponds to a risk with the same number i.e. assumption one corresponds to risk one etc...

Assumptions

1. The infrastructure upgrade will be completed on time
2. Responsibility for defects discovered will be clear
3. There will be enough time to complete OAT.
4. Defects found during OAT could be on other applications not just BMRA as the database and application server are being upgraded.
5. The AMD are using the DR environment to develop and test changes.
6. The AMD virtual machine environments are sufficiently robust for release testing purposes.
7. There is sufficient contingency allowed for testing any defects.
8. For P243/P244 FAT testing there will be a dry run carried out on the pre- upgraded environment and a main run carried out on the post- upgraded environment
9. Test flows are delivered on time by NGC
10. P243/P244/CP1333 timescales can be managed with respect to End-to-End Testing timescales

Risks

1. Infrastructure changes are not completed on time therefore Acceptance testing may be delayed.
2. Defects uncovered in BPO testing could result in additional test runs if disagreements arise over responsibility for defects.
3. If a rerun of OAT is required, testing will be significantly delayed. A time of three weeks has also allocated for defect fixes.
4. If Applications other than the BMRA are impacted during OAT, this could delay OAT significantly.
5. The AMD are using the DR environment to test changes which places a risk on the availability of the DR system.
6. Any issues with the virtual machines could result in the need for additional environments and delays in testing.
7. Timescales may not allow for contingency testing identified by the BPO which could potentially impact the quality of the software deployed to live.
8. The dry run and main run being carried out on two different environments may make it difficult to determine the source of any issues that arise.
9. Test flows from NGC are not available in time for OAT testing.
10. If OAT phase is staggered for P243/P244 and CP1333, then the timescales may not be convenient for participant testing.

Issues

There are currently no issues.



Authorities				
Version	Date	Author	Reviewer	Reason for review
0.1	20 April 2010	SHJ	TYM	Peer Review
0.2	30 April 2010	SHJ	TYM, YVW, PAP, STF	Peer Review
0.3	7 May 2010	TYM, SHJ	YVW, SHJ	Peer Review
0.4	21 May 2010	SHJ	TYM, YVW, AMD, BPO	Formal review

Approval				
Version	Date	Author	Reviewer	Reason for review
1.0	11 June 2010	SHJ	YVW	
2.0	26 July 2010	SHJ	-	Corrected flows (I026 to I025 and I027 to I026)

Authorisation				
Version	Date	Author	Reviewer	Reason for review



Terms used in this Document

Acronyms and definitions	
Term	Definition
AMD	Application Manager and Developer
BMRS	Balancing Mechanism Reporting System
BPO	Business Process Host/Operator
BRS	Business Requirements Solution
CSD	Code Subsidiary Document
CVA	Central Volume Allocation
FAT	Factory Acceptance Testing
OAT	Operational Acceptance Testing
SAT	Software Acceptance Testing
SO	System Operator
SRDN	Software Release Development Note
SVA	Supplier Volume Allocation

References

Reference	Document
Reference 1	P243 and P244 combined Business Requirements Solution
Reference 2	Testing Guidelines
Reference 3	November 10 PID and Plan

14 Appendix 1 – P243/P244 change specific test overview

Below is an overview of change specific scenarios; test scripts will contain the detailed test steps and variations.

CSTP243/4-1: Changes to Electricity Data Summary page

- At the Electricity Data Summary page, verify if the following 2 links are available:
 - 2-14 day ahead Output Usable
 - 2-52 week ahead Output Usable

2-14 day

- Select '2-14 day ahead Output Usable' and verify the format of the graph displayed.
- Load the '2-14 day ahead Output Usable' data and check the following:

- 'Manage Task Run' screen for successful load of the data file
- Verify the business tables for successful data load into the database
- Verify the contents of the webpage (LG and HG), including a spot warning 'Data to be used at user's own risk'
- Total Forecast Exports for Interconnector fuel type category will be capped to Zero for Graphical, XML and CSV formats while TIBCO includes raw data (inclusive of negative values)

2-52 week

4. Select '2-52 week ahead Output Usable' and verify the format of the graph displayed.
5. Load the '2-52 week ahead Output Usable' data and check the following:
 - 'Manage Task Run' screen for successful load of the data file
 - Verify the business tables for successful data load into the database
6. Verify the contents of the webpage (LG and HG), including a spot warning 'Data to be used at user's own risk'
7. Total Forecast Exports for Interconnector fuel type category will be capped to Zero for Graphical, XML and CSV formats while TIBCO includes raw data (inclusive of negative values)

Interconnector data

8. Verify if 'BritNed' is added to 'Generation By Fuel Type' (graph), 'Generation By Fuel Type' (table) and 'Average Half-hourly Interconnector Flows'
9. Verify if an additional column is added in the webpage while 'Current/Historic' button is clicked from 'Generation by Fuel Type' (graph) and/or 'Average Half Hourly Interconnector Flows'
10. Verify if an additional column is added in the excel spreadsheet while 'Current/Historic' button is clicked from 'Generation by Fuel Type' (table)
11. Filtering of data by end user for 'Generation By Fuel Type' (graph) (E.g. Selection of Dutch I/C using Tick boxes)

CSTP243/4-2: Changes to Forecast Data page

2-14 Day Ahead

1. Verify if 'No data available to chart' message is displayed for:
 - 2-14 day ahead data existing graphs: NDFD, TSDFD, OCNMD
 - New graphs: GPDM and 2-14 day ahead Output Usable data by Fuel type
 - An additional column to the table displaying GPDM with spot warning
 - Options to download the Output usable data by fuel type in CSV and XML
2. Load the data for NDFD, TSDFD, OCNMD, GPDM and 2-14 day ahead Output Usable data by Fuel Type and verify the 'Manage Task Run' screen, data load in business tables, and data displayed on the webpage.

2-52 Week Ahead

3. Verify if 'No data available to chart' message is displayed for:
 - 2-52 week ahead data existing graphs: NDFW, TSDFW, OCNMW
 - New graphs: GPDM and 2-52 week ahead Output Usable data by Fuel type
 - An additional column to the table displaying GPDM with spot warning

- Options to download the Output usable data by fuel type in CSV and XML
4. Load the data for NDFW, TSDFW, OCNMW, GPDM and 2-52 week ahead Output Usable data by Fuel Type and verify the 'Manage Task Run' screen, data load in business tables, and data displayed on the webpage.

CSTP243/4-3: Addition of National Output Usable Forecast pages

2-49 Days Ahead Output Usable Data

1. Verify if the webpage appears under 'National data->Forecast data->2-49 days ahead OUP'
2. Verify if 'No data available to chart' message is displayed for:
 - New graph displaying 2-49 days ahead Output Usable Forecast data
 - XML and CSV buttons are available on the webpage for downloading the data
3. Load the 2-49 days Ahead Output Usable data and verify the 'Manage Task Run' screen, data load in business tables, and data displayed on the webpage. Verify the webpage for:
 - Graph displaying 2-49 days ahead Output Usable Forecast data
 - Click on the XML and/or CSV buttons to download the data and verify the contents of the files.

1-5 Years Ahead Output Usable Data

1. Verify if the webpage appears under 'National data->Forecast data->1-5 years ahead OUP'
2. Verify if 'No data available to chart' message is displayed for:
 - New graph displaying 1-5 years ahead Output Usable Forecast data
 - XML and CSV buttons are available on the webpage for downloading the data
3. Load the 1-5 years ahead Output Usable data and verify the 'Manage Task Run' screen, data load in business tables, and data displayed on the webpage. Verify the webpage for:
 - Graphs displaying 1-5 years ahead Output Usable Forecast data
 - Click on the XML and/or CSV buttons to download the data and verify the contents of the files.

CSTP243/4-4: Addition of Zonal Output Usable Forecast page

1. Verify if the webpage appears under 'Zonal data->Output Usable'
2. Verify if new page is displayed with the following 'Links':
 - 2-14 days ahead, 2-49 days ahead, 2-52 weeks ahead, 1-5 years ahead
 - The user can choose between XML and CSV format for download
 - For each selected combinations, verify the format of the XML and CSV outputs
 - System Zone Maps and BM Unit Mapping information
 - For System Zone Maps, the information will be available in pdf and BM Unit Mapping information will be available in spreadsheet format (xls)

CSTP243/4-5: Changes to the Help page

1. Check if there are Glossary entries for FUELINST and FUELHH to reference the new interconnector
2. Check if it is updated to include data items on the new graphs: 2-14 days and 2-52 week ahead output usable data



3. Check if explanatory text has been added making appropriate reference to the Zonal Forecast page

CSTP243/4-6: Verification of TIBCO message services

1. Drop the NGC files for 2-14 days and 2-52 weeks ahead (OUD by Fuel type, OUD by Fuel type and BM Unit, and GPDM).
2. Carry out TIBCO broadcasting and check if the data of all the 6 files are broadcasted onto the TIBCO client machines
3. Verify the format of 6 TIBCO messages against the IDD

Also, the Following available Change Specific Test Scripts will be run:

C6B-01 - BMRA P219 Functionality Test

This test creates and loads the various new types of NGC Forecast data files defined under P219, and then verifies them through the BMRA high-grade and low-grade web pages, TIB/RV and CSV downloads.

C6B-02 - BMRA P220 Functionality Test

This test creates and loads the various new types of NGC Forecast data files defined under P220, and then verifies them through the BMRA high-grade and low-grade web pages, TIB/RV and CSV downloads.

C6B-04 - BMRA CP1247 Functionality Test

This test creates and loads the various types of NGC System Warning files defined under CP1247, and then verifies them through the BMRA high-grade and low-grade web pages, and TIB/RV.

15 Appendix 2 – CP1333 change specific test overview

Below is an overview of change specific scenarios; test scripts will contain the detailed test steps and variations.

CSTSOSO-1: Verify the process loads the new XML file agreed with NGC

1. FTP server will have a new directory created to receive the NGC XML file with SO-SO price data. The new XML file will be dropped into the NGC_FILE_XML directory
2. Drop the new XML SO-SO price data file into the NGC_FILE_XML directory without having an entry in the SO-SO trade type table. The file must be rejected and the same will be validated in the 'Manage Task Run' screen and SGI_Files_Rejected area as well. NGC to receive an exception report.
3. Drop the new XML SO-SO price data file into the NGC_FILE_XML directory after an entry in the SO-SO trade type table. The 'Manage Task Run' screen shows the status as 'Successful' and the new XML file must be loaded into the new SO-SO price data business table

CSTSOSO-2: Check for 'Today/Tomorrow' webpage under 'General->SO-SO Prices' option

1. SO-SO Prices will have 3 options: a. Today/Tomorrow, b. Historic and c. SO-SO trades (existing).
2. Choose 'Today/Tomorrow' option and verify for the agreed format. This page will accept the 'Trade type' parameter with 3 filter criteria's: All, NGC->French, French->NGC. The data (SO-SO Trade Type; Settlement Date and time; Direction; ContractIdentification; Qty; and EnergyPrice) will be reported in Tabular format on the same webpage.

3. Verify both HG and LG WebPages display the data properly after dropping the new XML SO-SO price data file for 'Today/Tomorrow'. The pages need to be refreshed automatically.
4. Click on the XML button to check if the data can be downloaded in XML format. Verify the contents against the file received from NGC. Also, verify the format of the XML file against the IDD
5. Click on the CSV button to check if the data can be downloaded in CSV format. Verify the contents against the file received from NGC. Also, verify the format of the CSV file against the IDD

CSTSOSO-3: Check for 'Historic' webpage under 'General->SO-SO Prices' option

1. Choose 'Historic' option and verify for the agreed format. This page will accept the settlement date, settlement period and a 'Trade type' parameter with 3 filter criteria's: All, NGC->French, French->NGC. The data (SO-SO Trade Type, Settlement Date and time, Direction, ContractIdentification, Qty, and EnergyPrice) will be reported in Tabular format on the same webpage.
2. Verify both HG and LG WebPages display the data properly after dropping the new XML SO-SO price data file for historic date.
3. Click on the XML button to check if the data can be downloaded in XML format. Verify the contents against the file received from NGC. Also, verify the format of the XML file against the IDD
4. Click on the CSV button to check if the data can be downloaded in CSV format. Verify the contents against the file received from NGC. Also, verify the format of the CSV file against the IDD

CSTSOSO-4: Tibco Message Broadcast

1. Drop new XML files for 'Today/Tomorrow' and 'Historic' dates.
2. Carry out TIBCO broadcasting and checking if the data is broadcasted onto the TIBCO client machines
3. Verify the format of TIBCO SO-SO message type with IDD and also the content.



CVA RT Scripts					
Number	Title	Description	P243/ P244	CP1333	Inf. ³
RT-01	Initial setup	Initial population of registration data into CRA, the set-up of the scanners, the propagation of the registration data into BMRA and ECVAA and its subsequent maintenance.	✓	✓	✓
RT-02	SAA setup	Populate SAA with data needed for further testing, also testing report redirection	✓	✓	✓
RT-03A	Security Tests	Test Security and Comms software		✓	
RT-04	Baseline Settlement	Check Settlement Calculations for base data	✓	✓	✓
RT-06	Change Registration data	Settlement Calculations, ECVAA and BMRA actions based on changed registration data	✓	✓	✓
RT-07	ECVAA setup	To perform initial setup on the ECVAA system			✓
RT-08	ECVAA Setup Continuous	To test various aspects of ECVAA functionality and to setup data for ECVAA Continuous Running Tests			✓
RT-10	BMRA Forecast and Dynamic Data	To ensure that BMRA acts correctly when loading and publishing Forecast and Dynamic Data	✓	✓	✓
RT-11	BMRA Continuous Running	To ensure that both the High Grade and Low Grade BMRA services act correctly during continuous running. The test	✓	✓	✓

³ Inf. = Infrastructure upgrade

		involves simulating a succession of NGC flows and checking that appropriate website information is updated at the correct time. The test also ensures that data is published correctly on the website for clock change days.			
RT-33	SAA (BMRA) Settlement Trade and NIV Tagging	This test is based on R2B-08 and R2B-09, from Feb03, and will cover post P78 and P71 on BMRA and SAA.	√	√	√
RT-34	SAA Validate Settlement Data	To load various data flows that are required by the settlement calculation (including missing data) and to run the pre-run check to validate the settlement data.			√
APU	MTS OR7208 APU Maintenance(Module test script)	To verify that, post-fix, the tables are handled correctly and as expected by the Archive & Purge Utility.	√	√	
C6B-01	BMRA P219 Functionality Test	creates and loads the various new types of NGC Forecast data files defined under P219, and then verifies them through the BMRA high-grade and low-grade web pages, TIB/RV and CSV downloads.	√		
C6B-02	BMRA P220 Functionality Test	creates and loads the various new types of NGC Forecast data files defined under P220, and then verifies them through the BMRA high-grade and low-grade web pages, TIB/RV and CSV downloads.	√		
C6B-04	BMRA CP1247 Functionality Test	creates and loads the various types of NGC System Warning files defined under CP1247, and then verifies them through the BMRA high-grade and low-grade web pages, and TIB/RV.	√		

SVA RT Scripts					
Number	Title	Description	P243/ P244	CP1333	Inf. ³
R5S	SVAA Regression script 5	Checks a number of front end forms, mainly centring on the NHH BM Unit forms			✓
R6S	SVAA Regression script 6	Checks a number of front end forms, mainly centring on the assignment of Multiple Distributors in GSP Groups, creating Scottish GSP Groups and assigning BM Units in Scottish GSP Groups			✓
R11S	SVAA Regression script 11	Verification of the loading of the MDD File (D0269)			✓
R13S	SVAA Regression script 13	Verification of VAR Process. Test includes SSR Run with Multiple SSCs and Distributors, Loading P0012, D0040, D0041, (all including Scottish GSP Groups) Loading of D0269, D0265 (with type C LLFCs) Loading of D0278 files, loading of SPM files containing both import and export SSCs, loading of BMU files and execution of SSR Run, request of SSR reports and verification of all reports			✓
PA_0103	PA Test 0103	To test the Pool Apps reporting functionality			✓
PA_0104	PA Test 0104	To test the Pool Apps reporting functionality			✓
MDD_0101	MDD Test 0101	To setup MDD publish			✓
MDD_0102	MDD Test 0102	To verify MDD publish functionality and carry out a performance test			✓

DM_0101	Data Marshalling Test 1	Tests for the DM forms			√
DM_0102	Data Marshalling Test 2	Tests for the DM forms and environment setup			√
DM_0103	Data Marshalling Test 3	Tests for the DM forms and environment setup			√
DM_0104	Data Marshalling Test 4	Data Marshalling running test			√