# **Section G: Change Pack**

### **G1: Communication Detail**

Comm Reference:	2918.2 - MT - PO
Comm Title:	XRN5231 Provision of FWACV Service Detailed Design Change Pack
Comm Date:	18/10/2021

# **G2: Change Representation**

Action Required:	For Representation
Close Out Date:	01/11/2021

# **G3: Change Detail**

Xoserve Reference	
Number:	XRN5231
Change Class:	CDSP System Changes - New Service Line
	CDOP System Changes - New Service Line
ChMC Constituency	Shipper Users
Impacted:	National Grid NTS
	• DNs
Change Owner:	Steve Pownall:0121 229 2671: steve.pownall@xoserve.com

	Shipper/Industry Impact
	During detailed design, Xoserve has also considered the solution for data feeds into Gemini and MIPI (data explorer etc) from the new FWACV application. Any changes in Gemini and MIPI to accept the new files from Xoserve is considered as part of Gemini Consequential changes and are out of scope of XRN5231.
	Gemini/MIPI Consequential Change:
	Link to XRN5231 Change details
	The change proposal can be found here: using the following link
	This was raised by SGN, on behalf of all DNs, during the 0719R Review Group. The change scope includes the calculation of the daily LDZ FWACV values and, its publication to shippers through replication of the existing SC9 file mechanism albeit Xoserve will generate the SC9 files.
	XRN5231 Change Proposal:
Background and Context:	The concluding 0719R Workgroup Report contains the Next Steps and can be found here: <a href="http://www.gasgovernance.co.uk/0719/">www.gasgovernance.co.uk/0719/</a>
	This Review Group assessed several options during 2020 that might support the DNs in meeting their FWACV calculation/data provision obligations. The DNs have agreed that Xoserve should take the FWACV calculation role over in its entirety from National Grid. As such, the DNs have requested Xoserve to assess and develop a single option solution under Change Proposal XRN5231.
	UNC 0719R 'Calculation of Energy Value of Gas' Review Group
	Consequently, the DNs will become responsible for calculating their own daily LDZ FWACVs and, publishing the data to Shippers.
	National Grid has announced it is to withdraw from providing the Distribution Network Operators (DNs) with the daily LDZ Flow-Weighted Average CV calculation (FWACV) service (March 2022).
	National Grid currently provides a FWACV calculation/data publication service to the Distribution Networks (DNs). The DNs have statutory "The Gas (Calculation of Thermal Energy) Regulations" and UNC-related obligations to calculate and publish charging zone (LDZ) CV e.g. FWACV data to Shippers.

Xoserve is cognisant that Shippers/industry have been informed there will be no impacts insofar as existing FWACV data provision is concerned i.e. data will be available through SC9 files, Gemini and MIPI. Shippers certainly raised such concerns in relation to MIPI during the recent formal DSC consultation for the XRN5231 HLSO. We will continue dialogue with National Grid /DNs to agree delivery of the consequential change with XRN5231 to ensure the 1 <sup>st</sup> April 2022 implementation is achieved. Important: SC9 file sent to Shippers
<ul> <li>For the avoidance of doubt;</li> <li>there is NO proposal to change the SC9 file format, file type nor data;</li> <li>the SC9 files will continue to be sent to Shippers in accordance with the existing timetable (UNC obligations)</li> </ul>
During the impact assessment phase, it has been noted the SC9 file contains a 'TOD' value. This is effectively a <i>projected end-of-day estimate</i> of LDZ CV values and is calculated between 06:00 and 09:00 on the Gas Day and is sent to shippers (SC9) by 11am on that day. Also included in this 11am file is the Actual LDZ CV (ACT) values from the previous Gas Day which may overwrite the previous day's TOD.
<ul> <li>Xoserve, in conjunction with the Distribution Networks would like the Shippers to consider and respond to the following:</li> <li>1. Do Shippers use the SC9 TOD value in your systems and business processes?</li> <li>2. What (if any) are the implications for Shippers if TOD is set to a default?</li> </ul>

Functional:	Potential new DSC Service Line – FWACV Service
Non-Functional:	None
Application:	SAP IS-U, SAP PO, IX/EFT, Gemini
User(s):	<ol> <li>Shipper Users</li> <li>National Grid NTS</li> </ol>

# G4: Change Impact Assessment Dashboard (UK Link)

	3. Distribution Networks
Documentation:	N/A
Other:	Not Applicable

# Interfaces

Below table summarises the new interfaces created within Xoserve as part of FWACV service.

Interface Name	Description	Source	Direction	Target	Transfer Route
Al File	Volume Data	DNs	Inbound	CDSP	IX/EFT/PO/ISU
AO File	Response to Volume Data	CDSP	Outbound	DNs	ISU/PO//EFT /IX
YO File	CV Data	NG DNs	Inbound	CDSP	IX/EFT/PO/ISU
SC9 File	FWACV Data	CDSP	Outbound	Shipper NG	ISU/PO/EFT/IX
FWACV File	FWACV Data	CDSP	Outbound	Gemini	ISU/PO/EFT
LOR	Loss of Record Data	DNs	Inbound	CDSP	Email
LOR Response	Recalculated FWACV Data	CDSP	Outbound	Box Account	Email to DNs
OFGEM Report	OFGEM Audit Report	CDSP	Outbound	Box Account	Email to OFGEM
DNs Report	Monthly Audit Report – copy of the OFGEM audit report reflecting respective DNs data.	CDSP	Outbound	Box Account	Email to DNs
Boil off Site data	Volume data from site will be sent by site operator via email	Site Operator	Inbound	Box Account	Email from Site Operator
Missing CV data	Notification to DNs on D+1 for missing site CV - This is a collated list for all the sites that has missing CV	CDSP	Outbound	Box Account	Email to DNs
Missing CV data	Missing CV data will be shared by DNs via email	DNs	Inbound	CDSP	Email from DNs
Chaser Notification	Notification to DNs on D+3 for missing site CV and Volume -This is a collated list for all the sites that has missing CV and volume	CDSP	Outbound	Box Account	Email to DN
Lowest CV Notification	Notification to DNs to inform the Lowest of last 12 month CV for the site/sites was used in FWACV Calculation	CDSP	Outbound	Box Account	Email to DN
Default CV Notification	Notification to DNs to inform the default CV for the site/sites was used in FWACV Calculation	CDSP	Outbound	Box Account	Email to DN

Interface Name	Description	Source	Direction	Target	Transfer Route
Capping Notification	Notification to DNs and NG to inform the LDZ Billing CV was Capped	CDSP	Outbound	Box Account	Email to DN and NG
Sites excluded & Zero volume sites	Notification to DNs with the list of sites that were excluded from FWACV Calc and the sites with zero volume	CDSP	Outbound	Box Account	Email to DN

#### Notes:

- 1. The response files are sent when an acknowledgement is sent or when a rejection is sent.
- 2. Rejections as part of AO files will be sent using the new rejection codes created as part of FWACV service. The detailed rejections are available in the <u>file formats section</u>
- Xoserve use the IX Network as a secure file transfer solution to receive and deliver files from Customers. The current design is proposing to leverage the IX Network and EFT file transfer capability to exchange files with DNs in a secure manner.
- 4. DNs will be required to transfer files from their infrastructure to their existing IX end user server instead of sending files via SFTP to NG's file server.
- 5. The are no file format changes required by DNs as part of the new FWACV service.

SI.	File	File	New/	File Description	File
No	Name	Туре	Existing		
1	<ldz code="">001.PNnnnnn.Al1</ldz>	CSV	New -	Original Volume Data from NGN DN	$\checkmark$
		file	Inbound		
2	<ldz code="">001.PNnnnnn.Al2</ldz>	CSV	New -	Original Volume Data from SGN DN	✓
		file	Inbound		
3	<ldz code="">001.PNnnnnn.Al3</ldz>	CSV	New -	Original Volume Data from WWU DN	$\checkmark$
		file	Inbound		
4	<ldz code="">001.PNnnnnn.Al4</ldz>	CSV	New -	Original Volume Data from Cadent DN	$\checkmark$
		file	Inbound		
5	<ldz code="">002.PNnnnnnn.Al1</ldz>	CSV	New -	Amended Volume Data from NGN DN	✓
		file	Inbound		
6	<ldz code="">002.PNnnnnnn.Al2</ldz>	CSV	New -	Amended Volume Data from SGN DN	$\checkmark$
		file	Inbound		
7	<ldz code="">002.PNnnnnn.Al3</ldz>	CSV	New -	Amended Volume Data from WWU DN	$\checkmark$
		file	Inbound		
8	<ldz code="">002.PNnnnnn.Al4</ldz>	CSV	New -	Amended Volume Data from Cadent DN	✓
		file	Inbound		

#### Inbound Files – The below listed detailed view of new inbound files to xoserve

Outbound Files – The below listed files are sent to outbound interfaces from Xoserve.

SI. No	File Name	File Type	New/ Existing	File Description	File
1	<ldz code="">001.PNnnnnn.AO1</ldz>	CSV file	New-Outbound Data file	Business Data (Billing CV and FWACV) to NGN DN	~

SI. No	File Name	File Type	New/ Existing	File Description	File
2	<ldz code="">001.PNnnnnn.AO2</ldz>	CSV file	New-Outbound Data file	Business Data (Billing CV and FWACV) to SGN DN	~
3	<ldz code="">001.PNnnnnn.AO3</ldz>	CSV file	New-Outbound Data file	Business Data (Billing CV and FWACV) to WWU DN	~
4	<ldz code="">001.PNnnnnn.AO4</ldz>	CSV file	New-Outbound Data file	Business Data (Billing CV and FWACV) to Cadent DN	~
5	<ldz code="">002.PNnnnnn.AO1</ldz>	CSV file	New-Outbound Data file	Amended Business Data (Billing CV and FWACV) to NGN DN	~
6	<ldz code="">002.PNnnnnn.AO2</ldz>	CSV file	New-Outbound Data file	Amended Business Data (Billing CV and FWACV) to SGN DN	~
7	<ldz code="">002.PNnnnnn.AO3</ldz>	CSV file	New-Outbound Data file	Amended Business Data (Billing CV and FWACV) to WWU DN	<b>v</b>
8	<ldz code="">002.PNnnnnn.AO4</ldz>	CSV file	New-Outbound Data File	Amended Business Data (Billing CV and FWACV) to Cadent DN	~
9	<ldz code="">004.PNnnnnn.AO1</ldz>	CSV file	New-Outbound Acknowledgement	Acknowledgement on successfully processing original/amended volume data to NGN	~
10	<ldz code="">004.PNnnnnn.AO2</ldz>	CSV file	New-Outbound Acknowledgement	Acknowledgement on successfully processing original/amended volume data to SGN	~
11	<ldz code="">004.PNnnnnn.AO3</ldz>	CSV file	New-Outbound Acknowledgement	Acknowledgement on successfully processing original/amended volume data to WWU	~
12	<ldz code="">004.PNnnnnn.AO4</ldz>	CSV file	New-Outbound Acknowledgement	Acknowledgement on successfully processing original/amended volume data to Cadent	~
13	<ldz code="">005.PNnnnnn.AO1</ldz>	CSV file	New – Outbound Rejection	Notification of error on processing original/amended volume data to NGN	~
14	<ldz code="">005.PNnnnnn.AO2</ldz>	CSV file	New – Outbound Rejection	Notification of error on processing original/amended volume data to SGN	~
15	<ldz code="">005.PNnnnnn.AO3</ldz>	CSV file	New – Outbound Rejection	Notification of error on processing original/amended volume data to WWU	~
16	<ldz code="">005.PNnnnnn.AO4</ldz>	CSV file	New – Outbound Rejection	Notification of error on processing original/amended volume data to Cadent	~
17	<ldz code="">007.PNnnnnn.AO1</ldz>	CSV file	New – Outbound Data file	Notification of substitution of original/amended volume data to NGN	~
18	<ldz code="">007.PNnnnnn.AO2</ldz>	CSV file	New – Outbound Data file	Notification of substitution of original/amended volume data to SGN	~
19	<ldz code="">007.PNnnnnn.AO3</ldz>	CSV file	New – Outbound Data file	Notification of substitution of original/amended volume data to WWU	~
20	<ldz code="">007.PNnnnnn.AO4</ldz>	CSV file	New – Outbound Data file	Notification of substitution of original/amended volume data to Cadent	~
21	<ldz code="">008.PNnnnnn.AO1</ldz>	CSV file	New – Outbound Data file	Notification of amended volume data to NGN	~
22	<ldz code="">008.PNnnnnn.AO2</ldz>	CSV file	New – Outbound Data file	Notification of amended volume data to SGN	~
23	<ldz code="">008.PNnnnnn.AO3</ldz>	CSV file	New – Outbound Data file	Notification of amended volume data to WWU	~
24	<ldz code="">008.PNnnnnn.AO4</ldz>	CSV file	New – Outbound Data file	Notification of amended volume data to Cadent	~
25	<site number&gt;nn<ddmmyy>.YO3</ddmmyy></site 	Flat file	New – Outbound Data file	CV Data from DNs and NG from stream 3	~
26	<site number&gt;nn<ddmmyy>.YO4</ddmmyy></site 	Flat file	New – Outbound Data file	CV Data from DNs and NG from stream 4	~
27	<site number&gt;nn<ddmmyy>.YO5</ddmmyy></site 	Flat file	New – Outbound Data file	CV Data from DNs and NG from stream 5	~

SI. No	File Name	File Type	New/ Existing	File Description	File
31	<gem>01.PNnnnnn.FCV</gem>	CSV file	New -Outbound Data file	FWACV file with energy, volume & CV data to Gemini	~
32	<3 letter Shipper Code>01.PNMMDDSS.SC9	CSV file	New -Outbound Data file	SC9 file with calculated FWACV data to all Shippers	~

**Note:** In AS IS process NG generates an AO<003> file (e.g. <LDZ Code>003.PNnnnnn.AO1) and sends to DNs when adhoc business data request is received. This is now confirmed to be descoped as this is not part of FWACV process.

## **G5: Change Design Description**

### **FWACV Service Overview :**

This change will allow Xoserve to take the FWACV calculation role over in its entirety from National Grid, with a view to stand up a parallel live running service to check and validate the output of calculation is aligned to Grid outputs:

- 1. Undertake the daily LDZ FWACV calculation and apply the LDZ Attribution Mapping rules as necessary.
- 2. Apply LDZ CV Capping Rules when necessary.
- 3. Use the daily LDZ FWACV to calculate the energy entering the LDZ from the daily volume flow.
- 4. Apply subsequent daily FWACV updates between D+1 and D+5 closeout. Any updates post D+5 closeout will not feed into FWACV calculation.
- 5. Ability to manage the Loss of Record (LOR) process.
- 6. Capability of having a screen for any data(CV and volume) updates for Business Operations teams within Xoserve
- 7. Generate, maintain and issue SC9 files (same format and frequency as currently provided) to Shippers.
- 8. Handle any/ all exceptions falling out of the above activities.
- 9. Ability to send all relevant REPORTING (including monthly OFGEM report, monthly DN report).
- 10. The FWACV Service meeting the Non-functional standards:
  - 1. Performance Data volumes, Response times, Security, Audit
  - 2. Internal Reporting for effective Service Management

### **Key Assumptions :**

S.No	Design Assumptions
1	<ul> <li>Stornoway and SIUs are not part of FWACV calculation and the values are received via AI files will be sent to DNs.</li> <li>Declared CV, Volume and energy data for SIU's(record120) will be sent via AI2 file by SGN.</li> <li>Declared CV for Stornoway will be sent via AI2 file (record 140) by SGN</li> </ul>
2	Default CV values for all sites (including SIUs) for substitution process is 37. Default CV value for Stornoway in Substitution Process is 93
3	If multiple AI or YO files are received for the same site with different Volume and CV data, the latest file will be considered.
4	NG will send all the CV and volume information for Industrial sites to Xoserve via email until the sites are de-scoped from FWACV calculation. VLDMC data for D80 OFGEM Reporting for 2 industrial sites will also be de-scoped from the OFGEM report
5	The volume data for Boil Off Site will be sent from the site by site operator via an email to Xoserve

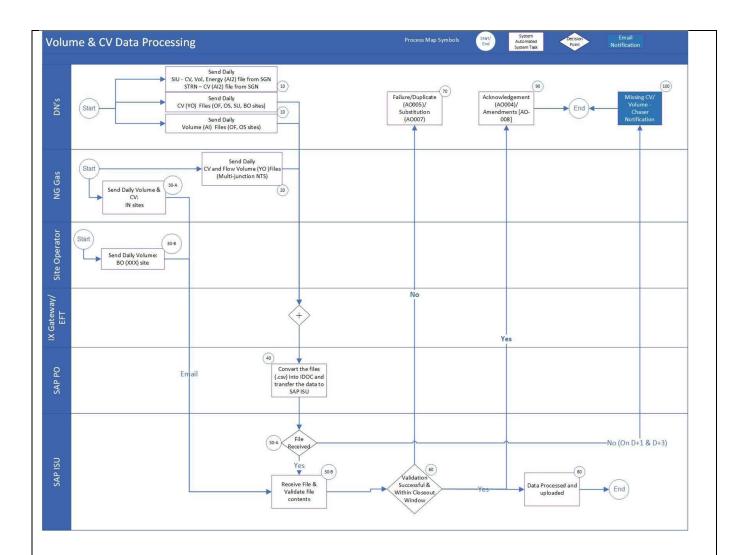
6	DNs will send CV for Boil off sites via YO files (using the existing record type).						
7	For all offtake sites, missing CV data is substituted with previous day's CV value and is used as the Average CV value from D+1 to D+4. On D+5, standard Attribution is followed to get Average CV value						
8	For all other sites (non-offtake) missing CV data is substituted with previous day's CV value and is used as the Average CV value from D+1 to D+5						
9	Data Migration – FWACV at LDZ level, CV and volume at site level will be migrated to UK Link system for past 7 years and will be provided by NG.						
10	The meter types that are considered for new FWACV file to be sent to Gemini are: OF meter types - Volume, CV and Energy OS meter types - Volume, CV and Energy SIU – CV , volume and energy STRN Meter types - CV						
11	DN to confirm all their site details prior to Go live to ensure the solution is catered to using the correct data and LDZ attribution mapping matrix						
12	The LOR notification will be sent by the DNs via an email to Xoserve during business hours in an agreed standard template as an attachment. The proposed template is attached to this change pack						
13	There is no attribution matrix for Onshore, Boil off and Industrial sites available.						
14	DNs do not need to receive the 200 (Storage Boil off volume) or 210 (Store rejection volume) records in the AO file						
15	FWACV file sent to Gemini Interface will include energy, volume data at meter/site level and CV at LDZ Level For Offtake sites the LDZ CV will be the CV for all the sites under the LDZ and for Onshore sites the CV will be the one from the YO file.						
16	The YO file would also be received through the IX network and not via an email from the DNs						
17	The notification to DNs and NG will be file and email based and not via Portal						
18	Accuracy of future calculation is highly dependent on quality of data that will be migrated. There is dependency on NG to ensure there will be data quality check at their end to mitigate the risk.						
19	The YOR response file will not be issued to DNs on the back of the YO files received						
20	In AS IS process NG generates an AO<003> file (e.g. <ldz code="">003.PNnnnnnn.AO1) and sends to DNs when adhoc business data request is received. This is confirmed to be descoped as this data is not part of FWACV process.</ldz>						
21	DN's have an obligation to provide 'not less than 6 months' notice informing any changes (e.g. adding a new site or removal of site, or changes to attribution matrix) as stated in the UNC and they need to contact Xoserve to discuss.						
22	<ul> <li>The process and timelines should be agreed as part of Service Transition Phase.</li> <li>SLA times for file delivery are as given below <ol> <li>AO(AO001) Response files are sent to DNs For Gas Day D on D+1 within 1 Business day.</li> <li>Amendments(AO0002) to FWACV/Billing CV information made between D+1 to D+5 has to be reported by D+5 (5 business days).</li> <li>AO Response files(AO004 and AO0005) are sent to DNs For Gas Day D on D+1 within 1 Business day.</li> </ol> </li> <li>Amendments to volume (AO008) information made between D+1 to D+5 has to be reported by D+5 (5 business days).</li> <li>Substitution Notification (AO0007) for Gas Day D on D+1 within 1 Business day.</li> </ul>						

	Below are the data feed cut off times that are considered for FWACV job run. D+1:
	6. All files received or CV entered/uploaded via screen by 9 AM, is considered for 10 AM processing job.
	7. All files received between and entered/uploaded between 9 AM and 12 PM, is considered for 13:30 processing job
23	8. All files received between and entered/uploaded between 12 PM and 2:30 PM, is considered for 15:30 processing job
	D+2 – D+5:
	9. All files received or CV entered/uploaded via screen after 2:30 PM on D+1 and 7:30 AM on D+2 is considered for 8:30 AM processing job.
	10. All files received between and entered/uploaded between 7:30 AM and 12 PM, is considered for 13:30 processing job
	11. All files received between and entered/uploaded between 12 PM and 2:30 PM, is considered for 15:30 processing job
24	The Missing CV data will be sent by the DNs via an email to Xoserve during business hours in an agreed standard template as an attachment. The proposed template is attached to this change pack
25	SC9 file sent to Shipper will not have any file format changes.
	Any requests to descope a site temporarily from FWACV calculation or include a site that was
26	temporarily removed, back into FWACV calculation should be sent to Xoserve as per a agreed process during Service Transition.

### Key Processes created as part of FWACV service are listed below

### > File Processing

The below process flow diagram and table details the system, path and the processing mechanism for the AI and YO files.



#### Figure: AI(Volume) and YO(CV) File Processing Flow

Step	Comment					
Step 10 Receive AI and YO files from DNs	Start of Process         DNs will send the AI file for below site types:         o       Offtake: It will have the Volume Data         o       Onshore: It will have the Volume Data         o       SIUs: It will have the Volume, CV and Energy Data.         o       STRN: It will have the CV data for Stornoway         DNs will send the YO file for below site types:       o         o       Offtake: It will have the CV Data         o       Onshore: It will have the CV Data         o       SIUs: FWACV will be received in the file.         o       Boil Off: It will have CV Data         Inbound File details are given in this change pack in Interface Section					
Step 20 Receive YO file from NG	<ul> <li>NG will send the YO file for below site types via IX Network:</li> <li>Multi-junction: It will have the Average CV Data</li> <li>Inbound File details are given in this change pack in <u>Interface Section</u></li> </ul>					

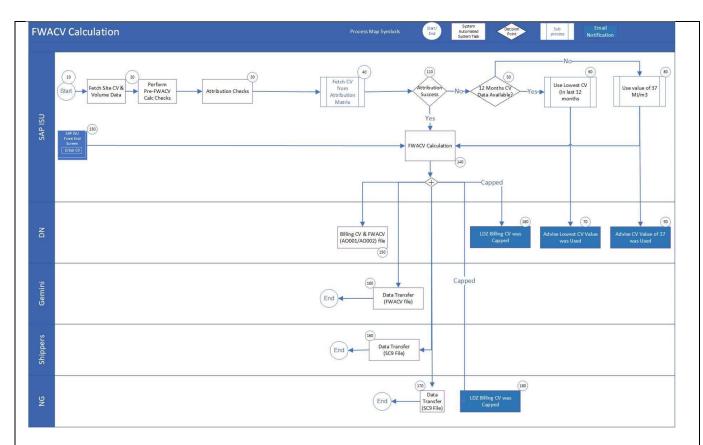
Step 30-A	NG will send an email with the below data:						
Receive Industrial Volume from NG via Email	<ul> <li>Industrial : It will have Volume Data</li> <li>Note: NG confirmed that these sites are planned to be de-scoped from FWACV calculations in future.</li> </ul>						
Step 30 -B Receive Boil off Volume from site operator via Email	Site Operator will send an email with the below data: 1. Boil Off: It will have Volume Data						
Step 40 Internal to Xoserve	All the AI and YO files will be received in the SAP PO system. The system will convert the files into the IDOC and transfer the data to SAP ISU. <u>Note:</u> No validations will be done in SAP PO.						
Step 50-1 Internal to Xoserve	Check if the File is received. If for any site/sites CV or Volume data is not received move to step 100.						
Step 50-2 Internal to Xoserve	Once the IDOCs are received in SAP ISU, the data is then loaded into the relevant tables.						
Step 60 Internal to Xoserve	Below validations will be done:         I. Below Validation will be done on all the Al file:         a. If the files are duplicate, it will be rejected.         b. All mandatory fields are present in the file.         c. Header record(A00) will be validated as below:         i. Header record         ii. LDZ Identifier         iii. File Creation Date         iv. File Creation Time         d. Below fields should validated using the site setup(depending on the record type):         i. LDZ identifier         ii. Onshore site, Offtake site, LDZ Transfer Out, Stornoway, SIU         iii. Effective Date         iv. Applicable at         v. CV         vi. Energy         e. Below fields will be validated in the trailer records (Z99)         i. Record Type: Z99         ii. Number of Records         f. If all the validations pass, then upload the volumes in the profiles for all the LDZ sites. For SIUs and Stornoway sites, upload the CV and Energy on main LDZ site.         g. Amended Al File will be identified if file type received in 002 like <ldz code="">002.PNnnnnn.Al1.         II. Below Validation will be done on all the YO file:         a. If the files are duplicate, it will be rejected.         b. All mandatory fields are present in the file.         c. Header record(A00) will be validated as below:</ldz>						

	<ul> <li>d. Below fields should validated using the allowable values in the file format: <ol> <li>CV Valid</li> <li>Average CV</li> <li>Average CV Attributable</li> <li>All the mandatory fields should be present in the trailer records (Z99).</li> </ol> </li> <li>Depending upon the result from the above, the records will be marked with below status: <ol> <li>If the validations pass for all the records in the received file, then update relevant tables. Also upload the CV, Volume and Energy in the profiles associated with the Site Name.</li> </ol> </li> <li>If the validations pass but the records in the file is not applicable for FWACV calculation, then update relevant tables.</li> <li>In case due to any system issue, the file processing is terminated, mark the records as 'P'(pending for processing) and fail the job.</li> </ul>
	'A'(Accepted/Ready for Processing)
	Move to step 80.
Step 70 Notify DNs via AO<005> file (Rejections)	If the validation fails for a couple of records in the received file, then mark the failed records as 'R' (Rejected) and the ones which passed the validation, mark them as 'N'(Not Valid for processing). Below are the proposed rejection codes for AO<005> file sent to the respective DN for the received AI file:
	Rejection         Rejection Description
	Code
	FWCV0001     File already exists in the system
	FWCV0002 Incorrect File Name received
	FWCV0003         Incorrect LDZ value received
	FWCV0004         The LDZ on the file is not associated with the DN
	FWCV0005         Incorrect file received from DN
	FWCV0006 Mandatory Field is missing
	FWCV0007     Gas day is outside closeout
	FWCV0008 Invalid Header Code
	FWCV0009     Site is invalid
	FWCV0010 Invalid file format received
	FWCV0011 Invalid trailer record
	FWCV0016         Amended file has same data as initial           File         File
	FWCV0017 Invalid Record Type
	For the YO files, the below rejection codes are maintained within internal Xoserve system only and are not sent to DNs as per the current design assumption that YO response files are not required.

	Rejection Code	Rejection Description					
	FWCV0001	File already exists in the system					
	FWCV0002	Incorrect File Name received	-				
	FWCV0005	Incorrect file received from DN	-				
	FWCV0006	Mandatory Field is missing	_				
	FWCV0007	Gas day is outside closeout	-				
	FWCV0010	Invalid file format received	-				
	FWCV0012	Incorrect Site Serial Number received	-				
	FWCV0013	Invalid CV flag received	4				
	FWCV0014	Invalid Attributable CV flag received	4				
	FWCV0016	Amended file has same data as initial File	-				
	FWCV0022	GC Sample Stream number not associated with the site	-				
	FWCV0023	Site does not exist in the system	-				
ep 80 ernal to Xoserve	The data will be processed and uploaded to relevant SAP ISU tables with appropriate status						
ep 90 otify DNs via D004,AO008 file	The acknowledgement of successful processing the file would be sent to DNs – AO004 file for the original AI file (AO001) or the AO008 file for the amendment file (AI002) for the respective DN						
ep 100 otify DNs of Missing //Volume on D+3 via nail	Missing CV notification email will be issued to respective DNs for any site/sites on D+1 post YO file processing job. Missing CV/Volume chaser notification email will be triggered to DNs on D+3 for any missing CV or Volume data at the end of D+2 for any site/sites						

#### > FWACV Calculation

The below process flow diagram and table details the system, path and the processing mechanism for the FWACV Calculation.



#### Figure : FWACV Calculation – Process Flow

Step	Comment
Step 10	Start of Process
Step 20 Internal to Xoserve	Pre-checks to ensure the correct CV and Volume data that fed into FWACV Calculation Job:         Site types valid for FWACV Calculation:         • Offtake site         • Onshore site         • Boil off sites         • Industrial sites         • LDZ Transfer Out    Initial Run: For the sites where AI/YO file are not available for the Gas flow day; SUBSTITUTION PROCESS will be executed i.e. the values from the previous day will be used for CV and Volume.
Step 30 Internal to Xoserve	Attribution mapping matrix checks( including the CV valid flag, attributable flag checks) are performed. The details are as given in the below table.

	(1) T	6	Cub Floo	CULL I	CV	
	Site Types	Scenario Site name is	Sub Flag	CV Valid Y	Attributable Y/N	Result Record the Average CV for the offtake site name as Average CV from the YO record
		same as	N	N/X	Y/N	Move to next attribution site. If none, lowest Average CV from the last 12 months. If not available 37
		Attribution	Р	N	N	Lowest Average CV from the last 12 months. If not available 37
		site name	Y	Y	N	Use previous Gas day's CV for calculation that was substituted earlier
	Offtake		N	Y	Y	record the Average CV for the offtake site name as Average CV from the YO record
		Site name is	N	Y	N	Move to next attribution site. If none, lowest Average CV from the last 12 months. If not available 37
		different to Attribution	P	N/X N	Y/N N	Move to next attribution site. If none, lowest Average CV from the last 12 months. If not available 37 Move to next attribution site. If none, lowest Average CV from the last 12 months. If not available 37
		site name	Y	Y		Use previous Gas day's CV for calculation that was substituted earlier
		site name	N	Y	Y/N	record the Average CV for the Transfer out as Average CV from the YO record
	LDZ Transfer		N	N/X	Y/N	Move to next attribution site. If no more lowest Average CV from the last 12 months for Transfer out, If not available 37
	Out	NA	Р	N	N	Move to next attribution site. If none, lowest Average CV from the last 12 months. If not available 37
			Y	Y	N	Use previous Gas day's CV for calculation that was substituted earlier
	Onshore Boil		N	Y	Y/N	record the Average CV for the site as Average CV from the YO record
	Off,	NA	N	N/X		Lowest Average CV from the last 12 months. If not available 37
	Industrial		Y P	Y N	N	Use previous Gas day's CV for calculation that was substituted earlier Lowest Average CV from the last 12 months. If not available 37
	notificat Refer F Note2 : must fo	tion is file Pro The a llow th Our w	sent f cessi ttribut e cha orkin	to DN ing st tion n ange g ass	Is on D- eps in the napping process sumptior	re done as part of File Processing Process and a email +1, D+3 so that DNs can share the data before D+5 closeout. he change Pack. matrix will be configurable and any changes to the same agreed between DNs and Xoserve. h is that there is no attribution matrix for Onshore, Boil off and
Step 40 Internal to Xoserve	Fetch C Move to			ibutic	n Matrix	c based on the step 30 checks
Step 50 Internal to Xoserve	For the given site, check if the site is live for the past 365 days and it has CV available for any of the past 365 days.					
Step 60 Internal to Xoserve	If successful, fetch the lowest CV from the last 12 months data and pass it to the FWACV calculation job and move to step 140, else move to step 80					
Step 70 Notify DNs via Email	An ema calculat		be trig	ggere	d to DN	s to notify that the Lowest CV Value was used in FWACV
	The ger	neric e	email f	forma	at is give	en below:
	Dear Si			4 in 44	a laat 0	
						65 days i.e. <b>XX.XXXX</b> is used for Site Number / Calculation.
	Regard Xoserve					
	content	of this	s ema	ul.		eam on capcom@xoserve.com for any queries related to the
Step 80 Internal to Xoserve	Default the CV for the given Site to 37 MJ/M3 and pass it to the FWACV calculation job and move to step 140					
Step 90	An ema FWAC\		-		d to DN	s to notify that the default CV Value of 37 was used in
Notify DNs via Email	Generic	<u>c e-ma</u>	il forn	nat is	given b	elow:
	Dear Si	ir/Mad	am,			
	Default	CV ve	alue i.	e. 37	'is used	for Site Number XXXXXXXXXXXXXX in FWACV Calculation.
	Regard					

	Xoserve
	Note: Please contact Xoserve team on capcom@xoserve.com for any queries related to the content of this email.
Step 110	If attribution is successful and CV is available for the site pass the CV value to FWACV
	calculation and move 140, else move to step 120 and 40
Internal to Xoserve	
Step 130	CDSP Internal Admin users are provided with an SAP ISU screen, wherein they will be able to update the CV for a site which then feeds into the next FWACV calculation run
Internal to Xoserve	
Step 140	The FWACV calculation Job would be scheduled with the below algorithm built-in:
Internal to Vecence	1. Site Energy = Site volume * Site Average CV
Internal to Xoserve	<ol> <li>LDZ Volume = Sum of all site volumes (Onshore + Offtake + Boil Off + Industrial + Transfer In – Transfer Out)</li> </ol>
	3. <b>Transfer In LDZ Volume =</b> Sum of all LDZ sites volumes (Onshore + Offtake + Boil Off + Industrial + Transfer In)
	4. Transfer Out LDZ Volume = Sum of all LDZ sites volumes (Onshore + Offtake + Boil Off +
	<ul> <li>Industrial - Transfer Out)</li> <li>LDZ (Measured) Energy = Sum of all LDZ sites energy (Onshore + Offtake + Boil Off +</li> </ul>
	<ul> <li>Industrial + Transfer In – Transfer Out)</li> <li>Transfer In LDZ Energy = Sum of all LDZ sites energy (Onshore + Offtake + Boil Off +</li> </ul>
	Industrial + Transfer In)
	7. <b>Transfer Out LDZ Energy =</b> Sum of all LDZ sites energy (Onshore + Offtake + Boil Off Industrial - Transfer out)
	8. LDZ FWACV = LDZ Energy / LDZ Volume
	9. LDZ Capped CV = (Lowest site CV in the LDZ) + 1
	10. LDZ Billing CV = Min (LDZ CV, LDZ Capped CV)
	11. Site Billed Energy = Site Volume * Billed CV for the LDZ
	<ol> <li>LDZ Billed Energy = Sum of all sites Billed Energy in the LDZ</li> <li>Offtake Billed Energy = Sum of each LDZ's Offtake Billed Energy for Gas Day D</li> </ol>
	14. <b>Onshore Billed Energy =</b> Sum of each LDZ's Onshore Billed energy for Gas Day D
	15. <b>Boil Off Billed Energy =</b> Sum of each LDZ's Boil Off Billed energy for Gas Day D
	16. Industrial Billed Energy = Sum of each LDZ's Industrial Billed energy for Gas Day D
	17. <b>Transfer Out Billed Energy</b> = Sum of each LDZ's Transfer Out Billed energy for Gas Day D
	18. Transfer In Billed Energy = Sum of each LDZ's Transfer In Billed energy for Gas Day D
	19.       Total Billed Energy = (Offtake Billed Energy + Onshore Billed Energy + Boil Off Billed Energy + Industrial Billed Energy + Transfer In Billed Energy – Transfer Out Billed Energy)
	Below are the data feed cut off times that are considered for FWACV job run.
	D+1:
	20. All files received or CV entered/uploaded via screen by 9 AM, is considered for 10 AM processing job.
	21. All files received between and entered/uploaded between 9 AM and 12 PM, is considered
	for 13:30 processing job 22. All files received between and entered/uploaded between 12 PM and 2:30 PM, is
	considered for 15:30 processing job
	D+2 – D+5:
	23. All files received or CV entered/uploaded via screen after 2:30 PM on D+1 and 7:30 AM on D+2, is considered for 8:30 AM processing job.
	24. All files received between and entered/uploaded between 7:30 AM and 12 PM, is
	considered for 13:30 processing job
	25. All files received between and entered/uploaded between 12 PM and 2:30 PM, is considered for 15:30 processing job
Step 150	
	o FWACV
Step 150	5

Response files to DNs via AO001 and	These files are generated and sent to DNs post the below FWACV Calculation runs for the Gas Day D as per below:							
AO002	D+1 processing o 11:00							
	o 14:00							
	<ul> <li>16:00</li> <li>D+2 to D+5 processing</li> </ul>							
	<ul> <li>○ 09:00</li> <li>○ 14:00</li> </ul>							
	<ul> <li>14:00</li> <li>16:00</li> </ul>							
	The File Formats are attached in this change pack in <u>file formats section</u> .							
Step 160	The job would be scheduled to generate and publish the SC9 files as given below							
SC9 file sent to	1. SC9 file to Shippers and NG for Gas Day D on D+1:							
Shippers and NG	2. Initial data set sent by 11:00 and second run for any further changes to CV will be sent by 16:00							
	<ol> <li>Amendments to volume and CV information made between D+1 to D+5 has to be reported by D+5 (5 business days)</li> </ol>							
	<b>Note:</b> The CV values must be available to Shippers and NG by 11:00 am every day, the transporters will be subjected to a fine if this is not available by 16:00 as mentioned in UNC (TPD Section C 1.6).							
Step 170	The schedule job would generate and send the FWACV file to Gemini with the below details							
FWACV file sent to	for the Offtake, Onshore and SIU, site types:							
Gemini	o LDZ CV							
	o Site Energy							
	For Stornoway site types o CV data							
	These files are generated and sent to Gemini for the Gas Day D as per below:							
	D+1 processing 1. 10:40							
	2. 13:35							
	3. 15:50 D+2 to D+5 processing							
	1. 10:40							
	2. 13:35 3. 15:50							
	Note: Accepting this file at Gemini end is out of scope of XRN5321 and will have to be							
	implemented as part of Gemini consequential changes.The File Format is attached in this change pack in file formats section.							
Step 180	An email will be triggered to DNs and OFGEM whereby LDZ Billing CV was Capped							
Notify DNs via Email	Generic e-mail format is given below:							
	Dear Sir/Madam,							
	For LDZ XX LDZ Billing CV has been Capped.							
	Regards, Xoserve							
	Note: Please contact Xoserve team on capcom@xoserve.com for any queries related to the							
	content of this email.							

#### Loss of Record (LOR) Process

The below process flow diagram details the system, path and the processing mechanism in the case of a LOR scenario.

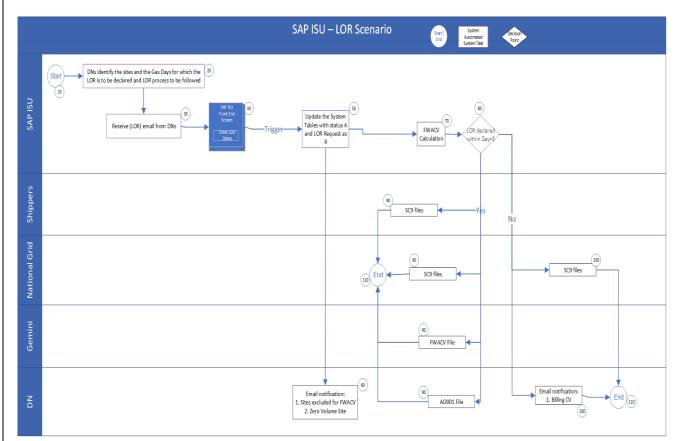


Figure: Loss of Record – Process Flow

Step	Description		
Step 10 Start the process	Start the Process		
Step 20 DNs trigger LOR Process	The DNs identify the sites and the Gas Days for which the LOR is to be declared and LOR process to be followed		
Step 30 Receive the LOR from DNs via email	SAP IS-U will receive LOR email from DNs Move to step 40		
Step 40 Internal to Xoserve	New SAP ISU screen to feed-in the LOR Dates and initiate the process by entering execute.		
Step 50 Internal to Xoserve	Carry out validation checks and process the LOR and update the relevant tables.		

	The trigger would also check if any site in the LOR scenario fed in is in excluded list or the site is of zero volume.		
Step 60	Response email will be generated to DNs with: 1. Sites excluded for FWACV		
Notify DNs via Email	2. Zero Volume Site		
	Generic e-mail formats are given below:		
	Dear Sir/Madam,		
	Site Name XXXXXXXX is excluded from the FWACV Calculation.		
	Regards, Xoserve		
	Dear Sir/Madam,		
	Site Name <b>XXXXXXX</b> is has been attributed due to site not flowing.		
	Regards, Xoserve		
	Note: Please contact Xoserve team on capcom@xoserve.com for any queries related to the content of these emails.		
Step 70	FWACV calculation will be carried out.		
Internal to Xoserve			
Step 80	Check if the LOR GAS DAY is with-in closeout. It will be determined that the date is less than the system date. If the file is amended, then check if the EFFECTIVE DATE is for up to -5		
Internal to Xoserve	calendar days.		
Step 90	Move to step 90 else 100. Within D+5 window		
Within D+5 window	Trigger the SC9 files to Shippers and National Grid. Trigger the FWACV File to Gemini. Trigger AO001 file to DNs		
SC9 file sent to			
Shippers and NG	Move to Step 110.		
FWACV file sent to Gemini			
AO001 file sent to DNs			
Step 100	Outside D+5 Window		
Outside D+5 window	Trigger SC9 file to National grid Trigger an email notification to DNs with billing CV		
Notify DNs via Email	Generic e-mail format is given below:		
SC9 file sent to NG	Dear Sir/Madam,		
	Below is the FWACV calculated in an LOR scenario within/outside D+5: LOR Reason: The LOR reason on the LOR file LDZ: LDZ ID from the File Name Gas Day: DDMMYYYY Stream: Stream Name from LOR file Attributed CV : XX.XXXX Attribute Site: The attributed site name from which the CV value was used. On Attribution failure or not triggered this would remain blank Original FWACV: Calculated FWACV before LOR was declared New FWACV: Re-calculated FWACV post processing LOR		

	Regards, Xoserve Note: Please contact Xoserve team on capcom@xoserve.com for any queries related to the content of these emails. Move to Step 110.	
Step 110	End of the Process	

## Reporting

#### **OFGEM Audit Report**

As part of the FWACV Service, we have regulatory obligation to send the Audit Report on the 10<sup>th</sup> of every month to OFGEM.

OFGEM audit report is a flat file sent monthly via email (attachment).

The OFGEM Audit Report includes the below details:

- 1. **On Shore Field Record** For each LDZ there is a record for each on-shore field contained by the LDZ.
- 2. Offtake Record For each LDZ there is a record for each NTS offtake which supplies the LDZ.
- 3. Tracker Calorimeter record For each offtake, where the offtake has a tracker calorimeter installed/configured.

4. Official Calorimeters considered in the capping Process - These records are a distinct list of all official calorimeters which are considered in the capping process. This record differs to the other records in that a meter reference will also be provided. A given site may have multiple official calorimeter meters. It should also be noted that a record for a calorimeter may appear more than once in the file as a calorimeter can feed more than one LDZ. <u>Note: DNs to provide the reference for the calorimeter values as part of data preparation activities for these details to be populated within this report.</u>

- 5. LDZ record These records give the total volume, total energy, FWACV (uncapped) and FWACV (capped) for each LDZ.
- 6. LDZ Transfers In record These records give the transfer Volume, CV & Energy into each LDZ where a transfer point exists.
- 7. LDZ Transfers Out record These records give the transfer Volume, CV & Energy out of each LDZ where a transfer point exists.
- 8. **NTS VLDMC using LDZ CV** These records hold data for sites which are categorised as special within the flow weighted average CV process. These records hold values for sites that are classified as NTS sites, but which use the IDZ CV. The energy and CV values are the attributed values for the site.
- 9. **Sub-LDZ VLDMC using site own CV** These records will hold data for sites which are categorised as special within the flow weighted average CV process. These record hold values for special sites which measure and use their own CV even though they are classified as sub-LDZ site
- 10. **Official Calorimeters not directly considered in the Capping** Process these are distinct records for all official calorimeters which are not considered in the capping process. These records differ: the other records in that a meter reference is also provided. A given site may have multiple official calorimeter meters.
- 11. **Official Calorimeters selected by Site Stream Selection Process** These are distinct records for all the meters used in the site stream selection process.

**Report Specifications:** 

OFGEM Audit Report Specifications

#### Note1:The report will be a flat file generated based on the specifications mentioned in the attached excel document.

**Note2:** The designing of the associated table and job to generate the OFGEM Audit Report can only be progressed once the source of these values is identified which is currently pending clarification from NG

#### Monthly Audit Report to DNs

This is the copy of the above <u>OFGEM audit report</u> which is created and sent to respective DNs.. This will be a flat file sent via email (attachment) to DNs box account on monthly basis.

### **File Formats:**

Proposed file formats attached below:

#### 1. Al File

File Format

<u>Hierarchy</u>

#### 2. AO File

File Format

**Hierarchy** 

#### 3. YO File:

File Format

**Hierarchy** 

#### 4. SC9 File:

File Format

#### 5. LOR Email attachment Template

Proposed template to be used by DNs to share the LOR data to Xoserve via email. This is a prototype and can be confirmed as part of Data migration/Market trials phase.

#### 6. FWACV File format

#### 7. Missing CV data Email template

Proposed T This is a prototype and can be confirmed as part of Data migration/Market trials phase.emplate to be used by DNs to share the Missing CV data to Xoserve via email.This is a prototype and can be confirmed as part of Data migration/Market trials phase.

#### 8. Rejections:

Rejections are sent to DNs for AI files only.

Proposed AI File Rejection codes are given below

Rejection Code	Rejection Description
FWCV0001	File already exists in the system
FWCV0002	Incorrect File Name received
FWCV0003	Incorrect LDZ value received
FWCV0004	The LDZ on the file is not associated with the DN
FWCV0005	Incorrect file received from DN
FWCV0006	Mandatory Field is missing
FWCV0007	Gas day is outside closeout
FWCV0008	Invalid Header Code
FWCV0009	Site is invalid
FWCV0010	Invalid file format received
FWCV0011	Invalid trailer record
FWCV0016	Amended file has same data as initial File
FWCV0017	Invalid Record Type

Proposed YO File Rejection codes are given below, these are only used by the internal xoserve processes.

Rejection Code	Rejection Description	
FWCV0001	File already exists in the system	
FWCV0002	Incorrect File Name received	
FWCV0005	Incorrect file received from DN	
FWCV0006	Mandatory Field is missing	
FWCV0007	Gas day is outside closeout	
FWCV0010	Invalid file format received	
FWCV0012	Incorrect Site Serial Number received	
FWCV0013	Invalid CV flag received	
FWCV0014	Invalid Attributable CV flag received	
FWCV0016	Amended file has same data as initial File	
FWCV0022	GC Sample Stream number not associated with the site	
FWCV0023	Site does not exist in the system	

### **Data Migration:**

As part of the Data migration activity, we proposed for this to carried out for two data sets. A custom program will be developed to create the sites and upload the data in the system. All the attributes should be received in an excel format as attached below.

- 1. Master Data Migration: The data as part of master data migration would include:
  - Active Sites for the below site types:
  - Offtake Sites
  - Boil Off Sites
  - Onshore Sites
  - SIUs sites
  - Stornoway site
  - Transfer IN sites
  - Transfer OUT sites
  - Multi-junction sites

As part of the Migration activity, the complete site setup will be done which includes the below:

- Technical POD/MPRN creation
- Device
- Device Allocation to POD/MRPN
- Profile Setup on the Device
- 2. Historic Data Migration: The data as part of historic data migration would include:
  - Latest Average CV and Volume for all active sites for 12 months.
  - FWACV at LDZ for 7 years.

As part of the Migration activity, the complete site setup will be done which includes the below:

- Data loaded for latest Average CV in the profile for that site
- Data loaded for latest Volume in the profile for that site
- Data loaded for FWACV in the files at the LDZ level

#### Data Migration Details

Note1: Data migration timings will be planned and confirmed with customers as part of preparation for testing the solution with customers.

Note2: As part of data migration the sequence of the file numbers will be taken into consideration to ensure the first job runs will send the correct file sequence number and naming to the relevant interfaces.

# **Service Transition**

Service Transition approach and plan will be defined and shared by Xoserve with customers as part of our stakeholder engagement. This will require sign on and support from National Grid, DNs and Shipper community during the project lifecycle.

# **G6: Associated Changes**

Associated Change(s) and	National Grid (Gemini/MIPI) Consequential changes - TBC
Title(s):	

### G7: DSG

Target DSG discussion date:	N/A
Any further	XRN5231 has been to DSG for discussion and agreement on the
information:	proposed solution option which has been agreed by ChMC

# **G8: Implementation**

Target Release:	March/April 2022
Status:	For Approval

# Section H: Representation Response

### H1: Change Representation

(To be completed by User and returned for response)

wider business due to the tight time frame involved and the amoun of specialised knowledge that is needed to be able to implement and run the system accurately. The FWACV calculation and everything that it entails relies on an in-depth understanding of the Thermal Energy Regulations and without this we run the risk of breaching those regulations and being held accountable by OfgemRepresentation Comments:Notes to specific areas of the document. 1. Important: SC9 file sent to Shippers;			
Oser Contact       Email:       catherine.litster@wwutilities.co.uk         Telephone:       07816661617         Representation Status:       Approved with comments         Publication:       Publish         We believe that the proposed change poses a risk to WWU and the wider business due to the tight time frame involved and the amoun of specialised knowledge that is needed to be able to implement and run the system accurately. The FWACV calculation and everything that it entails relies on an in-depth understanding of the Thermal Energy Regulations and without this we run the risk of breaching those regulations and being held accountable by Ofgem         Representation Comments:       Notes to specific areas of the document.         1. Important: SC9 file sent to Shippers; Currently SC9 Files/SCADA Changes are not in our change scope If any such changes need to be made, that will require a wider impact assessment involving our DNCS SCADA and DNCS BA systems to see how we can get the SCADA values to be sent to Xoserve for SC9 file.		Organisation:	Wales & West Utilities
Email:       catherine.itster@wwutilities.co.uk         Telephone:       07816661617         Representation Status:       Approved with comments         Publication:       Publish         We believe that the proposed change poses a risk to WWU and the wider business due to the tight time frame involved and the amoun of specialised knowledge that is needed to be able to implement and run the system accurately. The FWACV calculation and everything that it entails relies on an in-depth understanding of the Thermal Energy Regulations and without this we run the risk of breaching those regulations and being held accountable by Ofgem         Notes to specific areas of the document.       1. Important: SC9 file sent to Shippers; Currently SC9 Files/SCADA Changes are not in our change scope If any such changes need to be made, that will require a wider impact assessment involving our DNCS SCADA and DNCS BA systems to see how we can get the SCADA values to be sent to Xoserve for SC9 file.		Name:	Catherine Litster
Representation Status:       Approved with comments         Representation Publication:       Publish         We believe that the proposed change poses a risk to WWU and the wider business due to the tight time frame involved and the amoun of specialised knowledge that is needed to be able to implement and run the system accurately. The FWACV calculation and everything that it entails relies on an in-depth understanding of the Thermal Energy Regulations and without this we run the risk of breaching those regulations and being held accountable by Ofgem         Representation Comments:       Notes to specific areas of the document. 1. Important: SC9 file sent to Shippers; Currently SC9 Files/SCADA Changes are not in our change scope If any such changes need to be made, that will require a wider impact assessment involving our DNCS SCADA and DNCS BA systems to see how we can get the SCADA values to be sent to Xoserve for SC9 file.	Details:	Email:	catherine.litster@wwutilities.co.uk
Status:       Approved with comments         Representation Publication:       Publish         We believe that the proposed change poses a risk to WWU and the wider business due to the tight time frame involved and the amoun of specialised knowledge that is needed to be able to implement and run the system accurately. The FWACV calculation and everything that it entails relies on an in-depth understanding of the Thermal Energy Regulations and without this we run the risk of breaching those regulations and being held accountable by Ofgem         Representation Comments:       Notes to specific areas of the document.         1. Important: SC9 file sent to Shippers; Currently SC9 Files/SCADA Changes are not in our change scope If any such changes need to be made, that will require a wider impact assessment involving our DNCS SCADA and DNCS BA systems to see how we can get the SCADA values to be sent to Xoserve for SC9 file.		Telephone:	07816661617
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Wider business due to the tight time frame involved and the amoun of specialised knowledge that is needed to be able to implement and run the system accurately. The FWACV calculation and everything that it entails relies on an in-depth understanding of the Thermal Energy Regulations and without this we run the risk of breaching those regulations and being held accountable by OfgemRepresentation Comments:Notes to specific areas of the document. 1. Important: SC9 file sent to Shippers; Currently SC9 Files/SCADA Changes are not in our change scope If any such changes need to be made, that will require a wider impact assessment involving our DNCS SCADA and DNCS BA systems to see how we can get the SCADA values to be sent to Xoserve for SC9 file.	-	Publish	
value would be used in the meantime. 2.FWACV Service Overview;	•	Publish We believe that the proposed change poses a risk to WWU and the wider business due to the tight time frame involved and the amount of specialised knowledge that is needed to be able to implement and run the system accurately. The FWACV calculation and everything that it entails relies on an in-depth understanding of the Thermal Energy Regulations and without this we run the risk of breaching those regulations and being held accountable by Ofgem. Notes to specific areas of the document. 1. Important: SC9 file sent to Shippers; Currently SC9 Files/SCADA Changes are not in our change scope. If any such changes need to be made, that will require a wider impact assessment involving our DNCS SCADA and DNCS BA systems to see how we can get the SCADA values to be sent to Xoserve for SC9 file. I believe we agreed that if it was acceptable the previous day's	

Should the ability to add/remove or freeze sites be added to this list, as this is a current function that will need to be checked during testing
testing. Can we confirm who the responsibility of providing the attribution mappings sit with? The DN's believe this should sit with NG as they are the ones who understand the direction flows across the networks.
<ul> <li>3.Key Assumptions;</li> <li>Point 8 - This should be worded as point 7 above (i.e D1 to D4)</li> <li>Need to include what happens at D+5, use lowest for the year or a default of 37 if a year's data isn't available?</li> <li>Point 9 - Will this data also be available for the DN's to validate?</li> <li>Point 11 - How much information are you expecting? Obviously, we have the current sites, but we also have frozen and new sites due</li> </ul>
on in coming months. Point 15 - Can we confirm the FWACV file is what NG refer to as the PRCMS file and the information that it contains.
- I think this statement needs to be clearer. I believe it is in reference to the PRCMS file and that for the offtakes (OF) the LDZ billing CV is entered with the flow (from the AI file) and energy calculated using the LDZ billing CV.
However, for the onshore (OS) (biomethane sites) the site CV (the same as the Y0 file) is entered, along with the flow and energy from the AI file. This data is then passed through and used in their contractual agreements with their Shipper.
- Unless the CV is missing or a LOR, then an attributed value (lowest or 37) is used.
Point 19 - Could you add what happens if the file is not received or corrupt i.e. the DN will be notified using the Morning (missing CV) Process.
Point 21 - As we have confirmed we are unlikely to be able to work to 6 months' notice in most cases. As stated, timelines need to be agreed, however, NG normally require 6 weeks' notice for new sites.
Point 22 - Are these the files that contain the LDZ billing CV? If so, please can we confirm the time they need to be with the GDNs, I think it's 10:15 or so.
Point 24 - Confirm time sent to DN and how long we have to process and return data i.e., D+5?
4. FWACV Calculation; Step 60 - Check when the 12 months start, is this the day prior to the failed CV?
i.e., If today's date is 28th Mar 2019 the lowest CV for the last 12 months should be determined from 27th Mar 2018 to 27th Mar 2019.

	<ul> <li>Step 110 - Step 120 seems to be missing from the flow diagram of numbered incorrectly.</li> <li>Step 150 - We currently receive this by about 10:40 so we need to maintain this schedule as it supports other processes too.</li> <li>Step 170 - Confirm the LDZ CV is the LDZ billing CV.</li> </ul>			
	<ul> <li>5. Loss of Record (LOR) Process;</li> <li>Step 60 - Sorry I don't understand this section.</li> <li>Are you sending out an email every time a site doesn't flow? If you are you're going to sending a lot of emails as many offtakes are shut down all summer and report a CV of 35 to show it's not to be included in the FWACV calculation.</li> <li>Step 100 - What format is being used for a range of gasdays?</li> <li>i.e., DDMMYYYY to DDMMYYYY, or each gasday listed individually?</li> <li>If the LOR covers multiple gasdays will this list the CV's for each gasday?</li> </ul>			
	<ul> <li>6. Data Migration;</li> <li>Will this data come to the DN's to be validated, prior to its use?</li> <li>This would be the offtake/onshore site CV rather then the LDZ billing CV. Will the system exclude CV's of 35 where the site wasn't flowing for the gasday?</li> </ul>			
	7. LOR Template; This is missing a section to enter the sample stream i.e., Stream 3 or 4.			
Confirm Target Release Date?	Yes	«h1_userDataAlternative»		

# H1: Xoserve' s Response

Xoserve Response to Organisations	Thank you for your representation, we will feed this into ChMC for a final decision.
Comments:	

# H1: Change Representation

(To be completed by User and returned for response)

	Organisation:	Cadent	
User Contact	Name:	Shiv Singh	
Details:	Email:	Shiv.singh1@cadentgas.com	
	Telephone:	07580 999 287	
Representation Status:	Reject		
Representation Publication:	Publish		
Representation Comments:			

Page 16: Step 170 States that the LDZ CV will be sent to Gemini for
the Onshore fields. It should not be the LDZ CV, it should be the
site CV, which currently comes from the AI file as stated in Page 7
no 10. Should include: Offtake Site Volume.
For Onshore Fields should be: Site Volume, Site CV, Site Energy
Page 16: Step 180 States "and email will be triggered to DNs and
OFGEM whereby LDZ Billing CV was capped" – this should read
NG, DNs, and OFGEM as per the process flow diagram.
Ofgem are not present on the process diagram.

# H1: Xoserve' s Response

Xoserve Response to Organisations Comments:	Thank you for your representation, we will feed this into ChMC for a final decision.

# H1: Change Representation

(To be completed by User and returned for response)

	Organisation:	Northern Gas Networks
User Contact	Name:	Helen Chandler
Details:	Email:	hchandler@northerngas.co.uk
	Telephone:	07580704123
Representation Status:	Support	
Representation Publication:	Publish	
Representation Comments:	NGN supports t	his design.

Confirm Target Release Date?	Yes	«h1_userDataAlternative»

### H1: Xoserve' s Response

Xoserve Response to Organisations Comments:Thank you for your representation, we will feed this into ChMC for a final decision.
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Please send the completed representation response to <u>uklink@xoserve.com</u>

### H1: Change Representation

(To be completed by User and returned for response)

	Organisation:	SGN	
User Contact	Name:	Name: Sally Hardman	
Details:	Email:	sally.hardman@sgn.co.uk	
	Telephone:	07970 019027	
Representation Status:	Approve		
Representation Publication:	Publish		
	SGN supports this change and we have set out below our comments regarding the detailed design presented.		
Representation Comments:			

#### Interfaces

The documentation provided does not indicate the details of the IX Servers the DNs should be sending to, or from which IX Gateway(s) they should be sending from. Will there be a requirement for the existing files to be split between different IX Gateways or via one IX Gateway? If files are spilt the DN's will need to know specific information on which files should be grouped together, and where they should be sent to / from.

File formats requisites have not been set out in the documentation i.e. 583 format appears to be the format indicated in the Inbound files section. Specifically for SGN we have various IX Gateways which use different file formats and would appreciate the clarification.

#### Inbound/Outbound Files

It would appear that the following files have been omitted from the list of new inbound file to Xoserve from the DN's YO3, Y04 and YO5. In addition these have been listed in the Outbound files as being provided from the DN's therefore this is also unclear as to the files which will be provided to DN's and NG from Xoserve.

We note that the AO<003> inbound files will cease to be provided as part of the migration of the service to Xoserve from NG. Will there be another form of notification regarding rejected files?

G5: Change Design Description
FWACV Service Overview
10. SGN would expect that transparency is provided on all Non-Functional standards.

**Key Assumptions** 

4. We would assume that all NG sites will no longer be within scope of the new FWACV service.

21. Regarding the obligation set out in OAD to provide 'not less than 6 months' notice informing any changes. DN's are unable to provide 6 months' notice regarding new sites, and historically this has usually been 1 month.

For example, currently if a new Biomethane site were to be required NG would set up an On Shore Field and in turn set up the FWACV at the same time. If the site is setup but no data is flowing this could impact the FWACV calculation.

24. We require a better understanding of how the process regarding Missing CV data will be provided and notified to DN's and the

	to D+5 or prior to the proc	ese processes. ovided at any point within the process up ess commencing. This is in the main due Letter of Direction for the site being
	removed, suspended, or r The indicated Service Line Service Line 6 however th	6
Confirm Target Release Date?	Yes	«h1_userDataAlternative»

# H1: Xoserve' s Response

Xoserve Response to Organisations Comments:Thank you for your representation, we will feed this into ChMC for a final decision.
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