

Section G: Change Pack

G1: Communication Detail

Comm Reference:	
Comm Title:	XRN5231 Provision of FWACV Service Detailed Design Change Pack V2.0 Approved
Comm Date:	Click here to enter a date.

G2: Change Representation

Action Required:	For Representation
Close Out Date:	Click here to enter a date.

G3: Change Detail

Xoserve Reference Number:	XRN5231
Change Class:	CDSP System Changes - New Service Line
ChMC Constituency Impacted:	<ul style="list-style-type: none"> • Shipper Users • National Grid NTS • DNs
Change Owner:	Steve Pownall:0121 229 2671: steve.pownall@xoserve.com
Background and Context:	<p>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.</p> <p>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).</p> <p>Note: National Grid has agreed to extend the FWACV Service it provides to DNs until September 2022</p> <p>Consequently, the DNs will become responsible for calculating their own daily LDZ FWACVs and, publishing the data to Shippers.</p> <p>UNC 0719R ‘Calculation of Energy Value of Gas’ Review Group</p> <p>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.</p>

The concluding 0719R Workgroup Report contains the Next Steps and can be found here: www.gasgovernance.co.uk/0719/

UNC 0793S ‘Determination of Charging Area CVs (Daily CVs) – Modification of Calculation Process Arrangements’

This Modification Proposal was raised by SGN in November 2021 and formalised the CDSP’s role as the new FWACV Service provider, revised the DNs’ data provision obligations from National Grid with the CDSP acting as agent to the DNs and, removed National Grid’s obligation to fulfil the FWACV Service provider role.

The UNC Mod Panel approved 0793S for implementation on February 17th 2022; this will put into effect the outcome from the 0719R Workgroup(see above).

<https://www.gasgovernance.co.uk/0793>

The date will be confirmed to align implementation with the associated DSC Change Proposal XRN5231; now anticipated to be September 2022.

XRN5231 Change Proposal:

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.

Gemini Consequential Change:

National Grid has raised a Change Variation to include two consequential changes required to Gemini into the scope of the FWACV Project. Inclusion of this Change Variation into the solution design will ensure a smooth transition for industry stakeholders to the new FWACV Service:

1. Gemini consequential change part A – Gemini system capable to receive and process the new FCV file from Xoserve for FWACV process. For non FWACV data Gemini to accept the existing PRCMS file and process the same.
2. Gemini consequential change part B – Xoserve to receive the CV, volume and energy via the AI file interface and send it to Gemini via the new FCV file for the below listed sites.
 - LDZ Stock Change (SC Meter Type)
 - 13 LDZ files from 4 DNs
 - 1 file for Scottish independents
 - Embedded LDZ Unique Sites (US Meter Type)
 - 6 files for below LDZ that contain unique sites from 4 DNs
 - NE – NGN
 - NO – NGN
 - WM – Cadent

- SE – SGN
- SO – SGN
- WS – WWU

Note: NW-Cadent unique site is now descoped from Gemini consequential as this has become a standard site.

The change proposal can be found here: using the following link

[Link to updated XRN5231 Change details](#)

MIPI Consequential Change:

During detailed design, Xserve has also considered the solution for data feeds into MIPI (data explorer etc) from the new FWACV application. Any changes in MIPI to accept the new files from Xserve are out of scope of XRN5231 delivery.

Shipper/Industry Impact

Xserve 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 original 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 September 2022 implementation is successfully achieved.

Important: SC9 file sent to Shippers

For the avoidance of doubt;

- there is NO proposal to change the SC9 file format, file type nor data;
- the SC9 files will continue to be sent to Shippers in accordance with the existing timetable (UNC obligations)

During the impact assessment phase, it has been noted the SC9 file contains a 'TOD' value. This is effectively a *projected end-of-day estimate* 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.

It has been agreed by the DN's that for an interim period, TOD will be defaulted to D-1 ACT value sent on D day.

	<p>The SC9 file issued to Shippers on D+1, will have the ACT – Actual LDZ Billing CV of Gas Day D and TOD - Actual LDZ Billing CV of D-1</p> <p>If the LDZ Billing CV has changed post the morning run and COR – Corrected CV was sent for Gas Day on D+1 at 16:00, then the COR will be the TOD for D-1 sent on D</p>
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G4: Change Impact Assessment Dashboard (UK Link)

Functional:	New DSC Service Line – FWACV Service
Non-Functional:	None
Application:	SAP IS-U, SAP PO, MOVEit (SFTP), IX/EFT, Gemini
User(s):	<ul style="list-style-type: none"> • Shipper Users • National Grid NTS • Distribution Networks • OFGEM • Grain LNG
Documentation:	N/A
Other:	Not Applicable

Interfaces

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

Interface Name	Description	Source	Direction	Target	Transfer Route
AI File	Volume, CV and Energy Data	DNs	Inbound	CDSP	MOVEit/PO/ISU
AO File	Response to AI file	CDSP	Outbound	DNs	ISU/PO/MOVEit
Y0 File	CV Data	NG DNs	Inbound	CDSP	MOVEit/PO/ISU
SC9 File	FWACV Data	CDSP	Outbound	Shipper NG	ISU/PO/EFT/IX

Interface Name	Description	Source	Direction	Target	Transfer Route
FCV File	FWACV Data to Gemini	CDSP	Outbound	Gemini	ISU/PO/EFT
LOR	Loss of Record Data	DNs	Inbound	CDSP	Email (viaTemplate)
LOR Response within closeout	Recalculated FWACV Data from D+1 to D+5 1.sent via AO001 file to DNs 2.sent via SC9 file to Shippers and NG 3. sent via FCV file to Gemini	CDSP	Outbound	DNs	ISU/PO/MOVEit
LOR Response outside closeout	Recalculated FWACV Data for LORs declared outside D+5 1.sent via Email to DNs 2.sent via SC9 file to NG	CDSP	Outbound	Box Account	Email to DNs
OFGEM Report	Monthly OFGEM Audit Report	CDSP	Outbound	Box Account	Email to OFGEM
DNs Report	Monthly Audit Report – copy of the OFGEM audit report reflecting respective DN's data.	CDSP	Outbound	Box Account	Email to DN's
Boil off Site data	Volume data from site will be sent by site operator via email in an agreed template	Grain LNG	Inbound	Box Account	<u>Email from Grain LNG via template</u>
Missing/Invalid CV and Volume data	System generated Notification to DN's on D+1 for missing/Invalid site CV -This is a collated list for all the sites that has missing CV or invalid CV (e.g. CV 35 with a flow) System generated Notification to DN's on D+1 for missing volume - This is a collated list for all the sites that has missing Volume	CDSP	Outbound	Box Account	Email to DN's
Missing/Invalid CV	Missing CV data will be shared by DN's via email	DN's	Inbound	CDSP	Email from DN's
Missing/Invalid Volume data	Missing Volume data will be shared by DN's via the existing AI interface.	DN's	Inbound	CDSP	AI Files from DN's
Chaser Notification for missing/Invalid CV and Volume data	System generated Notification to DN's on D+3 for missing/Invalid site CV -This is a collated list for all the sites that has missing CV or invalid CV (e.g. CV 35 with a flow) System generated notification to DN's on D+3 for missing volume -This is a collated list for all the	CDSP	Outbound	Box Account	Email to DN

Interface Name	Description	Source	Direction	Target	Transfer Route
	sites that has missing Volume				
Lowest CV Notification	System generated notification to DNs to inform the Lowest of last 12 month CV for the site/sites was used in FWACV calculation. This will be generated only for D+1 initial run. This might trigger capping process and a separate capping email will be sent.	CDSP	Outbound	Box Account	Email to respective DNs
Default CV Notification	System generated notification to DNs to inform the default CV for the site/sites was used in FWACV Calculation. This will be generated only for D+1 initial run. This might trigger capping process and a separate capping email will be sent.	CDSP	Outbound	Box Account	Email to respective DNs
Capped CV Notification	Notification to DNs to inform the LDZ Billing CV was Capped. This notification will be sent whenever a capped CV is generated irrespective of the runs.	CDSP	Outbound	Box Account	Email to respective DNs
Sites excluded & Zero volume sites	System generated notification will be sent whenever we receive a LOR for a site which is excluded for FWACV calculation or we receive a zero volume for a site.	CDSP	Outbound	Box Account	Email to respective DNs

Notes:

- 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 file formats section
- Xoserve will use MOVEit SFTP service to receive and deliver AI/Y0 files, the IX Network will be used to deliver the SC9 files to Shippers and NG.
- DNs and NG will be using MOVEit SFTP service to transfer and receive files from their infrastructure to Xoserve. As part of project, connectivity needs to be setup to exchange these files
- There are no file format changes required by DNs as part of the new FWACV service.

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

Sl. No	File Name	File Type	File Description
1	<LDZ Code>001.PNnnnnnn.AI1	Flat file	Original Volume, CV and Energy from NGN DN

Sl. No	File Name	File Type	File Description
2	<LDZ Code>001.PNnnnnnn.AI2	Flat file	Original Volume, CV and Energy from SGN DN
3	<LDZ Code>001.PNnnnnnn.AI3	Flat file	Original Volume, CV and Energy from WWU DN
4	<LDZ Code>001.PNnnnnnn.AI4	Flat file	Original Volume, CV and Energy from Cadent DN
5	<LDZ Code>002.PNnnnnnn.AI1	Flat file	Amended Volume, CV and Energy from NGN DN
6	<LDZ Code>002.PNnnnnnn.AI2	Flat file	Amended Volume, CV and Energy from SGN DN
7	<LDZ Code>002.PNnnnnnn.AI3	Flat file	Amended Volume, CV and Energy from WWU DN
8	<LDZ Code>002.PNnnnnnn.AI4	Flat file	Amended Volume, CV and Energy from Cadent DN
9	<LDZ Code>006.PNnnnnnn.AI1	Flat file	Acknowledgment on receipt of AO(005) and AO(007) file from NGN DN
10	<LDZ Code>006.PNnnnnnn.AI2	Flat file	Acknowledgment on receipt of AO(005) and AO(007) file from SGN DN
11	<LDZ Code>006.PNnnnnnn.AI3	Flat file	Acknowledgment on receipt of AO(005) and AO(007) file from WWU DN
12	<LDZ Code>006.PNnnnnnn.AI4	Flat file	Acknowledgment on receipt of AO(005) and AO(007) file from Cadent DN
13	<site number>nn<ddmmyy>.Y03	Flat file	CV Data from DNs and NG from stream 3
14	<site number>nn<ddmmyy>.Y04	Flat file	CV Data from DNs and NG from stream 4
15	<site number>nn<ddmmyy>.Y05	Flat file	CV Data from DNs and NG from stream 5

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

Sl. No	File Name	File Type	File Description
1	<LDZ Code>001.PNnnnnnn.AO1	Flat file	Business Data (Billing CV and FWACV) to NGN DN
2	<LDZ Code>002.PNnnnnnn.AO1	Flat file	Recalculated Business Data (Billing CV and FWACV) to NGN DN
3	<LDZ Code>007.PNnnnnnn.AO1	Flat file	Notification of substitution of original/amended volume data to NGN
4	<LDZ Code>004.PNnnnnnn.AO1	Flat file	Acknowledgement on successfully processing original AI file data to NGN
5	<LDZ Code>005.PNnnnnnn.AO1	Flat file	Notification of error on processing original AI file data to NGN
6	<LDZ Code>008.PNnnnnnn.AO1	Flat file	Acknowledgement on amended AI file data to NGN
7	<LDZ Code>001.PNnnnnnn.AO2	Flat file	Business Data (Billing CV and FWACV) to SGN DN
8	<LDZ Code>001.PNnnnnnn.AO2	Flat file	Initial Storage Boil off Volume data to SGN (Record type 200)
9	<LDZ Code>002.PNnnnnnn.AO2	Flat file	Amended Storage Boil off Volume data to SGN (Record type 200)
10	<LDZ Code>002.PNnnnnnn.AO2	Flat file	Recalculated Business Data (Billing CV and FWACV) to SGN DN
11	<LDZ Code>007.PNnnnnnn.AO2	Flat file	Notification of substitution of original/amended volume data to SGN
12	<LDZ Code>004.PNnnnnnn.AO2	Flat file	Acknowledgement on successfully processing original AI file data to SGN
13	<LDZ Code>005.PNnnnnnn.AO2	Flat file	Notification of error on processing original AI file data to SGN
14	<LDZ Code>008.PNnnnnnn.AO2	Flat file	Acknowledgement on amended AI file data to SGN
15	<LDZ Code>001.PNnnnnnn.AO3	Flat file	Business Data (Billing CV and FWACV) to WWU DN

Sl. No	File Name	File Type	File Description
16	<LDZ Code>002.PNnnnnnn.AO3	Flat file	Recalculated Business Data (Billing CV and FWACV) to WWU DN
17	<LDZ Code>007.PNnnnnnn.AO3	Flat file	Notification of substitution of original/amended CV/volume data to WWU
18	<LDZ Code>004.PNnnnnnn.AO3	Flat file	Acknowledgement on successfully processing original AI file data to WWU
19	<LDZ Code>005.PNnnnnnn.AO3	Flat file	Notification of error on processing original AI file data to WWU
20	<LDZ Code>008.PNnnnnnn.AO3	Flat file	Acknowledgement on amended AI file data to WWU
21	<LDZ Code>001.PNnnnnnn.AO4	Flat file	Business Data (Billing CV and FWACV) to Cadent DN
22	<LDZ Code>002.PNnnnnnn.AO4	Flat file	Recalculated Business Data (Billing CV and FWACV) to Cadent DN
23	<LDZ Code>004.PNnnnnnn.AO4	Flat file	Acknowledgement on successfully processing original AI file data to Cadent
24	<LDZ Code>007.PNnnnnnn.AO1	Flat file	Notification of substitution of original/amended volume data to NGN
25	<LDZ Code>005.PNnnnnnn.AO4	Flat file	Notification of error on processing original AI file data to Cadent
26	<LDZ Code>007.PNnnnnnn.AO4	Flat file	Notification of substitution of original/amended CV/volume data to Cadent
27	<LDZ Code>008.PNnnnnnn.AO4	Flat file	Acknowledgement on amended AI file data to Cadent
28	<GEM>01.PNnnnnn.FCV	Flat file	New FCV file with energy, volume & Billing CV data to Gemini
29	<3 letter Shipper Code>01.PNMMDDSS.SC9	Flat file	SC9 file with calculated FWACV data to all Shippers and NG

Note1: In the 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 now confirmed to be descoped as this is not part of FWACV process.

Note2: In the As-Is process, NG currently sends blank data for LDZ storage rejection volume (Record Type : 210) data in AO file. This is now confirmed to be descoped from delivery during FWACV Focus Group discussions.

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:

- Undertake the daily LDZ FWACV calculation and apply the LDZ Attribution Mapping rules as necessary.
- Apply LDZ CV Capping Rules when necessary.
- Use the daily LDZ FWACV to calculate the energy entering the LDZ from the daily volume flow.
- Apply subsequent daily FWACV updates between D+1 and D+5 closeout. Any updates post D+5 closeout will not feed into FWACV calculation.
- Ability to manage the Loss of Record (LOR) process.
- Capability of having a screen for any data(CV and volume(Boil off and industrial Sites only)) updates for Business Operations teams within Xoserve
- Generate, maintain and issue SC9 files (same format and frequency as currently provided) to Shippers.
- Handle any/ all exceptions falling out of the above activities.
- Ability to send all relevant REPORTING (including monthly OFGEM report, monthly DN report, NG Energy Report).
- The FWACV Service meeting the Non-functional standards:
 - Performance – Data volumes, Response times, Security, Audit
 - Internal Reporting for effective Service Management
- Capability to Add (create site and include)/exclude sites to the FWACV calculation
- Capability to add/updated Attribution matrix/site config details
- Capability to add/updated Shipper config details to ensure the stakeholder list for SC9 file can be maintained for FWACV process.

Key Assumptions/Decisions :

S.No	Design Assumptions/Decisions
1	Stornoway and SIUs are not part of FWACV calculation and the values are received via AI files will be sent to Shippers/NG. <ul style="list-style-type: none"> • Declared CV data for SIU's(record120) will be sent via AI2 file by SGN. • Declared CV for Stornoway will be sent via AI2 file (record 140) by SGN
2	Default CV value for Stornoway is 93 Default CV values for all other sites is 37.
3	If multiple AI or Y0 files are received for the same site with different Volume and CV data, the latest file will be considered for FWACV calculation.
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 Grain LNG via an email to Xoserve in an agreed template.
6	DNs will send CV for Boil off sites via Y0 files (using the existing record type). NG will send CV for multi-junctions via Y0 files (using the existing record type).
7	For all sites, CV data(missing CV inclusive) will go through attribution matrix and the attribution logic is same from D+1 to D+5. For all sites, missing Volume data will go through substitution process
8	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.
9	The data set for different site types is expected via AI interface as given below (SITE TYPE - Data set) Onshore(Record type 260) -CV, Volume and Energy Offtake(Record type 250) - Volume SIUs (Record type 120)- CV Stornoway (Record type 140)- CV LDZ Transfers Out (Record type 280) - Volume Unique Sites (Record type 240) - CV, Volume and Energy

	Stock Change(Record type 150) - CV, Volume and Energy																									
10	<p>The meter types and data sets that are considered for new FCV file to be sent to Gemini at site level are:</p> <table border="1"> <thead> <tr> <th>Site Type</th> <th>Meter Type</th> <th>CV</th> <th>Volume</th> <th>Energy</th> </tr> </thead> <tbody> <tr> <td>Offtake</td> <td>OF</td> <td>LDZ Billing CV</td> <td>AI File-Volume</td> <td>Site Billed Energy</td> </tr> <tr> <td>Onshore</td> <td>OS</td> <td>AI File - CV</td> <td>AI File- Volume</td> <td>AI File- Site Energy</td> </tr> <tr> <td>Stock Change</td> <td>SC</td> <td>AI File - CV</td> <td>AI File- Volume</td> <td>AI File- Site Energy</td> </tr> <tr> <td>Unique Site</td> <td>US</td> <td>AI File - CV</td> <td>AI File- Volume</td> <td>AI File- Site Energy</td> </tr> </tbody> </table> <p>The LDZ Billing CV at LDZ level for all 13 LDZs are also sent to Gemini via the FCV file. For offtakes (OF) sites the LDZ billing CV is entered with the flow (from the AI file) and energy is calculated using the LDZ billing CV. For Onshore sites (OS/biomethane) the CV, volume and energy from the AI file is used unless the CV is missing or a LOR, then an attributed value (lowest or 37) is used.</p>	Site Type	Meter Type	CV	Volume	Energy	Offtake	OF	LDZ Billing CV	AI File-Volume	Site Billed Energy	Onshore	OS	AI File - CV	AI File- Volume	AI File- Site Energy	Stock Change	SC	AI File - CV	AI File- Volume	AI File- Site Energy	Unique Site	US	AI File - CV	AI File- Volume	AI File- Site Energy
Site Type	Meter Type	CV	Volume	Energy																						
Offtake	OF	LDZ Billing CV	AI File-Volume	Site Billed Energy																						
Onshore	OS	AI File - CV	AI File- Volume	AI File- Site Energy																						
Stock Change	SC	AI File - CV	AI File- Volume	AI File- Site Energy																						
Unique Site	US	AI File - CV	AI File- Volume	AI File- Site Energy																						
11	DNs to confirm all their site details and LDZ attribution mapping matrix prior to Go live to ensure the solution is catered to using the valid data sets.																									
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	DNs do not need to receive 210 (Store rejection volume) records in the AO (AO001/AO002) file																									
14	The Y0 file would also be received through the MOVEit SFTP network and not via an email from the DNs																									
15	The notification to DNs and NG will be file and email based and not via Portal																									
16	Accuracy of future calculation is highly dependent on quality of data that will be migrated. There is dependency on NG and DNs to ensure there will be data quality check at their end to mitigate the risk.																									
17	The YOR response file will not be issued to DNs on the back of the Y0 files received. An Missing CV email notification will be sent for any missing/corrupt Y0 files.																									
18	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.																									
19	<p>New site setup</p> <ul style="list-style-type: none"> Agreed SLA for DNs to initiate the new site creation process with Xoserve is 6-8 weeks before site going live. Agreed SLA for DNs to inform the new site go live(Effective date) to Xoserve and National grid is 3 business days prior to site going live. <p>Existing Config changes :</p> <ul style="list-style-type: none"> Agreed SLA for DNs to inform Xoserve for any exiting config changes is 7-10 business/working days. <p>Note: When a new site does not flow on the setup effective date in Gemini, there is an impact and the FWACV values are expected in the Gemini System. Currently NG manually enters zero values in Gemini. Xoserve to provide the service manually for Day 1.</p>																									
20	<p>SLA times for file delivery are as given below</p> <ul style="list-style-type: none"> AO(AO001) Response files (containing LDZ billing CV) are sent to DNs For Gas Day D on D+1 by 11:00 and fall back by 16:00 Amendments(AO002) to LDZ Billing CV information made between D+1 to D+5 has to be reported by D+5 (16:00) AO Response files(AO004 and AO0005) are sent to DNs for every AI received throughout the day. Amendments to volume (AO008) information made between D+1 to D+5 has to be reported by D+5 (by 12:00 midday for data to be picked by morning run) Substitution Notification (AO0007) for Gas Day D on D+1 by 16:00. 																									

	<p>Note: For Gas day D (AI inbound) data received on D+1 file received after 3:00pm, the response AO files to be issued on D+2 (first run) For Gas day D (AI inbound) data received on D+5 files received after 3:00pm, the response AO files will not be issued and data will be considered outside closeout. Note: Currently there is no requirement for any data reconciliation post closeout(D+5) for CDSP.</p>																																																				
21	<p>SLA for Inbound Data:</p> <table border="1"> <thead> <tr> <th colspan="5">Inbound Data Feed Cut off SLA Times</th> </tr> <tr> <th>Route</th> <th>Scenario</th> <th>Data Received by/between</th> <th>Processed by Job run at</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td rowspan="4">Files</td> <td rowspan="2">For Gas day D information sent on D+1</td> <td>09:00</td> <td>10:00</td> <td></td> </tr> <tr> <td>09:00 to 12:30 12:30 to 15:00</td> <td>13:30 15:30</td> <td></td> </tr> <tr> <td>For Gas day D information sent on D+2 – D+5</td> <td>14:30 D+1 to 7:30 on (D+2-D+5)</td> <td>08:30</td> <td></td> </tr> <tr> <td>For Gas day D information sent on D+2 – D+5</td> <td>7:30 AM and 12:30 PM on (D+2 - D+5)</td> <td>13:30</td> <td></td> </tr> <tr> <td></td> <td>For Gas day D information sent on D+2 – D+5</td> <td>12 PM and 3:00 PM (D+2 - D+5)</td> <td>15:30</td> <td>Any files that are received after 3:00 PM D+5 for Gas day D to be considered as outside close out, hence would not feed into FWACV calculation generating an error message to source informing the same in the next day run(D+6 10:00am)</td> </tr> <tr> <td rowspan="4">Emails</td> <td rowspan="2">For Gas day D information sent on D+1</td> <td>09:00</td> <td>10:00</td> <td></td> </tr> <tr> <td>12:30 to 15:00</td> <td>15:30</td> <td></td> </tr> <tr> <td>For Gas day D information sent on D+2 – D+5</td> <td>14:30 D+1 to 7:30 on (D+2-D+5)</td> <td>08:30</td> <td></td> </tr> <tr> <td>For Gas day D information sent on D+2 – D+5</td> <td>7:30 AM and 12:30 PM on (D+2 - D+5)</td> <td>13:30</td> <td></td> </tr> <tr> <td></td> <td>For Gas day D information sent on D+2 – D+5</td> <td>12:00 (Mid day)</td> <td>13:30 or 15:30</td> <td>SLA for the Missing CV data will be sent by the DNs via an email to Xoserve during business hours by D+5 (12:00 mid day) in an agreed standard template as an attachment.</td> </tr> </tbody> </table> <p>Note1 :Any files that are received after 15:00 D+5 for Gas day D to be considered as outside close out, hence would not feed into FWACV calculation generating an error message to source informing the same in the next day run(D+6 10:00am) Note2 For Inbound Files: The As-Is FWACV process runs as a 22*7 (inclusive of holidays and weekdays), hence the To-Be process needs to follow this SLA.</p>	Inbound Data Feed Cut off SLA Times					Route	Scenario	Data Received by/between	Processed by Job run at	Comments	Files	For Gas day D information sent on D+1	09:00	10:00		09:00 to 12:30 12:30 to 15:00	13:30 15:30		For Gas day D information sent on D+2 – D+5	14:30 D+1 to 7:30 on (D+2-D+5)	08:30		For Gas day D information sent on D+2 – D+5	7:30 AM and 12:30 PM on (D+2 - D+5)	13:30			For Gas day D information sent on D+2 – D+5	12 PM and 3:00 PM (D+2 - D+5)	15:30	Any files that are received after 3:00 PM D+5 for Gas day D to be considered as outside close out, hence would not feed into FWACV calculation generating an error message to source informing the same in the next day run(D+6 10:00am)	Emails	For Gas day D information sent on D+1	09:00	10:00		12:30 to 15:00	15:30		For Gas day D information sent on D+2 – D+5	14:30 D+1 to 7:30 on (D+2-D+5)	08:30		For Gas day D information sent on D+2 – D+5	7:30 AM and 12:30 PM on (D+2 - D+5)	13:30			For Gas day D information sent on D+2 – D+5	12:00 (Mid day)	13:30 or 15:30	SLA for the Missing CV data will be sent by the DNs via an email to Xoserve during business hours by D+5 (12:00 mid day) in an agreed standard template as an attachment.
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23	SC9 file sent to Shipper will not have any file format changes.																																																				
24	Any CV and Volume updated post closeout (D+5) is out of FWACV process scope.																																																				
25	Missing CV Email template – DNs agreed to use the system generated email which will have auto populated Site, Gas day information and blank <u>CV</u> , <u>CV flag</u> and <u>attributable flag</u> attributes for DNs to input the data and send back to Xoserve during business working hours.																																																				
26	New Site Setup in Gemini system is out of scope for FWACV process and as agreed with DNs and NG, this will be carried out by National Grid on DN's instruction.																																																				
27	Shrinkage data to be added to Capping CV email sent to DNs. NG does not need Shrinkage value in the Energy Report.																																																				
28	When a 35 CV (Y0 file) with flow (valid volume in AI file) is received below steps to be considered for Calculation																																																				

	<p>1. Exclude the 35 CV data record from calculation and add this site to the Missing CV/Invalid Email Notification Email to DNs requesting for the correct CV as CV 35 is classed as a no flow.</p> <p>2. Use the attributed CV until D+5 or until the correct values are available and reflect it in Ofgem report</p> <p>3. Attributed CV will be published as is in the Ofgem Report if no values are received within D+5.</p> <p>When a 0 Volume flow (AI) is received below steps to be considered for Calculation</p> <p>1. Since 35 is classed as a no flow and If we get a non-35 CV value is received (Y0 file) with a 0 Volume, change the CV =35 and Y,N the flags.</p> <p>2. 35 would be used as a CV and reflect in the Ofgem report</p> <p>3. If No CV is received from the DN's for 0 flow, default to 35 and report it in Ofgem report Note: Ofgem report to show what DN's sent within D+5/CV will be 35 for no flow.</p> <p>When a site has a flow in AI file, and if a CV is non 35 and the CV flag is N, then</p> <p>1. The site needs to be added to the Missing CV collated list sent to DNs (morning process),</p> <p>2. Use the attributed CV until D+5 or until the correct values are available and reflect it in Ofgem report</p> <p>3. Attributed CV will be published as is in the Ofgem Report if no values are received within D+5.</p> <p>Note: What SAP stores as CV needs to be reflected in the Ofgem report. Hence if any condition we default 35 in Ofgem report, it should reflect the same in the system.</p>																						
29	<p>LDZ Transfer in (Record type 270) is currently to sent to National Grid, however this is not currently used in the FWACV process.</p> <p>The new FWACV process does not need to have an interface to accept, acknowledge or process the record type 270 as the As-Is process for FWACV will only use LDZ transfer out (Record type 280) volume.</p> <p>The LDZ Transfer in and Transfer out pair mapping is as given below</p> <table border="1" data-bbox="320 1144 1102 1308"> <thead> <tr> <th>LDZ Transfer In - Transfer Out Pair</th> <th>Transfer In LDZ</th> <th>Transfer Out LDZ</th> </tr> </thead> <tbody> <tr> <td>EM-WM</td> <td>WM</td> <td>EM</td> </tr> <tr> <td>SO-NT</td> <td>NT</td> <td>SO</td> </tr> </tbody> </table> <table border="1" data-bbox="320 1341 1426 1762"> <thead> <tr> <th>Scenario</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>Transfer Out Volume - EM LDZ</td> <td>Volume received in AI file Record 280 Processed and volume data loaded and fed into calculation</td> </tr> <tr> <td>Transfer Out Volume - SO LDZ</td> <td>Volume received in AI file Record 280 Processed and volume data loaded and fed into calculation</td> </tr> <tr> <td>Transfer In Volume - WM LDZ</td> <td>Same volume data as it is for EM LDZ Feed this into calculation</td> </tr> <tr> <td>Transfer In Volume - NT LDZ</td> <td>Same volume data as it is for SO LDZ Feed this into calculation</td> </tr> <tr> <td>CV for SO-NT and EM-WM Transfer Pair</td> <td>Derived using attribution matrix and fed into calculation</td> </tr> </tbody> </table> <p>Note: This is the As-Is process that NG currently delivers for FWACV Service.</p>	LDZ Transfer In - Transfer Out Pair	Transfer In LDZ	Transfer Out LDZ	EM-WM	WM	EM	SO-NT	NT	SO	Scenario	Status	Transfer Out Volume - EM LDZ	Volume received in AI file Record 280 Processed and volume data loaded and fed into calculation	Transfer Out Volume - SO LDZ	Volume received in AI file Record 280 Processed and volume data loaded and fed into calculation	Transfer In Volume - WM LDZ	Same volume data as it is for EM LDZ Feed this into calculation	Transfer In Volume - NT LDZ	Same volume data as it is for SO LDZ Feed this into calculation	CV for SO-NT and EM-WM Transfer Pair	Derived using attribution matrix and fed into calculation	
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CV for SO-NT and EM-WM Transfer Pair	Derived using attribution matrix and fed into calculation																						
30	<p>Lowest CV Approved Requirement Update:</p> <p>For the site types: offtake site, Boil off sites, Industrial sites, LDZ Transfer Out , onshore - the below attribution matrix process steps are applicable</p> <p>Step1: Use the attribution map for an alternate value; if not available follow Step 2</p>																						

Step2: Where the directed point has been directed for 12 months prior to the failure day pursuant to Reg 6 (C) use the lowest average value during this period excluding days in the 12 month period where there was a failure (i.e. not valid flag) and the two days following the resolution of the failure. If you don't have 12 month's data prior to the failure day and 2 good days following the failure go to (Step 3)

and a notification to be sent to DNs informing of the occurrence

Step3: Use the lower of (a)the lowest average CV recorded for each gas day prior to the failure day (exclude failure days) and the two days following the resolution of the failure or (b) 37MJ/m³ and a notification to be sent to DNs informing of the occurrence.

Note1: The above 3 steps are provided by the DNs as rules to adhere the Thermal Energy Regulation (UK Statutory Instruments 1996, Regulation 4 (3) & UK Statutory Instruments 1997, Regulation 7 4A (7))

Note2: For Step 2 as agreed in the scenarios by DN's, if 2 future good days are not available, use available 1 future good day. If no future good days available, use the 12 months historic data

For Step3 as agreed in the scenarios by DN's, if 2 future good days are not available, use available 1 future good day. If no future good days available, available historic data and compare with default 37 CV to fetch the lowest CV

Note 3: Failure Day is determined by the below conditions:

1. If the CV Valid Flag is 'N' or 'X'.
2. If the LOR was declared for that day.
3. No CV is received.

Note4: Step 2 and Step3 might trigger capping process, in such a scenario a notification to DN's needs to be send informing of the capped CV occurrence.

Note5: that onshore sites do not attribute to other sites but are attributed to themselves.

Key Processes created as part of FWACV service are listed below

➤ CV and Volume Data Processing

The below process flow diagram and table details the system, path and the processing mechanism for the processing CV and Volume data.

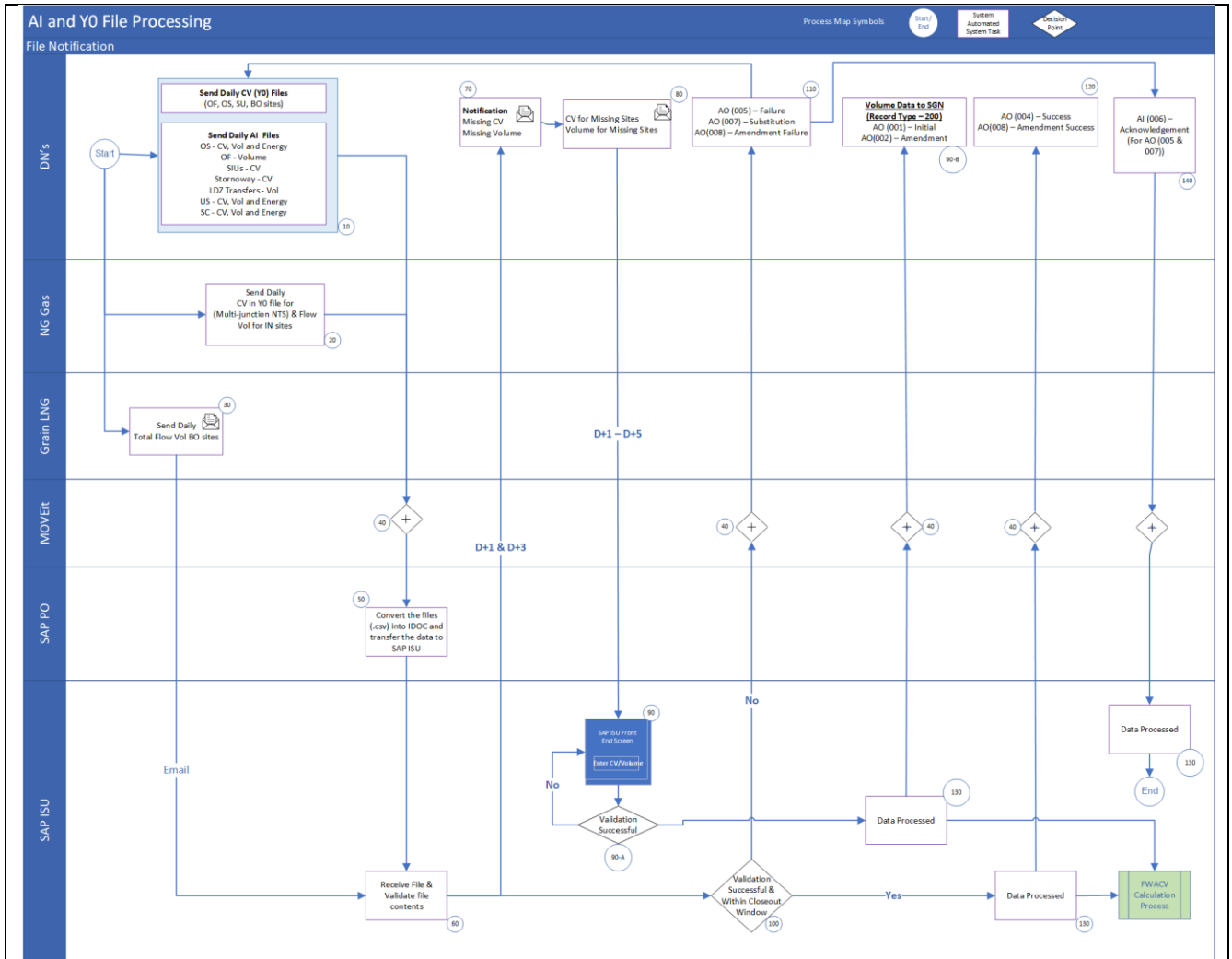


Figure: CV and Volume Data Processing Flow

Step	Comment
Step 10	<p>Start of Process</p> <p>Receive AI and Y0 files from DNs</p> <p>DNs will send the AI file for below site types:</p> <ul style="list-style-type: none"> ○ Onshore(Record type 260) -CV, Volume and Energy ○ Offtake(Record type 250) - Volume ○ SIUs (Record type 120)- CV ○ Stornoway (Record type 140)- CV ○ LDZ Transfers Out (Record type 280) - Volume ○ Unique Sites (Record type 240) - CV, Volume and Energy ○ Stock Change(Record type 150) - CV, Volume and Energy <p>DNs will send the Y0(CV) file for below site types:</p> <ul style="list-style-type: none"> ○ Offtake(OF): CV data ○ Onshore(OS): CV data ○ SIUs: CV data ○ Boil Off: CV data <p>Inbound File details are given in this change pack in Interface Section</p>
Step 20	<p>NG will send the Y0 file for below site types:</p> <ul style="list-style-type: none"> ○ Multi-junction: CV data <p>Inbound File details are given in this change pack in Interface Section</p>

<p>Receive Y0 file from NG</p>	
<p>Step 20 Receive Industrial Volume from NG via Email</p>	<p>NG will send an email to Xserve via agreed template with the below data:</p> <ul style="list-style-type: none"> o Industrial : Volume data <p>Note: NG confirmed that these sites are planned to be de-scoped from FWACV calculations in future.</p>
<p>Step 30 Receive Boil off Volume from site operator via Email</p>	<p>Site Operator(Grain LNG) will send an email via agreed template with the below data:</p> <ul style="list-style-type: none"> • Boil Off: Volume Data
<p>Step 40 Internal to Xoserve</p>	<p>All the AI and Y0 files will be sent to SAP PO system via MOVEit SFTP layer</p>
<p>Step 50 Internal to Xoserve</p>	<p>All the AI and Y0 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. Note: No validations will be done in SAP PO.</p>
<p>Step 60 Internal to Xoserve</p>	<p>Check if the File is received. If for any site/sites CV or Volume data is not received move to step 70. For all the sites that data is available for move to step 100</p>
<p>Step 70 Notify DNs of Missing CV/Volume on D+1 and D+3 via Email Notify NG of Missing CV for Multi-junctions</p>	<p>Notification to DNs Missing CV/Volume notification email will be issued to respective DNs for any site/sites on D+1</p> <p>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</p> <p>Notification to National Grid Missing CV notification email will be issued to NG for given gas day on D+1 Missing CV chaser notification email will be issued to NG for given gas day on D+3</p>
<p>Step 80 DNs to notify correct CV via Email</p>	<p>DNs to send email with correct CV using the Missing CV template to Xoserve during business hours.</p> <p>Please note any email sent after 12:00 (midday) on D+5 for a given gas day will be considered outside closeout.</p> <p>Note: Any incorrect volume to be send via the existing AI file interface.</p>
<p>Step 90 & 90-A Internal to Xoserve</p>	<p>Xoserve Business to enter the following information via screen</p> <ul style="list-style-type: none"> • Daily Volume data received from Grain LNG for Boil off site • Missing CV data received from DNs and National Grid <p>Note: In case of any screen validation failures, the data needs to be checked manually and uploaded again. If successfully uploaded move to step 130</p>
<p>Step 90-B Notification to SGN DN</p>	<p>When the Isle of Grain Volume is inserted into the system, a notification with the below details will be triggered to SGN to inform them regarding the volume used of calculation.</p> <ul style="list-style-type: none"> o AO-001 - Initial Volume data for Isle of Grain to SGN o AO-002 - Amended Volume data for Isle of Grain to SGN

<p>Step 100 Internal to Xoserve</p>	<p>Below validations will be done:</p> <ol style="list-style-type: none"> I. Below Validation will be done on all the inbound AI file: <ol style="list-style-type: none"> 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: <ol style="list-style-type: none"> i. Header Code 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): <ol style="list-style-type: none"> i. LDZ identifier ii. Onshore site, Offtake site, LDZ Transfer Out, Stornoway, SIU iii. Effective Date iv. Applicable at v. CV vi. Energy vii. Volume e. Below fields will be validated in the trailer records (Z99) <ol style="list-style-type: none"> i. Record Type: Z99 ii. Number of Records f. If all the validations pass, then use the valid values for further FWACV processing. g. Amended AI File will be identified if file type received in 002 like <LDZ Code>002.PNnnnnnn.AI1. II. Below Validation will be done on all the Y0 file: <ol style="list-style-type: none"> a. All mandatory fields are present in the file. b. Below fields should validated using the allowable values in the file format: <ol style="list-style-type: none"> i. CV Valid flag ii. Average CV Attributable flag <p>If the validations pass for all the records in the received file, then mark all the records as 'A'(Accepted/Ready for Processing) and move to step 130.</p> <p>If the validation fails then move to step 110</p>
<p>Step 110 Notify Rejections to DNs via File</p>	<p>If the inbound AI file validation fails, then notify DNs appropriate rejections/acknowledgment via the below files</p> <ul style="list-style-type: none"> • AO<005>- Failure Notification • AO<007> Volume Substitution Notification • AO<008> Amendment Failure Notification <p>Below are the proposed rejection codes for AO<005> file sent to the respective DN for the received AI file:</p>

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
FWCV0009	Site is invalid

Note: For inbound AI files any rejections raised for Invalid Header, invalid file format, invalid record type and invalid trailer records, the technical teams will raise the alert with DNs when applicable. This cannot be automated due to system restrictions.

Note: For the Y0 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 Y0 response files are not required.

Rejection Code	Rejection Description
FWCV0006	Mandatory Field is missing
FWCV0007	Gas day is outside closeout
FWCV0013	Invalid CV flag received
FWCV0014	Invalid Attributable CV flag received
FWCV0022	GC Sample Stream number not associated with the site
FWCV0023	Site does not exist in the system

Step 120 Notify DNs via AO004,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
Step 130 Internal to Xoserve	The data will be processed and uploaded to relevant SAP ISU tables with appropriate status for the FWACV core calculation process to continue.
Step 140 Acknowledgement Notification from DNS	Receive AI006 acknowledgment from DN's for AO005 and AO007.

➤ FWACV Calculation

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

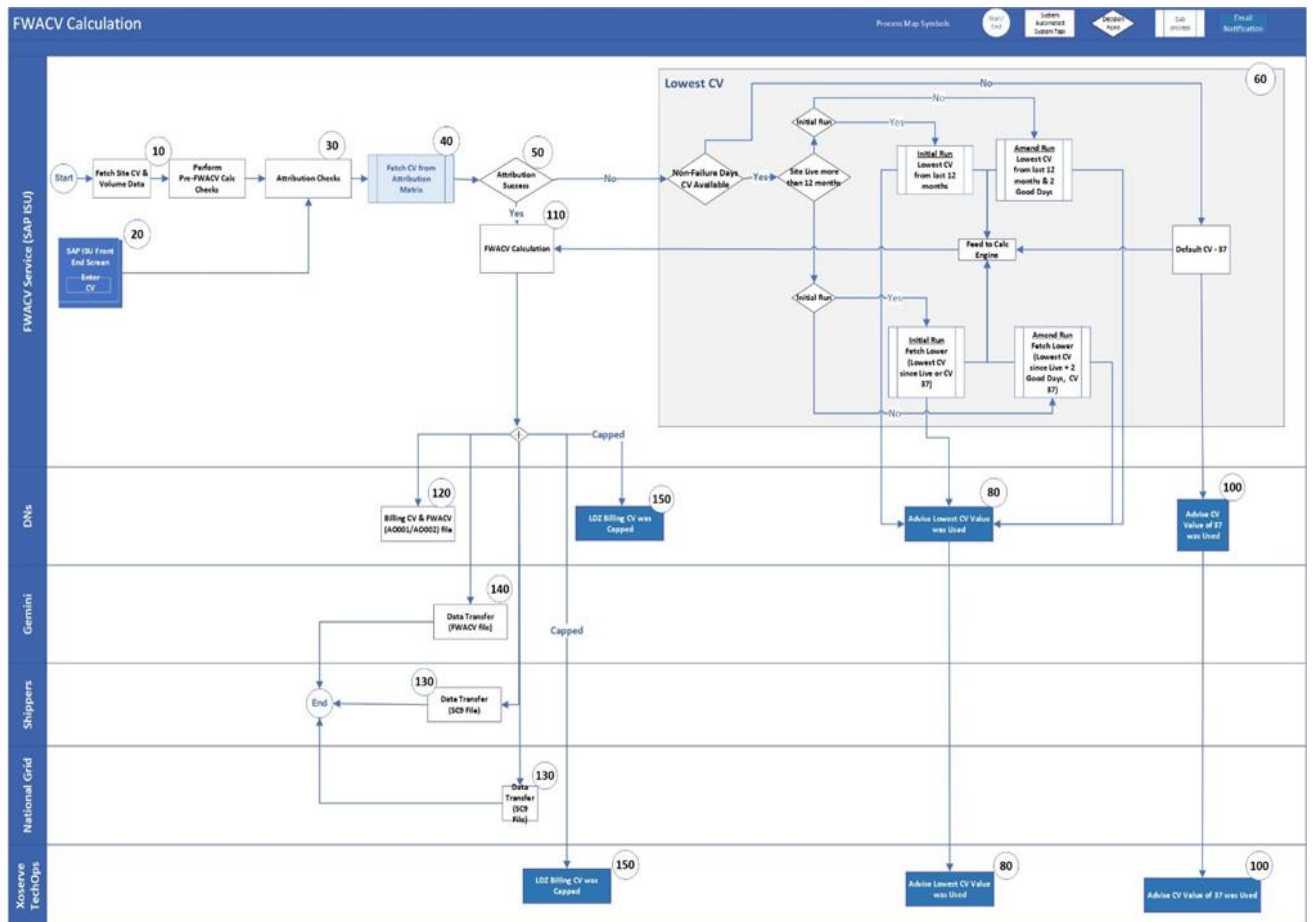




Figure : FWACV Calculation – Process Flow

Step	Comment
Step 10 Internal to Xoserve	<p>Pre-checks to ensure the correct CV and Volume data is fed into FWACV Calculation Job:</p> <p>Site types valid for FWACV Calculation:</p> <ul style="list-style-type: none"> ○ Offtake site ○ Onshore site ○ Boil off sites ○ Industrial sites ○ LDZ Transfer Out ○ LDZ Transfer In (The LDZ transfer out volume will be used received via AI(record type 280)) <p>Initial Run:</p> <ul style="list-style-type: none"> • For the sites where AI 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 volume <p>For the sites where Y0 files are not available for the Gas Flow Day, based on the attribution matrix(Step 30) FWACV can be calculated.</p>

Step 20 Internal to Xoserve	Xoserve Business Users to use the available SAP ISU screen to input any CV manually using the agreed Missing CV template.																										
Step 30 Internal to Xoserve	<p>Attribution mapping matrix checks(including the CV valid flag, attributable flag checks) are performed. The details are as given in the below table.</p> <table border="1" data-bbox="491 515 1505 1075"> <thead> <tr> <th>Site Type</th> <th>Scenario</th> <th>CV Valid Flag</th> <th>CV Attributable Flag</th> <th>Process Step</th> </tr> </thead> <tbody> <tr> <td rowspan="5">Offtake, LDZ Transfers, Onshore, Industrial Sites, Boiloff</td> <td rowspan="2">Site name is same as Attribution site name and CV & Attribution Flag is of the site</td> <td>Y</td> <td>Y/N</td> <td>Record the Average CV for the site name as Average CV from the Y0 record</td> </tr> <tr> <td>N/X</td> <td>Y/N</td> <td>Fetch Lowest CV based on the Lowest CV logic based on the <u>Lowest CV derivation logic below – Step 60</u></td> </tr> <tr> <td rowspan="3">Site name is different to Attribution site name and CV & Attribution Flag is of the attribution site</td> <td>Y</td> <td>Y</td> <td>Record the Average CV from the Y0 record</td> </tr> <tr> <td>Y</td> <td>N</td> <td>Move to next attribution site. If none available, Fetch lowest CV based on the <u>Lowest CV derivation logic below – Step 60</u></td> </tr> <tr> <td>N</td> <td>Y/N</td> <td>Move to next attribution site. If none available, Fetch lowest CV based on the <u>Lowest CV derivation logic below – Step 60</u></td> </tr> </tbody> </table> <p>Note1: Missing CV file checks are done as part of File Processing Process and an email notification is sent to DNs on D+1, D+3 so that DNs can share the data before D+5 closeout. Refer File Processing steps in the change Pack. Note2 : The attribution mapping matrix will be configurable and any changes to the same must be informed to Xoserve as per the agreed SLA (10 working days).</p>	Site Type	Scenario	CV Valid Flag	CV Attributable Flag	Process Step	Offtake, LDZ Transfers, Onshore, Industrial Sites, Boiloff	Site name is same as Attribution site name and CV & Attribution Flag is of the site	Y	Y/N	Record the Average CV for the site name as Average CV from the Y0 record	N/X	Y/N	Fetch Lowest CV based on the Lowest CV logic based on the <u>Lowest CV derivation logic below – Step 60</u>	Site name is different to Attribution site name and CV & Attribution Flag is of the attribution site	Y	Y	Record the Average CV from the Y0 record	Y	N	Move to next attribution site. If none available, Fetch lowest CV based on the <u>Lowest CV derivation logic below – Step 60</u>	N	Y/N	Move to next attribution site. If none available, Fetch lowest CV based on the <u>Lowest CV derivation logic below – Step 60</u>			
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Step 40 Internal to Xoserve	Fetch CV from Attribution Matrix based on the step 30 checks Move to step 50																										
Step 50 Internal to Xoserve	If attribution is successful and CV is available for the site, pass the CV value to FWACV calculation and move 110, else move to 60																										
Step 60 Internal to Xoserve	Fetch CV using Lowest CV Derivation logic as given in the below table <table border="1" data-bbox="491 1545 1505 2016"> <thead> <tr> <th>Step</th> <th>Scenario</th> <th>Condition</th> <th>Result</th> <th>Condition Exception</th> </tr> </thead> <tbody> <tr> <td rowspan="2">1</td> <td rowspan="2">Check for any Non-failure days CV data</td> <td>Available</td> <td>Go to Step 2</td> <td>None</td> </tr> <tr> <td>Not available</td> <td>Default the CV to 37 and feed into FWACV Calculation and the Default CV email triggered</td> <td>None</td> </tr> <tr> <td rowspan="2">2</td> <td rowspan="2">Check the duration the site has been live</td> <td>12 months or more</td> <td>Go to step 3</td> <td>None</td> </tr> <tr> <td>Less than 12 months</td> <td>Go to Step 4</td> <td>None</td> </tr> <tr> <td>3</td> <td>Initial Run</td> <td>Fetch Lowest average CV from past 12 months ignoring failure days</td> <td>Fetch and feed the lowest average CV into FWACV Calculation and</td> <td>None</td> </tr> </tbody> </table>	Step	Scenario	Condition	Result	Condition Exception	1	Check for any Non-failure days CV data	Available	Go to Step 2	None	Not available	Default the CV to 37 and feed into FWACV Calculation and the Default CV email triggered	None	2	Check the duration the site has been live	12 months or more	Go to step 3	None	Less than 12 months	Go to Step 4	None	3	Initial Run	Fetch Lowest average CV from past 12 months ignoring failure days	Fetch and feed the lowest average CV into FWACV Calculation and	None
Step	Scenario	Condition	Result	Condition Exception																							
1	Check for any Non-failure days CV data	Available	Go to Step 2	None																							
		Not available	Default the CV to 37 and feed into FWACV Calculation and the Default CV email triggered	None																							
2	Check the duration the site has been live	12 months or more	Go to step 3	None																							
		Less than 12 months	Go to Step 4	None																							
3	Initial Run	Fetch Lowest average CV from past 12 months ignoring failure days	Fetch and feed the lowest average CV into FWACV Calculation and	None																							

				notify about Lowest average CV used	
		Amendment Run	Fetch Lowest average CV from past 12 months + 2 good days (ignoring failure days)	Fetch and feed the lowest average CV into Calc and the Lowest CV email triggered	If 2 good days are not available, consider available good days. If no good days available, then just fetch the Lowest average CV from past 12 months
		Amendment Run: Not triggered	If no amendments received within D+5 close-out	None	Lowest CV captured at initial run and published on D+1 would be the closed out CV
	4	Initial Run	Compare the CV between: - Lowest average CV since the site went Live (ignoring failure days) - Default CV 37	Feed the Lower of the two CV into FWACV Calculation and the Lowest average CV email triggered	None
		Amendment Run	Compare the CV between: - Lowest average CV since the site went Live + 2 Good Days (ignoring failure days) - Default 37	Feed the Lower of the two CVs into FWACV Calculation and the Lowest average CV email triggered	If 2 good days not available, consider available good days. If no good days available, then just past days since the site was live
		Amendment Run: Not triggered	If no amendments received within D+5	None	If no amendments received within D+5 close-out, then the Lowest 'Average CV' captured at site level during the initial run will be used as closed out CV for that site. When there are no amendments received with D+5 close-out, the FWACV and LDZ Billing CV will remain the same and will not be re-calculated.
		If there are no good days and the derived CV was default CV of 37, move to step 100 and 110, else go to step 80 and 110.			
Step 70 Internal to Xserve	Fetch the lowest CV from the last 365 days and pass it to the FWACV calculation job and move to step 80 and 110 <<Removed as per Lowest CV updates>>				
Step 80 Notify DNs via Email	<p>An email (example shown below) will be triggered to DNs to notify that the Lowest CV Value was used in FWACV calculation</p> <p>From: xserveinterface@xservices.com <xserveinterface@xservices.com> Sent: Tuesday, December 10, 2019 9:08 PM To: xyz@dn.com; abc@dn.com Cc: .Box.xserve.spa; (box account of Operational Change) Subject: Lowest CV Information for LDZ: NW – 01/12/2021 (Gas Day)</p>				

	<p>Dear Customer,</p> <p>Lowest CV is used for attached site/sites in FWACV calculation for Gas Day 01/12/2021. (Gas Day)</p> <p>This is an automated email account and responses to this account are not monitored. Kindly follow the agreed Query Management Process for FWACV.</p> <p>Regards Xoserve</p>  <p>Lowest CV Email Attachment.xls</p> <p>Note: Please raise any business FWACV queries via our Help and Support page https://www.xoserve.com/help-and-support/</p> <p>Customers can also send an email to Xoserve team on FWACV@xoserve.com.</p>
<p>Step 99 Internal to Xoserve</p>	<p>Default the CV for the given Site to 37 MJ/M3 and pass it to the FWACV calculation job and move to step 100 and step 110-<<Removed as per Lowest CV updates>></p>
<p>Step 100 Notify DNs via Email</p>	<p>An email will be triggered to DNs to notify that the default CV Value of 37 was used in FWACV calculation</p> <p>Default CV Email</p> <p>From: xoserveinterface@xoserveservices.com <xoserveinterface@xoserveservices.com> Sent: Tuesday, December 10, 2019 9:08 PM To: xyz@dn.com; abc@dn.com Cc: .Box.xoserve.spa; (box account of Operational Change) Subject: Default CV Information for LDZ : WM – 01/12/2021</p> <p>Dear Customer,</p> <p>Default CV is used for attached sites in FWACV calculation for gas day 01/12/2021.</p> <p>This is an automated email account and responses to this account are not monitored. Kindly follow the agreed Query Management Process for FWACV.</p> <p>Regards Xoserve</p>  <p>Default CV Email Attachment.xlsx</p> <p>Note: Please raise any business FWACV queries via our Help and Support page https://www.xoserve.com/help-and-support/</p> <p>Customers can also send an email to Xoserve team on FWACV@xoserve.com.</p>
<p>Step 110 Internal to Xoserve</p>	<p>The FWACV calculation Job would be scheduled with the below algorithm built-in :</p> <ul style="list-style-type: none"> • Site Energy = Site volume * Site Average CV • LDZ Volume = Sum of all Site Volumes for LDZs (Onshore + Offtake + Boil Off + Industrial + Transfer In – Transfer Out) • Transfer In LDZ Volume = Sum of all Site Volumes for LDZs (Onshore + Offtake + Boil Off + Industrial + Transfer In)

- **Transfer Out LDZ Volume** = Sum of all **Site Volumes** for LDZs (Onshore + Offtake + Boil Off + Industrial - Transfer Out)
- **LDZ (Measured) Energy** = Sum of all **Site Energy** for all LDZs (Onshore + Offtake + Boil Off + Industrial + Transfer In – Transfer Out)
- **Transfer In LDZ Energy** = Sum of all **Site Energy** for all LDZs (Onshore + Offtake + Boil Off + Industrial + Transfer In)
- **Transfer Out LDZ Energy** = Sum of all **Site Energy** for all LDZs (Onshore + Offtake + Boil Off Industrial - Transfer out)
- **LDZ FWACV** = **LDZ Energy / LDZ Volume**
- **LDZ Capped CV** = (Lowest site CV in the LDZ) + 1
- **LDZ Billing CV** = Min (**LDZ CV, LDZ Capped CV**)
- **Site Billed Energy** = **Site Volume * LDZ Billed CV**
- **LDZ Billed Energy** = Sum of all **Site Billed Energy** in the LDZ
- **Offtake Billed Energy** = Sum of all **Site Billed Energy** for Gas Day D for Offtake LDZ
- **Onshore Billed Energy** = Sum of all **Site Billed Energy** for Gas Day D for Onshore LDZ
- **Boil Off Billed Energy** = Sum of all **Site Billed Energy** for Gas Day D for Boiloff LDZ
- **Industrial Billed Energy** = Sum of all **Site Billed Energy** for Gas Day D for Industrial LDZ
- **Transfer Out Billed Energy** = Sum of all **Site Billed Energy** for Gas Day D for Transfer Out LDZ
- **Transfer In Billed Energy** = Sum of all **Site Billed Energy** for Gas Day D for Transfer in LDZ
- **Total Billed Energy** = (**Offtake Billed Energy + Onshore Billed Energy + Boil Off Billed Energy + Industrial Billed Energy + Transfer In Billed Energy – Transfer Out Billed Energy**)

Note: The calculated FWACV and Billing CV will be truncated to 2 decimal places and rounded to 1 decimal place.

Below units are used as part of calculations
 For all CVs – MJ/m³
 For all Energy – kWh
 For all Volume/Flow - mcm

Below are the data feed cut off times that are considered for FWACV job run.

Inbound Data Feed Cut off SLA Times																													
Route	Scenario	Data Received by/between	Processed by Job run at	Comments																									
Files	For Gas day D information sent on D+1	09:00	10:00																										
		09:00 to 12:30	13:30																										
		12:30 to 15:00	15:30																										
	For Gas day D information sent on D+2 – D+5	14:30 D+1 to 7:30 on (D+2-D+5)	08:30																										
Files	For Gas day D information sent on D+2 – D+5	7:30 AM and 12:30 PM on (D+2 - D+5)	13:30																										
	For Gas day D information sent on D+2 – D+5	12 PM and 3:00 PM (D+2 - D+5)	15:30	Any files that are received after 3:00 day D to be considered as outside of would not feed into FWACV calculation error message to source informing the day run(D+6 10:00am)																									
Emails	For Gas day D information sent on D+1	09:00	10:00																										
		12:30 to 15:00	15:30																										
	For Gas day D information sent on D+2 – D+5	14:30 D+1 to 7:30 on (D+2-D+5)	08:30																										
	For Gas day D information sent on D+2 – D+5	7:30 AM and 12:30 PM on (D+2 - D+5)	13:30																										
Files	For Gas day D information sent on D+2 – D+5	12:00 (Mid day)	13:30 or 15:30	SLA for the Missing CV data will be via an email to Xoserve during business (12:00 mid day) in an agreed standard attachment.																									
<p>Step 120</p> <p>Response files to DNs via AO001 and AO002</p>	<p>The schedule job would generate and send the response files AO001/AO002 to DNs with below details:</p> <ul style="list-style-type: none"> o Billing CV o FWACV <p>These files are generated and sent to DNs post the below FWACV Calculation runs for the Gas Day D as per below:</p> <p>D+1 processing by</p> <ul style="list-style-type: none"> o 11:00 o 14:00 o 16:00 <p>D+2 to D+5 processing by</p> <ul style="list-style-type: none"> o 09:00 o 14:00 o 16:00 <p>The File Formats are attached in this change pack in file formats section.</p>																												
<p>Step 130</p> <p>SC9 file sent to Shippers and NG</p>	<p>The job would be scheduled to generate and publish the SC9 files as given below</p> <ul style="list-style-type: none"> • SC9 file to Shippers and NG for Gas Day D on D+1: • Initial data set sent by 11:00 and second run for any further changes to CV will be sent by 16:00 • Amendments to volume and CV information made between D+1 to D+5 has to be reported by D+5 <p>Note: 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).</p>																												
<p>Step 140</p> <p>FCV file sent to Gemini</p>	<p>The meter types and data sets that are considered for new FCV file to be sent to Gemini at site level are:</p> <table border="1"> <thead> <tr> <th>Site Type</th> <th>Meter Type</th> <th>CV</th> <th>Volume</th> <th>Energy</th> </tr> </thead> <tbody> <tr> <td>Offtake</td> <td>OF</td> <td>LDZ Billing CV</td> <td>AI File-Volume</td> <td>Site Billed Energy</td> </tr> <tr> <td>Onshore</td> <td>OS</td> <td>AI File - CV</td> <td>AI File- Volume</td> <td>AI File- Site Energy</td> </tr> <tr> <td>Stock Change</td> <td>SC</td> <td>AI File - CV</td> <td>AI File- Volume</td> <td>AI File- Site Energy</td> </tr> <tr> <td>Unique Site</td> <td>US</td> <td>AI File - CV</td> <td>AI File- Volume</td> <td>AI File- Site Energy</td> </tr> </tbody> </table> <p>Note: The LDZ Billing CV at LDZ level for all 13 LDZs are also sent to Gemini via the FCV file.</p> <p>FCV files are generated and sent to Gemini for the Gas Day D as per below:</p>				Site Type	Meter Type	CV	Volume	Energy	Offtake	OF	LDZ Billing CV	AI File-Volume	Site Billed Energy	Onshore	OS	AI File - CV	AI File- Volume	AI File- Site Energy	Stock Change	SC	AI File - CV	AI File- Volume	AI File- Site Energy	Unique Site	US	AI File - CV	AI File- Volume	AI File- Site Energy
Site Type	Meter Type	CV	Volume	Energy																									
Offtake	OF	LDZ Billing CV	AI File-Volume	Site Billed Energy																									
Onshore	OS	AI File - CV	AI File- Volume	AI File- Site Energy																									
Stock Change	SC	AI File - CV	AI File- Volume	AI File- Site Energy																									
Unique Site	US	AI File - CV	AI File- Volume	AI File- Site Energy																									

	<p>D+1 processing by</p> <ul style="list-style-type: none"> • 10:40 • 13:35 • 15:50 <p>D+2 to D+5 processing by</p> <ul style="list-style-type: none"> • 10:40 • 13:35 • 15:50 <p>The File Format is attached in this change pack in file formats section.</p>
<p>Step 150</p> <p>Notify DNs via Email</p>	<p>An email will be triggered to DNs whereby LDZ Billing CV was Capped</p> <p>Capped CV Email</p> <p>From: xoserveinterface@xoserveservices.com <xoserveinterface@xoserveservices.com> Sent: Tuesday, December 10, 2019 9:08 PM To: xyz@dn.com; abc@dn.com Cc: .Box.xoserve.spa; (box account of Operational Change) Subject: Capped CV Sites for LDZ : WM – 03/02/2022</p> <p>Dear Customer,</p> <p>LDZ Billing CV for WM has been capped for gas day 03/02/2022, which has been caused by BarnesFarmBioOns (<i>Actual Site Name will be populated</i>). The LDZ Billing CV capped at 39.4 when the FWACV is 40.1; this caused 8989 kWh of CV Shrinkage.</p> <p>Please note this is a best endeavors process and that all CV's are subject to change until D+5.</p> <p>This is an automated email account and responses to this account are not monitored. Kindly follow the agreed Query Management Process for FWACV.</p> <p>Regards Xoserve</p> <p>Note: Please raise any business FWACV queries via our Help and Support page https://www.xoserve.com/help-and-support/</p> <p>Customers can also send an email to Xoserve team on FWACV@xoserve.com.</p>
<p>➤ 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.</p>	

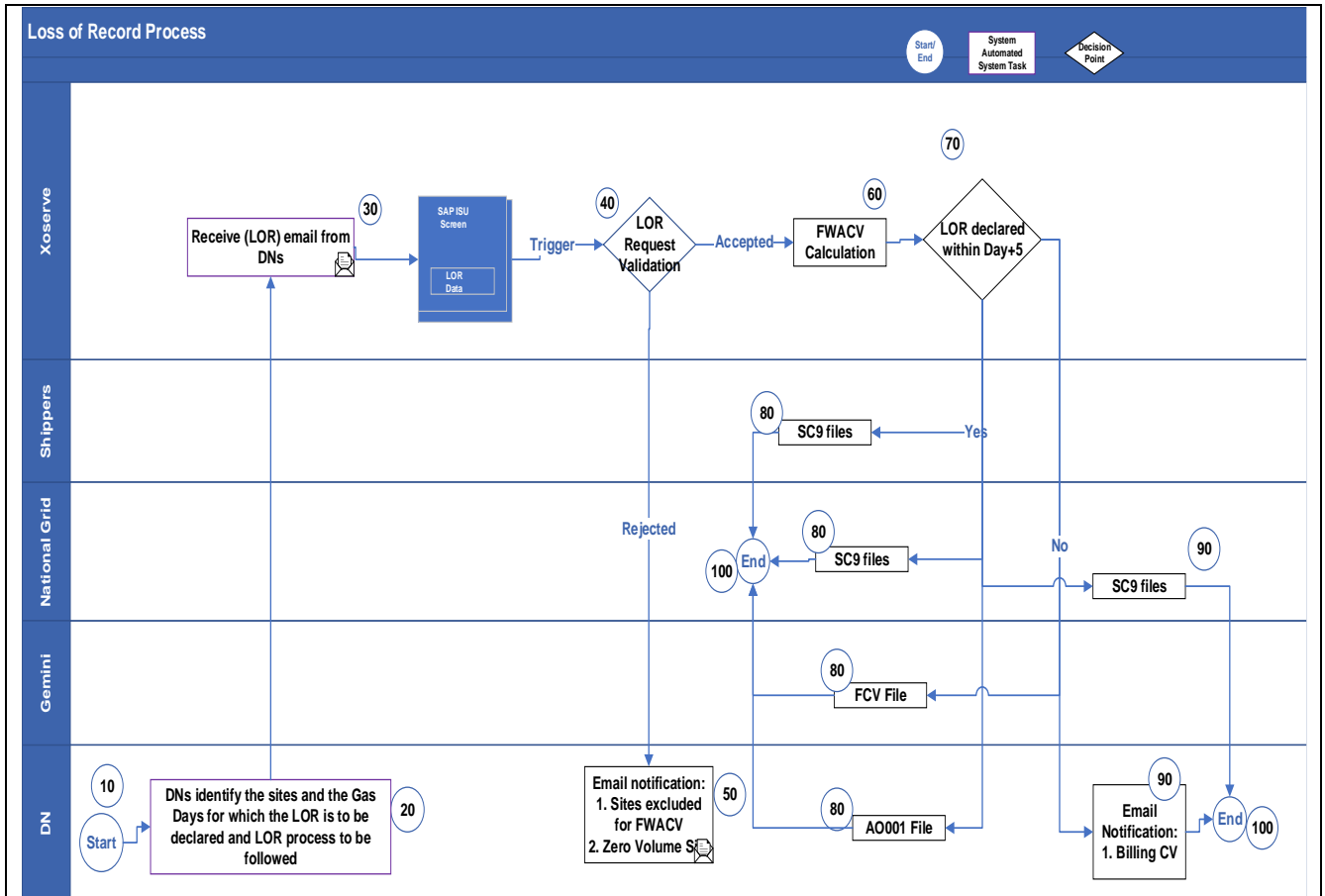



Figure: Loss of Record – Process Flow

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 notify Xoserve via an email (data shared in the LOR template).
Step 30 Receive the LOR from DNs via email	SAP IS-U will receive LOR email in the agreed template from DNs and upload the information in the SAP ISU screen to feed-in the LOR information for the FWACV process to calculate the CV for the declared LOR dates for the given gas days. Move to step 40
Step 40 Internal to Xoserve	Carry out validation checks and process the LOR and update the relevant tables. The validation checks include to see if 1. Sites for given gas days in the LOR scenario are excluded from FWACV calculation 2. Sites for given gas days in the LOR scenario have no flow If validation is successful move to Step 60 If validation has failed move to Step 50
Step 50	Response email will be generated to DNs with: 1. Sites excluded for FWACV 2. Zero Volume Site

<p>Notify DNs via Email as part of LOR process</p>	<p style="text-align: center;">LOR – Site Exclusion Email</p> <p>From: xoserveinterface@xoserveservices.com <xoserveinterface@xoserveservices.com> Sent: Tuesday, December 10, 2019 9:08 PM To: xyz@dn.com; abc@dn.com Cc: .Box.xoserve.spa; (box account of Operational Change) Subject: Sites excluded for LOR from 27/12/2021 to 03/01/2022</p> <p>Dear Customer,</p> <p>This is with reference to a loss of record at XXXXXXXX (Actual Site Name will be populated) from gas day 27/12/2021 to 03/01/2022.</p> <p>No alternative CV has been applied due to site not being used in the FWACV calculation.</p> <p>This is an automated email account and responses to this account are not monitored. Kindly follow the agreed Query Management Process for FWACV.</p> <p>Regards Xoserve</p> <hr/> <p style="text-align: center;">LOR – Zero Volume Email</p> <p>From: xoserveinterface@xoserveservices.com <xoserveinterface@xoserveservices.com> Sent: Tuesday, December 10, 2019 9:08 PM To: xyz@dn.com; abc@dn.com Cc: .Box.xoserve.spa; (box account of Operational Change) Subject: Zero Volume Site for LOR from 27/12/2021 to 03/01/2022</p> <p>Dear Customer,</p> <p>This is with reference to a loss of record at XXXXXXXX (Actual Site Name will be populated) from gas day 27/12/2021 to 03/01/2022.</p> <p>No alternative CV has been attributed due to site not flowing.</p> <p>This is an automated email account and responses to this account are not monitored. Kindly follow the agreed Query Management Process for FWACV.</p> <p>Regards Xoserve</p> <p><u>Note:</u> Please raise any business FWACV queries via our Help and Support page https://www.xoserve.com/help-and-support/</p> <p>Customers can also send an email to Xoserve team on FWACV@xoserve.com.</p>
<p>Step 60 Internal to Xoserve</p>	<p>FWACV calculation will be carried out for the submitted sties for the LOR declared gas days. Note: LOR declared Gas days will always be less than system date.</p>
<p>Step 70 Internal to Xoserve</p>	<p>Check if the LOR GAS DAY is with-in closeout or outside D+5. If LOR gas day is within closeout move to step 80 else for outside close out move to step 90.</p>

<p>Step 80</p> <p>LORs declared Within D+5 window</p> <p>SC9 file sent to Shippers and NG</p> <p>FWACV file sent to Gemini</p> <p>AO001 file sent to DNs</p>	<p>For LORs declared within D+5 window, calculate the FWACV and carry out the below steps</p> <ul style="list-style-type: none"> • Trigger the SC9 files to Shippers and National Grid. • Trigger the FWACV File to Gemini. • Trigger AO001 file to DNs <p>Move to Step 100.</p>
<p>Step 90</p> <p>LORs declared outside D+5 window</p> <p>Notify DNs via Email</p> <p>SC9 file sent to NG</p>	<p>For LORs declared outside D+5 window, calculate the FWACV and carry out the below steps</p> <ul style="list-style-type: none"> • Trigger SC9 file to National grid • Trigger an email notification to DNs with billing CV <hr/> <p>LOR Email</p> <p>From: xoserveinterface@xoserveservices.com <xoserveinterface@xoserveservices.com> Sent: Tuesday, December 10, 2019 9:08 PM To: xyz@dn.com; abc@dn.com Cc: .Box.xoserve.spa; (box account of Operational Change) Subject: LOR scenario outside D+5 for LDZ : SE</p> <p>Dear Customer,</p> <p>Attached file with the FWACV calculated for an LOR raised outside D+5 from 27/12/2021 to 03/01/2022 for XXXXXXXX(Actual site name will be populated here).</p> <p>This is an automated email account and responses to this account are not monitored. Kindly follow the agreed Query Management Process for FWACV.</p> <p>Regards Xoserve</p>  <p>LOR Post Calculation Template.xlsx</p> <p>Note: Please raise any business FWACV queries via our Help and Support page https://www.xoserve.com/help-and-support/</p> <p>Customers can also send an email to Xoserve team on FWACV@xoserve.com.</p> <p>Move to Step 100.</p>
<p>Step 100</p>	<p>End of the Process</p>

➤ **New Site Setup Process**

The below process flow diagram details the new site setup for FWACV process.

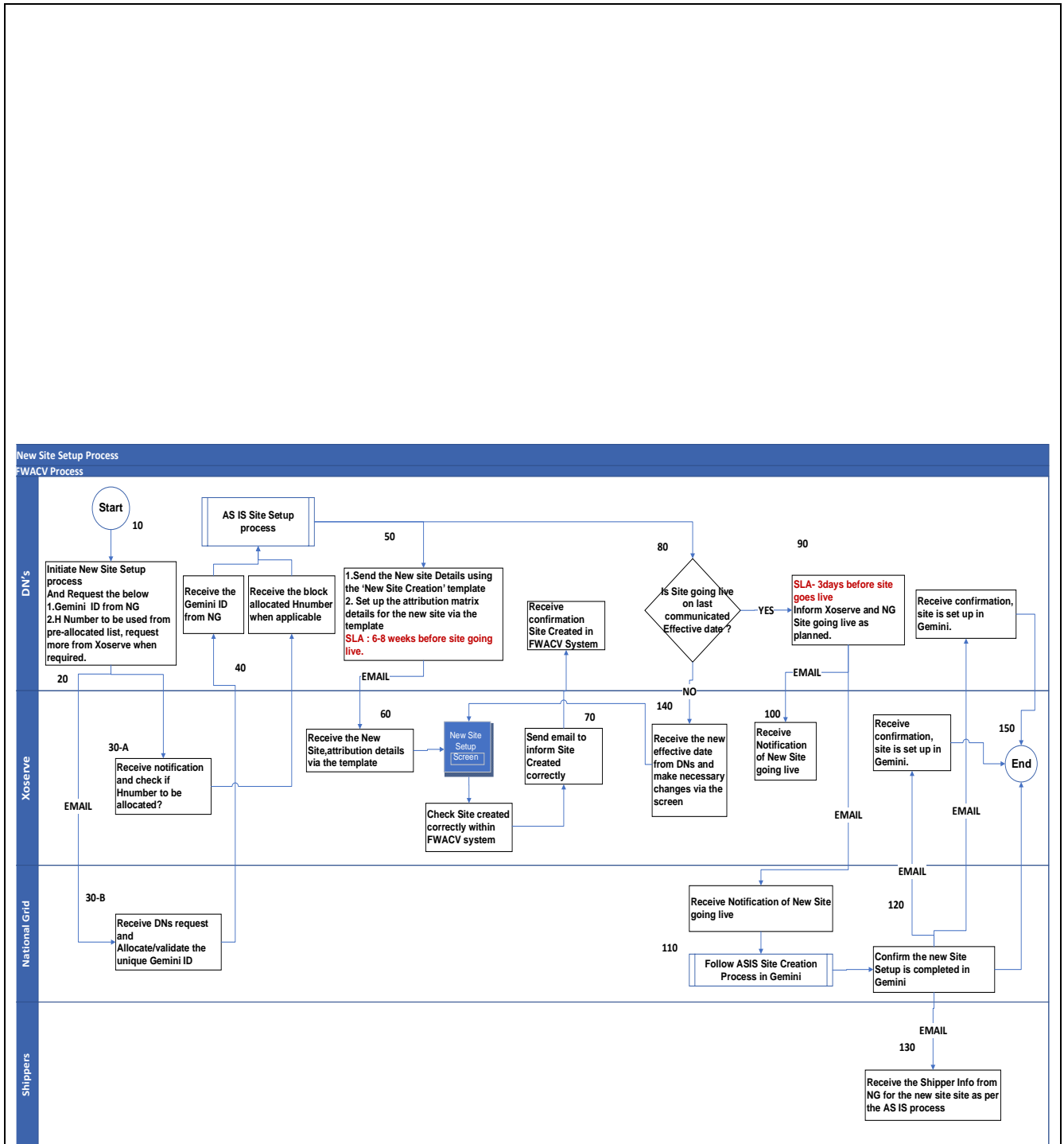


Figure: New Site Setup Process Flow

Step No	Description
Step 10 Start the process	Start the Process
Step 20 DNs trigger New Site Setup Process	Initiate the New site set up process <ol style="list-style-type: none"> DNs send a suggested Gemini ID to National Grid and Ng to check within Gemini for availability. H number(site number) to be used from the pre-allocated list, DN's to request H number from Xoserve if the block allocated H numbers are required.

Step 30 A Xoserve -Process H Number (Site Number)	Xoserve to issue a list of Hnumber to DNs if they request the same as part of New Site Setup process initiation. Note: Hnumber is a unique ID ref used to setup as a Site number for the new sites. These numbers are block allocated to each DN to ensure no duplicate ID's are used.
Step 30 B National Grid- Process Gemini ID	National Grid to issue/validate the Gemini ID (Gemini Meter ID) to DN's
Step 40- DNs to follow As-Is site setup process	DNs to receive the below information and to follow the As-Is New site creation process <ol style="list-style-type: none"> 1. Site Number(Hnumber) from Xoserve if requested. 2. Gemini ID from National Grid
Step 50 DNs to send New site details to Xoserve	DNs to share the below information with Xoserve <ol style="list-style-type: none"> 1. Send the new site details using the 'New Site Creation' template 2. Set up the attribution matrix details for the new site via the Attribution matrix template <p>Agreed SLA to inform Xoserve for new site creation process is 6-8 weeks before site going live.</p>
Step 60 Xoserve- To create the new site setup for FWACV	Xoserve to receive the new site details via the agreed templates and follow the below steps <ol style="list-style-type: none"> 1. Ensure all the data is available within the templates 2. Data to be uploaded via the Screen.
Step 70 Xoserve to notify DNs	Xoserve to send notification via email to DN's once the New site is successfully set up within FWACV system
Step 80 DNs to check if Effective date is valid	DNs to check if the site is going live as planned on the latest communicated effective date If yes move to step 90 else move step 140
Step 90 DNs to inform Xoserve and National Grid about site go live -3 days prior	DNs to inform National grid and Xoserve that the site going live and confirm the effective date. Agreed SLA to inform National Grid and Xoserve for confirming the site go-live date is 3 working days. National Grid has a dependency on this SLA for creation of the new site within the Gemini system.
Step 100 Xoserve	Xoserve to receive DN's email notification and check if the effective date is setup correctly for the given new site. Note: If the Gemini system is not inline with FWACV, Gemini will result in rejecting the data sent by Xoserve
Step 110 National Grid to setup site in Gemini	National Grid to receive DN's notification of new site go-live and create the new site in Gemini system following the As-Is Gemini New site setup process.
Step 120 National Grid to inform DNs and Xoserve	National Grid to send confirmation to DNs and Xoserve once the new site is setup successfully in Gemini.
Step 130 National Grid to inform Shippers	National Grid to follow the As-Is Gemini Site setup process and inform Shippers to create activity number for the new site. Note: This is BAU (Business as usual) Gemini Site Creation Activity carried out by NG.

Step 140 Xoserve to update the site go live date	Xoserve to receive the correct Site go live date (effective date) and update the same within the FWACV system via the SAP ISU screen.
Step 150 End	End the process

➤ **Existing Site Configuration Changes**

Any changes given below can be raised by DN's via email to Xoserve.

- Existing Site config changes – Attributes like *Analyser Serial Number, Capping Flag, Stream, Effective Date* and *Maintain Transfer out LDZ* new pair can be expected to change.
- Attribution matrix changes
- Shipper config Changes
- Default CV Changes
- Email Stakeholder changes
- Site Inclusion/ Exclusion List / Decommissioned Changes

Agreed SLA to action any of the above config changes is 7-10 business/working days

Reporting

OFGEM Audit Report

As part of the FWACV Service, we have regulatory obligation to send the Audit Report on the 10th 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:

- **Onshore Field Record** - For each LDZ there should be a record for each on-shore field contained by the LDZ.
- **Offtake Record** - For each LDZ there should be a record for each NTS offtake which supplies the LDZ.
- **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.
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.
- **LDZ record** - These records give the total volume, total energy, FWACV (uncapped) and FWACV (capped) for each LDZ.
- **LDZ Transfers In record** - These records give the transfer Volume, CV & Energy into each LDZ where a transfer point exists.
- **LDZ Transfers Out record** - These records give the transfer Volume, CV & Energy out of each LDZ where a transfer point exists.
- **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.
- ⊖ **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.

Report Specifications:



OFGEM_Hierarchy.xls
x



File Format
Specification - OFGEM

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 [OFGEM audit report](#) which is created and sent to respective DNs. This will be a flat file sent via email (attachment) to DNs box account on monthly bAs-Is.

NG Energy Report

National Grid requires the billed energy and measured energy at LDZ level to calculate CV Shrinkage for their business as usual processes. NG Energy Report will include the below information

- LDZ
- Gas Day
- Total Billed energy for the Gas Day
- Total Measured energy for the Gas Day

The report will be sent to NG bi-monthly via an email to agreed NG box account.



File Format

Report Specification : Specification - NG Enr

File Formats/Templates:

Proposed file formats attached below:

1. AI File:



AI_Hierarchy.xlsx



File Format
Specification - AI.xlsx

2. AO File



File Format
Specification - AO.xlsx

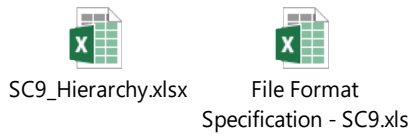


AO_Hierarchy.xlsx

3. Y0 File:

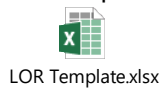


4. SC9 File:

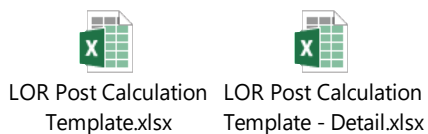


5. LOR Email attachment Template

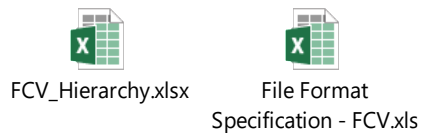
LOR template to be used by DNs to share the LOR data to Xoserve via email.



6. LOR Post calculation template

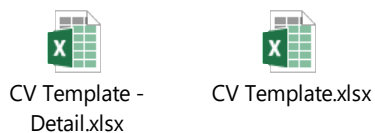


7. FCV File format



8. Missing CV data Email template

Template to be used by DNs to share the Missing CV (Y0) data to Xoserve via email.



9. Isle of Grain data Email Template:



10. Industrial Sites Volume Template:



Industrial - Volume
Template.xlsx



Industrial - Volume
Template - Detail.xlsx

11. Site Creation and Attribution matrix Template



Site Creation
Template - Detail.xlsx



Site Creation
Template.xlsx



Attribution Matrix
Template.XLSX



Attribution Matrix
Template - Detail.XLSX

12. 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
FWCV0009	Site is invalid

Note: For inbound AI files any rejections raised for Invalid Header, invalid file format, invalid record type and invalid trailer records, the technical teams will raise the alert with DNs when applicable. This cannot be automated due to system restrictions.

Proposed Y0 File Rejection codes are given below, these are only used by the internal xoserve processes.

Rejection Code	Rejection Description
FWCV0006	Mandatory Field is missing
FWCV0007	Gas day is outside closeout
FWCV0013	Invalid CV flag received
FWCV0014	Invalid Attributable CV flag received
FWCV0022	GC Sample Stream number not associated with the site
FWCV0023	Site does not exist in the system

Note: For the Y0 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 Y0 response files are not required.

Data Migration:

As part of the Data migration activity, we proposed for this to be 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:
 - Onshore/offtake CV, LDZ Billing 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.xlsx

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 Title(s):	National Grid (Gemini/MIPI) Consequential changes (XRN5382 and XRN5383)
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G7: DSG

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

G8: Implementation

Target Release:	March/April 2022
Status:	For Approval

Please see the following page for representation comments template; responses to uklink@xoserve.com

Section H: Representation Response

H1: Change Representation

(To be completed by User and returned for response)

User Contact Details:	Organisation:			
	Name:			
	Email:			
	Telephone:			
Representation Status:				
Representation Publication:	<input type="checkbox"/> Publish		<input type="checkbox"/> Private	
Representation Comments:				
Confirm Target Release Date?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If [No] please specify alternative	

Please send the completed representation response to uklink@xoserve.com