CentralMarketAgency

Central Systems

Performance Standards

User Requirements Specification

This version of the PS URS covers the period from 1 April 2025. For periods up to 31 March 2025, please refer to earlier versions of the PS URS.

Document Control

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Change history

Version	Date	Author	Reason for new version	Review	Approval
0.01	26/11/2013	Chris Stubbs	Initial Draft	GC, NC, AB.	N/A
1.0	10/12/2013	Neil Cohen	Draft in CMA format	GC, AB, CS	N/A
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2.1	2014-04-15	NC	Minor clarification on timings for runs	N/A	JA
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6.0	2016-05-05	NC	Remove S reads for POLR from R9	N/A	GC
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7.1-8.0	2016-09-27	NC	R10 Mod (MCCP190)	AB	GC
8.1-9.0	2016-03-16	NC	R9D and R9E (CMACPx165)	AB	AM
9.1-10.0	2017-10-02	NC	License Transfers when caps have been reached (CMACP267)	AB	AM
10.1-11.0	2018-09-27	NC	MCCP227 – CC SWx for TTRAN SPIDs	AM	AM
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14.0	2019-12-09	DC	Remove refs to R4A and R4B and Change of T007.1 ownership to SW (MCCP239) Add refs to T015.2 (MCCP185)	NC	
15.0	2020-09-24	NC	Mods to validation for the R5 and the R9	AS	DC
15.1-16.0	2021-01-01	NC	Exclusion of the R10 charges for covid 19 unwinding.	DC	JA

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Version	Date	Author	Reason for new version	Review	Approval
16.1-17.0	2021-01-20	NC	Removal of R11 and minor mods to R1 and R5	NC	JA
17.1	2022-07-26	NC	Additional re-set for the R10B	DC	JA
17.2 – 18.0	2022-09-15	NC	Clarification of 'success' for all Rs	DC	JA
18.1 – 19.0	2024-03-21	DS	Correction to R3A and R5A	NC	
19.1 – 20.0	2025-03-20	DS	Incorporates outcome of Performance Charges Review 2024 (MCCP308)	DS	JO
20.1 – 21.0	2026-03-18	DS	Incorporates outcome of Performance Charges Review 2025 (MCCP316)	DS	JO

CONTENTS

1. INTRODUCTION

OBJECTIVES

This PS URS is intended to provide an unambiguous and comprehensive statement of all users' requirements for the performance charging functions of the CMA CS, such that all performance charging related user obligations under the MC can be shown to be satisfied.

The principal purpose of the document is to provide a basis against which a Functional Design Specification for the CMA CS could be formulated and to provide a basis for the development of changes to the performance charging function and to facilitate the development of User Acceptance Test specifications for such changes.

SCOPE & DERIVATION

This version of the PS URS covers the period from 1 April 2025. For periods up to 31 March 2025, please refer to earlier versions of the PS URS.

The PS URS covers all inputs to the performance standards and charging calculations (defined as being the relevant data sources within the CMA CS which will have been updated via the registration functions of the system), processing and output requirements for the performance standards and charging functions of the CMA CS, both functional and non-functional, noting that manual processes to be performed by the CMA OSP and by the CMA are dealt with in LWIs and are outside the scope of the PS URS.

This document has been reverse engineered from existing scripts, with suitable cross-referencing to CSD 0002.

CONTEXT

This document has been developed in accordance with LWI 205 and forms part of a set of User Requirements Specifications for the CMA Central Systems.

OVERVIEW

The PS URS is first broken down into 2 main categories:

- General Requirements (GPS URS). These set down non-calculational requirements for the performance standards and charges, such as access, operation and performance and also the output requirements (e.g. reporting). These are described in Section 3 and have been allocated a GPSUR number.
- Process Requirements (PPS URS). These identify the requirements for the processing of data in order to arrive at the liabilities and accruals and supporting information that is to be provided via reports to Parties.

   The specific processing requirements for these are presented in Section 4 and are given a PPSUR number.

2. GENERAL REQUIREMENTS

GPSUR 1 OPERATION

The performance reports shall generally be run on a monthly basis, as scheduled events, typically 6 Business Days after the end of the month for which the measures are to be assessed in order to ensure that, for the R10 measure, legitimate meter reads submitted 5 BDs after the read date are taken account of. However, there shall be a capability to re-run previous months.

Throughout this URS the term "Reporting Month" is used to mean the calendar month before the month in which the reports are run, except where a previous month is being re-run. For example, when the reports are run in March the Reporting Month will be the immediately preceding February.

The creation of the performance reports shall not have an adverse performance effect on the rest of the Central Systems.

As with all well-designed software, the reports shall be created in such a way that allows for easy extension and modification.

GPSUR 2 CONFIGURABLE ITEMS

Performance Standard Business Day Thresholds

The basis of the performance reports (with the exception of the R11) is to measure the time period between a Transaction being sent to a Trading Party, and the Trading Party's successful response to that transaction. The time period thresholds for each performance report are in business days. The threshold is configurable: the threshold value that is active when the report is generated will be used. From 1 April 2025, the values for these thresholds are:

Performance Measure	Business Day Threshold
R1A Partial Registration	5
R1B Partial Registration	10
R2A Disconnection /Reconnection (Threshold 1 for activities undertaken by Scottish Water and Threshold 2 for activities undertaken by an Accredited Entity)	*Threshold 1*: 5 *Threshold 2*: 8
R2B New Connection Notifications (Threshold 1 for activities undertaken by Scottish Water and Threshold 2 for activities undertaken by an Accredited Entity)	*Threshold 1*: 9 *Threshold 2*: 12
R3A Connection Notifications for Gap Site or Connection Change of Use	15
R4A New Connection Notifications	Removed in March 2020
R4B New Connection Notifications	Removed in March 2020
R5A Connection Notifications for Gap Site or Connection Change Use	15
R6A Disconnection /Reconnections (Threshold 1 for SPID Status TDISC, REC and PPDISC and Threshold 2 for SPID Status PDISC)	*Threshold 1:* 2 *Threshold 2:* 5
R6B Disconnection /Reconnections (Threshold 1 for SPID Status TDISC, REC and PPDISC and Threshold 2 for SPID Status PDISC)	*Threshold 1:* 6 *Threshold 2:* 9

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Performance Standards   User Requirements Specification

Performance Measure	Business Day Threshold
R7A Late Meter Reads (Threshold 1 for activities undertaken by Scottish Water and Threshold 2 for activities undertaken by an Accredited Entity) Note: Threshold 2 only applies for I, F, E and O reads	*Threshold 1:* 5 *Threshold 2:* 8
R7B Late Meter Reads (Threshold 1 for activities undertaken by Scottish Water and Threshold 2 for activities undertaken by an Accredited Entity) Note: Threshold 2 only applies for I, F, E and O reads	*Threshold 1:* 13 *Threshold 2:* 16
R7C Late Meter Reads 'C'	5
R7D Late Meter Reads 'C'	60
R8A Extremely Late Meter Reads	160
R8B Extremely Late Meter Reads	40
R9A Late Meter Reads	5
R9B Late Meter Reads	~~5~~10
R9C Late Meter Reads	60
R9D Late Meter Reads 'T, U or S'	T Reads: ~~2~~4 U Reads: 4 S Reads: 5
R9E Late Meter Reads 'T, U or S'	10
R10A Missed Meter Reads	Six calendar months
R10B Missed Meter Reads	Within the previous calendar month

Performance Charge Levels

Performance Charge Levels are the charges that are levied if a Business Day Threshold is breached. Performance Charge Levels shall be configurable in terms of:

- The Performance Charge Level applied to a Measure
- The charge amount for the Charge Level.

The charges and Charge Levels are as follows:

Performance Charge Level	Amount (£)	Notes
Level 0	0	
Level 1	10	
Level 2 -1	15	(This is 2 minus 1) i.e. 25 - 10 = 15
Level 2	25	
Level 3- 2	15	(This is 3 minus 2) i.e. 40 - 25 = 15
Level 3	40	

GPSUR 3 DATE AND TIME CONVENTIONS

GPSUR 3.1 Calendar Days.

- If a period start, or other date and time, is identified on a Calendar Day, it shall be taken that the period starts at the second beginning at 00.00.00 on that day.
- If a period end is identified on a Calendar Day, it shall be taken that the period ends at the beginning of the second of 23.59.59 on that day.

GPSUR 3.2 Business Days. Where a date and time needs to be identified against a Business Day, the Business Day will be identified, as follows:

- If received during business hours on a BD – that BD.
- If received after Business Hours on a BD – the next BD.
- If received prior to Business Hours on a BD – that BD.
- If received on a non-BD – the first BD after the non-BD.
- Business Hours will be defined as being from the start of the second beginning at 08.00.00 to the end of the second beginning at 17.59.59 inclusive.

> **Commented [DS1]:** Business Hours potentially amended by MCCP317. If MCCP317 is implemented those changes will be incorporated into a consolidated PS URS.

GPSUR 3.3 Message From and To Dates. Bounding Message From and To Dates shall be identified against the beginning of the second immediately after a previous period, or the beginning of the last second for the given period, respectively.

GPSUR 3.4 PM Run Dates. The following dates associated with each PM run shall be logged:

- The period (month) to which the run relates.
- The PM run date.
- The Message From Date for each measure.
- The Message To Date for each measure.

GPSUR 4 OUTPUT REQUIREMENTS

Summary Report

The summary report shall be presented as per the LVI URS, where:

- No. of Failures is:
    - the number of failed transactions for R1 to R9E (Late),
    - the number of RSDs for which no T005.1 was received for R9E (Missing),
    - the number of failed instances for R10 and
    - No. of Transactions is as above, but for both fails and successes, where the number of successes is the number of any relevant parameters included for R1 to R10, as defined in PPURs below.
- Rate is the % of the transactions that are fails

Charges Summary Report

The summary charges report shall be as per the LVI URS, where:

- Net Performance Standard Charge is $RPSC^q_N$
- Charge is $RPSC^q_{CMA}$
- Credit is PSC^q_{SWLP} and shall be shown as a positive amount for SW and negative amounts for each LP.

Charges by Trading Party Report

This report shall be presented as per the LVI URS, where:

- Uncapped CMA Performance Standard Charge is PSC^q_{CMA}
- Cumulative Uncapped CMA Performance Standard Charge is the sum of the above to the end of the last month
- Quarterly R1 Settlement Charge is QR^q
- Cumulative Quarterly R1 Settlement Charge is the sum of the above to the end of the last month
- The Cumulative Cap is 0.3% of the above for 2025-26, 0.45% of the above for 2026-27 and 0.6% of the above for 2027-28. This is represented in the equations in this URS as PCP^Y. There is no Cumulative Cap from 1 April 2028.
- The Cumulative Capped Quarterly CMA Performance Standard Charge is $RPSC^q_{CMA}$
- Uncapped SWLP Performance Standard Charge is PSC^q_{SWLP}
- Cumulative Uncapped SWLP Performance Standard Charge is the sum of the above

> **Commented [DS2]:** The increase in the cap leading to its eventual removal will improve the business case for Trading Parties to invest in data and process improvements while giving time for those projects to be implemented.

Failures Report

This report is as per the LVI URS, where:

- Failures are added for each Level of Charge (Level 0, Level 1, Level 2-1, Level 2, Level 3-2 and Level 3) for each LP and for SW
- R1 Settlement Charges are the sum of the QR^q amounts per Trading Party.

Transaction Level Reports

These reports shall be provided for download from the LVI, as described in the LVI URS.

Peer Review and Market Level Reports

As per the LVI URS and with data definitions as per the Summary Report

R1A / R1B Subsequently Deregistered SPIDs

From May 2026, a report shall be provided for CMA Users each month, identifying any SPIDs previously subject to R1A and R1B failures that have been deregistered in the previous month where the SPID deregistration Effective From Date is the same as the original SPID Effective From Date.

The report shall list the SPID number, the relevant LP, whether the SPID failed the R1A measure, whether the SPID failed the R1B measure, and the Performance Charges applied.

The report shall include a total of Performance Charges applied for each LP for the SPIDs deregistered back to their Effective From Date during the relevant month.

> **Commented [DS3]:** Note - as written this takes effect in the Performance Standards runs for April 2026 but also applies to SPIDs initially registered before 1 April 2026.
>
> The trigger is the receipt of the SPID deregistration transaction not the SPID creation.

> **Commented [DS4]:** The CMA would use this report to manually calculate refunds for LPs.

Publishing Reports

A Performance Report Publisher shall be provided for CMA Users to allow for reports for individual Trading Parties to be published (i.e. made available for relevant Trading Parties to view and download). This page shall also provide a record and audit of when reports have been made available.

All reports shall be available to CMA Users and all reports except the Market Level Report and the Charges Summary Report shall be available to SWW Users. All reports pertaining to an LP except the Market Level Report and the Charges Summary Report, shall be available to that LP's Users.

3. PROCESS REQUIREMENTS

The following process requirements identify the specific data inputs, processing and outputs required for each process, as identified in Annex 1. As identified in Annex 1, the PPS URS are presented in three sub-sections:

- PPS URS 1.0 to 1.5 refer to performance standard charge calculations pertaining to SW.
- PPS URS 2.0 to 2.5 refer to performance standard charge calculations pertaining to LPs.
- PPS URS 3.1 to 3.11 refer to transaction level performance charge calculations.

SW PERFORMANCE STANDARD CHARGES

PPSUR – 1.0	$RPSC^Q_N$: Net SW Reconciled Performance Standard Charges
Summary	The amount payable by SW each quarter to the CMA.
Input Data and Source	• PPSUR 1.1: $RPSC^Q_{CMA}$ • PPSUR 1.5: PSC^Q_{SWLP}
Calculation/Process	$RPSC^Q_N = RPSC^Q_{CMA} + PSC^Q_{SWLP}$
Output Data and Location	Charges Summary Report

PPSUR – 1.1	$RPSC^Q_{CMA}$: SW Reconciled CMA Performance Standard Charges
Summary	This is the capped quarterly amount payable by SW to the CMA, but not credited to LPs. It is calculated from the minimum of the sum of the CMA Performance Standard Charges for all quarters to date and the sum of the cap for all such quarters, less any SW Reconciled CMA Performance Standard Charges already invoiced.
Input Data and Source	• PPSUR 1.3: PSC^q_{CMA} • PPSUR 1.4: QR^q
Calculation/Process	For quarters up to 31 March 2028 $RPSC^Q_{CMA} = \min \left(\Sigma^Q_q PSC^q_{CMA}, \ PCP^Y \times \Sigma^Q_q QR^q \right) - \left(\Sigma^{Q-1}_q RPSC^q_{CMA} \text{ for q= 2, 3 and 4} \right)$ For quarters after 1 April 2028 $RPSC^Q_{CMA} = PSC^Q_{CMA}$

Output Data and Location	• PPSUR 1.0

PPSUR – 1.2	SW Reconciled SWLP Performance Standard Charges
Summary	This parameter is identical to that in PPSUR1.5
Input Data and Source	
Calculation/Process	
Output Data and Location	

PPSUR – 1.3	PSC^q_{CMA} : SW CMA Performance Standard Charges
Summary	This is the quarterly amount payable by SW to the CMA, but not credited to LPs. It is calculated from the SW Transaction Level Performance Standard Charge Components for the identified quarter.
Input Data and Source	• PPSUR 3.2: The sum of the R2A and R2B Charge Components • PPSUR 3.3: The sum of the R3A Charge Components • PPSUR 3.6: The sum of the R6A and R6B Charge Components • PPSUR 3.7: The sum of the R7A, R7B, R7C and R7D Charge Components
Calculation/Process	PSC^q_{CMA} = Sum of (R2A + R2B + R3A + R6A + R6B + R7A + R7B + R7C + R7D Charge Components) for each month in the quarter, summed to give the quarterly amount.
Output Data and Location	PPSUR 1.1

PPSUR – 1.4	QR^q: SW CMA Performance Standard Charge Cap
Summary	This is the total of the R1 settlement charges payable to SW for Q1 of each FY: used as a basis for capping the SW CMA Performance Standards Charges.
Input Data and Source	Published R1 total charges for all LPs (i.e. payable to SW) for April, May and June.
Calculation/Process	QR^q = Sum of all R1 Charges for April, May and June for all LPs.
Output Data and Location	PPSUR 1.1: QR^q

PPSUR – 1.5	PSC$^q_{SWLP}$: SW SWLP Performance Standard Charge
Summary	This is the quarterly amount payable by SW to the CMA, to be credited to LPs. It is calculated from the SW Transaction Level Performance Standard Charge Components for the identified quarter.
Input Data and Source	• PPSUR 3.8: The sum of the R8A and R8B Charge Components.
Calculation/Process	PSC$^q_{SWLP}$ = Sum of Level (3-2) (R8A + R8B Charge Components) for each month in the quarter, for all LPs, summed to give the quarterly amount.
Output Data and Location	• PPSUR 1.1

LP PERFORMANCE STANDARD CHARGES

PPSUR – 2.0	$RPSC^Q_N$: Net LP Reconciled Performance Standard Charges
Summary	The amount payable by each LP each quarter to the CMA.
Input Data and Source	• PPSUR 2.1: $RPSC^Q_{CMA}$ • PPSUR 2.5: PSC^Q_{SWLP}
Calculation/Process	$RPSC^Q_N = RPSC^Q_{CMA} - PSC^Q_{SWLP}$
Output Data and Location	Charges Summary Report.

PPSUR – 2.1	LP Reconciled CMA Performance Standard Charges
Summary	This is the capped quarterly amount payable by each LP to the CMA. It is calculated from the minimum of the sum of the LP's CMA Performance Standard Charges for all quarters to date and the sum of the LP's cap for all such quarters, less any LP Reconciled CMA Performance Standard Charges already invoiced. If the LP is a Transferor, the sum of the LP's CMA Performance Standard Charges shall include those of the Transferee for all quarters to date for the current financial year, the sum of the LP's cap for all such quarters shall include those for the Transferee and the LP Reconciled CMA Performance Standard Charges already invoiced shall also include those of the Transferee.
Input Data and Source	• PPSUR 2.3: PSCqCMA • PPSUR 2.4: QRq
Calculation/Process	For quarters up to 31 March 2028 $RPSC^Q_{CMA} = \min\left(\Sigma^Q_q PSC^q_{CMA},\ PCP^Y \times \Sigma^Q_q QR^q\right) - \left(\Sigma^{Q-1}_q RPSC^q_{CMA}\ \text{for q= 2, 3 and 4}\right) - \left(\Sigma^{Q-1}_q RPSC^q_{CMA}\ \text{for q= 2, 3 and 4 for any Transferee to this LP}\right)$ For quarters after 1 April 2028 $RPSC^Q_{CMA} = PSC^Q_{CMA}$
Output Data and Location	• PPSUR 2.0

PPSUR – 2.2	**LP Reconciled SWLP Performance Standard Charge**
Summary	This parameter is identical to that in PPSUR 2.5
Input Data and Source	
Calculation/Process	
Output Data and Location	

PPSUR – 2.3	**LP CMA Performance Standard Charge**
Summary	This is the quarterly amount payable by each LP to the CMA. It is calculated from the LP Transaction Level Performance Standard Charge Components for the identified quarter.
Input Data and Source	• PPSUR 3.1: The sum of the R1A and R1B Charge Components • PPSUR 3.5: The sum of the R5A Charge Components • PPSUR 3.9: The sum of the R9A, R9B, R9C, R9D and R9E Charge Components. • PPSUR 3.10: The sum of the R10A and R10B Charge Components for 2022-04 onwards •
Calculation/Process	$\textbf{PSC}^q_{\textbf{CMA}}$ **=** Sum of (R1A + R1B + R4A + R4B + R5A + R9A + R9B + R9C + R9D + R9E + R10A +R10B Charge Components) for each month in the quarter (excluding the R10A and R10B Charge Components for months prior to 2022-04), summed to give the quarterly amount, plus the equivalent charges for a Transferee, if this LP is a Transferor. After February 2020, the values for R4A and R4B will be zero.
Output Data and Location	PPSUR 2.1

PPSUR – 2.4	QR^q LP Settlement Charge for the CMA Performance Standard Charge Cap
Summary	This is the total of the R1 settlement charges for an LP for each Q~~1~~ of each FY: used as a basis for capping the CMA Performance Standards Charges. If a Licence Transfer has occurred in the given FY, the total of the R1 settlement charges for each Q of the Transferee shall be added.
Input Data and Source	Published R1 total charges for each LP for each quarter.
Calculation/Process	QR^q = Sum of R1 Charges for the quarter for the LP and any Transferee to that LP.
Output Data and Location	PPSUR 2.2: QR^q

PPSUR – 2.5	LP SWLP Performance Standard Charge
Summary	This is the quarterly amount to be credited to LPs. It is calculated from the SW Transaction Level Performance Standard Charge Components for each LP for the identified quarter.
Input Data and Source	• PPSUR 2.1: RPSC$^Q_{CMA}$ • PPSUR 3.8: The sum of the R8A and R8B Charge Components for each LP.
Calculation/Process	PSC$^q_{SWLP}$ **=** The minimum of: Sum of the Level (3-2) (R8A + R8B Charge Components) for each month in the quarter for each LP, summed to give the quarterly amount and RPSC$^Q_{CMA}$. Where the LP will be the LP responsible for the SPID associated with the meter being read at the received at date for the transaction, or will be the LP responsible for the Main Meter of a Meter Network Association that the meter being read is also associated to (if it has no associated SPID).
Output Data and Location	• PPSUR 2.0

TRANSACTION LEVEL CHARGES

PPSUR – 3.1	R1A/R1B Partial Registration (LP) Performance Charge Components
Summary	These parameters identify the component of charge for the sum of the failures within the Reporting Month, by an LP, to provide either: • A valid partial registration (a T003.0), • A valid rejection (T009.2), or • For SW to provide a deregistration (T015.0 (Notify SPID Status - DEREG) or T015.2 (Submit Backdated SPID Status - DEREG) In response to a T002.0 (Notify New SPID), issued by the CMA. Where failure is determined to be: • No valid response within 5 BDs (for R1A) – creating a Level 2 charge • No valid response within 10 BDs (for R1B) – creating a Level (3-2) charge.
Input Data and Source	• Period Start Date: being the first calendar day of the Reporting Month • Period End Date: being the last calendar day of the Reporting Month • R1A Business Day Threshold • R1B Business Day Threshold • Level 2 Charge • Level (3-2) Charge • Relevant T002.0s/T003.0s/T009.2s/T015.0s (DEREG only)/T015.2s (DEREG only)
Calculation/Process	Step 1 Calculate Message From Date (the date and time of the beginning of the second from which relevant T002.0s shall be considered for triggering T003.0s/T009.2s/T015.0s (DEREG)/T015.2s (DEREG)): • Message From Date = Previous Message To Date + 1 second Step 2 Calculate Message To Date (the date and time of the beginning of the last second in which relevant T002.0s shall be considered for triggering T003.0s/T009.2s/T015.0s (DEREG)/T015.2s (DEREG)): • R1A Message To Date = 23.59.59 on the Period End Date– R1A Business Day Threshold (Business Days only) • R1B Message To Date = 23.59.59 on the Period End Date – R1B Business Day Threshold (Business Days only) Step 3 Identify all relevant T002.0s (as triggers to check for success/fail for T003.0s/T009.2s/T015.0s (DEREG)/T015.2s (DEREG)s) and relevant LPs (being those in the T002.0s): • Relevant T002.0s = Successful T002.0s with a Created At Date, greater than, or equal to the Message From Date and less than or equal to the Message To Date. Step 4 Identify all T003.0s/T009.2s/T015.0s (DEREG)/T015.2s (DEREG) associated with the relevant T002.0s: • The associated HVI Received At Date .

	• Such T003.0s/T009.2s/T015.0s (DEREG)/T015.2s (DEREG) will be those with an HVI Received At Date on or after the Message From Date and prior to the PM run date.
	
	Step 5 Calculate Business Days Between (BDB) for each T003.0/T009.2/T015.0s (DEREG)/T015.2s (DEREG) (the number of BDs from the T002.0 to the T003.0/T009.2/T015.0/T015.2:
	• If there is no T003.0/T009.2/T015.0 (DEREG)/T015.2 (DEREG), the BDB will be the BDs from the T002.0 to the PM run date.
	• Exclusive of the HVI Received At Date for the T003.0/T009.2/T015.0 (DEREG)/T015.2 (DEREG) or PM run date, but inclusive of the T002.0 Created At Date.
	
	Step 6 Identify successes, being where, for each T003.0/T009.2/T015.0 (DEREG)/T015.2 (DEREG):
	• BDB is less than or equal to the R1A Business Day Threshold
	
	Step 7 Identify failures, being:
	• An R1B Failure and an R1A Failure where there is no successful T003.0/T009.2/T015.0 (DEREG)/T015.2 (DEREG) for the relevant T002.0, ignoring any such failures that have been identified in a previous run or,
	• For each successful T003.0/T009.2/T015.0 (DEREG)/T015.2 (DEREG):
	    ○ BDB is greater than the R1A Business Day Threshold, for an R1A Failure
	    ○ BDB is greater than the R1B Business Day Threshold, for an R1B Failure
	
	Step 8 Calculate Success Dates and Failure Dates for each such instance:
	• Success Date = T003.0/T009.2/T015.0 (DEREG)/T015.2 (DEREG) HVI Received At Date.
	• R1A Failure Date = T002.0 Created At Date + R1A Business Day Threshold + 1 BD
	• R1B Failure Date = T002.0 Created At Date + R1B Business Day Threshold + 1 BD, or PM run date for missing T003.0/T009.2/T015.0 (DEREG)/ T015.2 (DEREG).
	
	Step 9 Calculate R1A and R1B CMA Performance Charge Components
	Sum all R1A Failures and multiply by the Level 2 Charge.
	Sum all R1B Failures and multiply by the Level (3-2) Charge.

Output Data and Location	• GPSUR 4. R1A Failures, with Failure Dates and associated T002.0s for the LP. • GPSUR 4. R1B Failures, with Failure Dates and associated T002.0s for the LP. • PPSUR 2.3. Sum of Level 2 Charges for each LP • PPSUR 2.3. Sum of Level (3-2) Charges for each LP

PPSUR – 3.2	R2A/R2B New Connection Notification (SW) Performance Charge Components
Summary	These parameters identify the component of charge for the sum of the failures within the Reporting Month, by SW, to provide: • A valid Notify Connection Complete (WS) (a T007.0) for a new connection. Where failure is determined to be: • No valid notification within 5 BDs of the D2013_Connection Date, or within 8 BDs of the D2013_Connection Date for an Accredited Entity Install (for an R2A) – creating a Level 2 Charge • No valid notification within 9 BDs of the D2013_Connection Date, or within 12 BDs of the D2013_Connection Date for an Accredited Entity Install (for an R2B) – creating a Level (3-2) Charge.
Input Data and Source	• Period Start Date: being the first calendar day of the Reporting Month • Period End Date: being the last calendar day of the Reporting Month • R2A Business Day Threshold • R2A Business Day Threshold for Accredited Entity Install. • R2B Business Day Threshold • R2B Business Day Threshold for Accredited Entity Install • Level 2 Charge • Level (3-2) Charge • Relevant T007.0s
Calculation/Process	Step 1 Calculate Message From Date (the date and time of the beginning of the second from which relevant T007.0s shall be considered): • Message From Date = Previous Message To Date + 1 second Step 2 Calculate Message To Date (the date and time of the beginning of the last second in which relevant T007.0s shall be considered): • Message To Date = 23.59.59 on the Period End Date Step 3 Identify all relevant T007.0s (to be checked for success/fail): Relevant T007.0s = successful T007.0s with: • An HVI Received At Date greater than, or equal to the Message From Date and less than or equal to the Message To Date. • A D2023 Connection Type of NEW. Step 4 Calculate Business Days Between (BDB) for each T007.0 (the number of BDs from the T007.0 D2013_Connection Date to the T007.0, inclusive of the Connection Date, but exclusive of the T007.0 HVI Received At Date) Step 5 Identify failures, being, for each T007.0: • BDB is greater than the R2A Business Day Threshold, for an R2A Failure and

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	• BDB is greater than the R2B Business Day Threshold, for an R2B Failure.
	• For each of these, noting that the R2A and R2B Thresholds are modified for T007.0s identifying an Accredited Entity Install.
	Step 6 Identify Success Dates and Failure Dates for each such instance = T007.0 HVI Received At Date.
	Step 7 Calculate R2A and R2B CMA Performance Charge Components
	Sum all R2A Failures and multiply by the Level 2 Charge.
	Sum all R2B Failures and multiply by the Level (3-2) Charge.
Output Data and Location	• GPSUR 4. R2A Failures, with Failure Dates and associated T002.0s for SW.
	• GPSUR 4. R1B Failures, with Failure Dates and associated T002.0s for SW.
	• PPSUR 1.3. Sum of Level 2 Charges for SW
	• PPSUR 1.3. Sum of Level (3-2) Charges for SW

PPSUR – 3.3	R3A Connection Notification for Gap Site or Change of Use (SW) Performance Charge Component
Summary	This parameter identifies the component of charge for the sum of the failures within the Reporting Month, by SW, to provide:
	• A valid Notify Connection Complete (WS) (a T007.0), for a Gap Site or a Connection Change of Use, subject to there being
	• No valid deregistration (T015.0 (DEREG) or T015.2 (DEREG)), for a Gap Site or a Connection Change of Use within 5 BDs.
	• Excluding any Gap Site or Connection Change of Use SPIDs that have been set to REJ by virtue of a valid T009.2 submission.
	In response to a T002.1 (Notify New SPID), issued by the CMA. Where failure is determined to be:
	• No valid T007.0 response within 15 BDs AND
	• No valid T015.0 / T015.2 response within 5 BDs
	A failure creates a Level 3 charge.
Input Data and Source	• Period Start Date: being the first calendar day of the Reporting Month
	• Period End Date: being the last calendar day of the Reporting Month
	• R3A Business Day Threshold
	• Level 3 Charge
	• Relevant T002.1s and T007.0s/T015.0 (DEREG)/T015.2 (DEREG)s
Calculation/Process	Step 1 Calculate Message From Date (the date and time of the beginning of the second from which relevant T002.1s shall be considered for triggering T007.0s/T015.0 (DEREG)/T015.2 (DEREG)s):
	• Message From Date = Previous Message To Date + 1 second

	Step 2 Calculate Message To Date (the date and time of the beginning of the last second in which relevant T002.1s shall be considered for triggering T007.0s/T015.0 (DEREG)/T015.2 (DEREG)s): • Message To Date = 23.59.59 on the Period End Date – R3A Business Day Threshold (Business Days only) Step 3 Identify all relevant T002.1s (as triggers to check for success/fail for T007.0s/T015.0 (DEREG)/T015.2 (DEREG)s): Relevant T002.1s = T002.1s with: • A Created At Date greater than, or equal to the Message From Date and less than or equal to the Message To Date. • Receiver being SW • D2023 Connection Type is Gap Site or Change of Use • No successful T009.2 submitted for the SPID, following the T002.1 • The SPID is a WS SPID Step 4 Identify all T007.0s/T015.0 (DEREG)/T015.2 (DEREG)s associated with the relevant T002.1s: • The associated HVI Received At Date • Such T007.0s/T015.0 (DEREG)/T015.2 (DEREG)s will be those with an HVI Received At Date on or after the associated T002.1 Created At Date and prior to the PM run date. • Where there are multiple T00.7.0s/T015.0 (DEREG)/T015.2 (DEREG)s, only the first successful T007.0/T015.0 (DEREG)/T015.2 (DEREG) shall be identified. Step 5 Calculate Business Days Between (BDB) for each T007.0/T015.0 (DEREG)/T015.2 (DEREG) (the number of BDs from the T002.1 to the T007.0s/T015.0 (DEREG)/T015.2 (DEREG)s, exclusive of the HVI Received At Date for the T007.0s/T015.0 (DEREG) /T015.2 (DEREG)s, but inclusive of the T002.1 Created At Date). Step 6 Identify successes, being where, for each T007.0/T015.0/T015.2 (DEREG/PDISC): • T007.0 BDB is less than or equal to the R3A Business Day Threshold or • If any T015.0 (DEREG)/T015.2 (DEREG) has been successfully submitted, at least one such has a BDB less than or equal to 5 Step 7 Identify failures, being: • where there is no successful T007.0/T015.0 (DEREG)/T015.2 (DEREG) for the relevant T002.1, or • For each successful T007.0 BDB is greater than or equal to the R3A Business Day Threshold, or • For each successful T015.0 (DEREG)/T015.2 (DEREG) BDB is greater than 5 BDs of the relevant T002.1. Step 8 Calculate Success Dates and Failure Dates for each such instance: • Success Date = T007.0s/T015.0 (DEREG)/T015.2 (DEREG)s HVI Received At Date

	• Failure Date =
	o If there is no T007.0/T015.0/T015.2 then the PM run date
	o If there is a T007.0 then T002.1 Created At Date + R3A Business Day Threshold + 1 BD
	o If there is a T015.0/T015.2 then T002.1 Created At Date + 5 BDs + 1 BD
	Step 9 Calculate R3A CMA Performance Charge Components
	Sum all R3A Failures and multiply by the Level 3 Charge.
Output Data and Location	• GPSUR 4. R3A Failures, with Failure Dates and associated T002.1s for SW.
	• PPSUR 1.3. Sum of Level 3 Charges for SW

PPSUR – 3.4	**R4A/R4B New Connection Notification (LP) Performance Charge Components (This measure shall not be calculated for any period after February 2020.)**
Summary	These parameters identify the components of charge for the sum of the failures within the Reporting Month, by an LP, to provide:
	• A valid Notify Connection Complete (SS) (a T007.1) for a new connection.
	Where failure is determined to be:
	• No valid notification within 5 BDs of the D2013_Connection Date – creating a Level 2 Charge
	• No valid notification within 9 BDs of the D2013_Connection Date – creating a Level (3-2) Charge.
Input Data and Source	• Period Start Date: being the first calendar day of the Reporting Month
	• Period End Date: being the last calendar day of the Reporting Month
	• R4A Business Day Threshold
	• R4B Business Day Threshold
	• Level 2 Charge
	• Level (3-2) Charge
	• Relevant T007.1s, D2023 Connection Types and D2013 Connection Dates
Calculation/Process	Step 1 Calculate Message From Date (the date and time of the beginning of the second from which relevant T007.1s shall be considered):
	Message From Date = Previous Message To Date + 1 second
	Step 2 Calculate Message To Date (the date and time of the beginning of the last second in which relevant T007.1s shall be considered):
	Message To Date = 23.59.59 on the Period End Date
	Step 3 Identify all relevant T007.1s (to be checked for success/fail) and the relevant LP (being the Sender):
	Relevant T007.1s = successful T007.1s with:

	• An HVI Received At Date, greater than, or equal to the Message From Date and less than or equal to the Message To Date • A D2023 Connection Type of NEW. Step 4 Calculate Business Days Between (BDB) for each T007.1 (the number of BDs from the T007.1 D2013_Connection Date to the T007.1, inclusive of the Connection Date, but exclusive of the T007.1 HVI Received At Date). Step 5 Identify failures, being, for each T007.1: • BDB is greater than the R4A Business Day Threshold, for an R4A Failure and • BDB is greater than the R4B Business Day Threshold, for an R4B Failure. Step 6 Identify Success Dates and Failure Dates for each such instance = T007.1 BDD Step 7 Calculate R4A and R4B CMA Performance Charge Components Sum all R4A Failures and multiply by the Level 2 Charge. Sum all R4B Failures and multiply by the Level (3-2) Charge.
Output Data and Location	• GPSUR 4. R4A Failures, with Failure Dates and associated T007.1s for each LP. • GPSUR 4. R4B Failures, with LP Failure Dates and associated T007.1s for each LP. • PPSUR 2.3. Sum of Level 2 Charges for an LP • PPSUR 2.3. Sum of Level (3-2) Charges for an LP

PPSUR – 3.5	R5A Connection Notification for Gap Site or Change of Use (SW) Performance Charge Component (Not calculated for 2020-03)
Summary	This parameter identifies the component of charge for the sum of the failures within the Reporting Month, by SW, to provide, either: • A valid Submit Connection Complete (SS) (a T007.1), for a New Connection Type of Gap Site or Connection Change of Use, subject to there being: • No valid DEREG Declaration (T015.0 (DEREG)) within 5 BDs. • Excluding any GS or CoU SPIDs that have been set to REJ by virtue of a valid T009.2 submission. In response to a T002.1 (Notify New SPID (SW), issued by the CMA. Where failure is determined to be: • No valid T007.0 response within 15 BDs AND • No valid T015.0 response within 5 BDs A failure creates a Level 3 charge.
Input Data and Source	• Period Start Date: being the first calendar day of the Reporting Month

	• Period End Date: being the last calendar day of the Reporting Month • R5A Business Day Threshold • Level 3 Charge • Relevant T002.1s/T007.1s/ T009.2/T015.0 (DEREG)s
Calculation/Process	Step 1 Calculate Message From Date (the date and time of the beginning of the second from which relevant T002.1s shall be considered for triggering T007.1s/ T015.0 (DEREG)s): • Message From Date = Previous Message To Date + 1 second Step 2 Calculate Message To Date (the date and time of the beginning of the last second in which relevant T002.1s shall be considered for triggering T007.1s/ T015.0 (DEREG)s): Message To Date = 23.59.59 on the Period End Date - R5A Business Day Threshold (Business Days only) Step 3 Identify all relevant T002.1s (as triggers to check for success/fail for T007.1s/T015.0 (DEREG)s and the relevant LP (being the Sender): Relevant T002.1s = T002.1s with: • A Created At Date greater than, or equal to the Message From Date and less than or equal to the Message To Date. • Receiver being SW • D2023_New Connection Type is Gap Site or Change of Use • No successful T009.2 submitted for the SPID, following the T002.1 • The SPID is an SS SPID that has no associated WS SPID. • The SPID is an SS SPID with an Associated WS SPID that has a D2025 SPID Status of REJ or DEREG and no D2013 Connection Date. • The SPID is an SS SPID with an Associated WS SPID that has a D2025 SPID Status other than New, Partial, or REJ and has a D2013 Connection Date that is earlier than the T002.1 Created at Date Step 4 Identify all T007.1s/T015.0 (DEREG)s associated with the relevant T002.1s and the associated HVI Received At Date. Step 5 Calculate Business Days Between (BDB) for each T007.1/T015.0 (DEREG) (the number of BDs from the T002.1 to the T007.1/T015.0 (DEREG), exclusive of the HVI Received At Date for the T007.1/T009.2/T015.0 (DEREG), but inclusive of the T002.1 Created At Date) Step 6 Identify successes, being where, for each T007.1/T015.0 (DEREG): • T007.1 BDB is less than or equal to the R5A Business Day Threshold • If any T015.0 (DEREG) has been successfully submitted, at least one such has a BDB less than or equal to 5 Step 7 Identify failures, being: • Where there is no successful T007.1 for the relevant T002.1, or • For each successful T007.1 BDB is greater than the R5A Business Day Threshold and • No T015.0 (DEREG) has been successfully submitted within 5 BDs of the relevant T002.1.

	Step 8 Calculate Success Dates and Failure Dates for each such instance:
	• Success Date = T007.1/T015.0 (DEREG) HVI Received At Date
	• Failure Date =
	    ○ If there is no T007.1/T015.0 then the PM run date
	    ○ If there is a T007.1 then T002.1 Created At Date + R3A Business Day Threshold + 1 BD
	    ○ If there is a T015.0 then T002.1 Created At Date + 5 BDs + 1 BD
	
	Step 9 Calculate R5A CMA Performance Charge Components
	Sum all R5A Failures and multiply by the Level 3 Charge.

Output Data and Location	• GPSUR 4. R5A Failures, with Failure Dates and associated T002.1s for SW. • PPSUR 2.3. Sum of Level 3 Charges for SW.

PPSUR – 3.6	R6A/R6B SPID Status (SW) Performance Charge Components
Summary	These parameters identify the components of charge for the sum of the failures within the Reporting Month, by SW, to provide: • A valid SPID Status Update (a T015.0), within the required timescales. Where failure is determined to be: • No valid notification within 2 BDs of the D4006_Effective From Date for SPID Status REC, TDISC and PPDISC or within 5 BDs of D4006_Effective From Date for SPID Status PDISC – creating a Level 2 Charge • No valid notification within 6 BDs of the D4006_Effective From Date for SPID Status REC, TDISC and PPDISC or within 9 BDs of D4006_Effective From Date for SPID Status PDISC – creating a Level (3-2) Charge. • Excluding T015.0s with the D2025_SPID Status set to DEREG, or to TTRAN.
Input Data and Source	• Period Start Date: being the first calendar day of the Reporting Month • Period End Date: being the last calendar day of the Reporting Month • R6A Business Day Threshold 1 • R6A Business Day Threshold 2 • R6B Business Day Threshold 1 • R6B Business Day Threshold 2 • Level 2 Charge • Level (3-2) Charge • Relevant T015.0s
Calculation/Process	Step 1 Calculate Message From Date (the date and time of the beginning of the second from which relevant T015.0s shall be considered): Message From Date = Previous Message To Date + 1 second

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<td>Step 2 Calculate Message To Date (the date and time of the beginning of the last second in which relevant T015.0s shall be considered):
Message To Date = 23.59.59 on the Period End Date

Step 3 Identify all relevant T015.0s (to be checked for success/fail):
Relevant T015.0s = T015.0s with:
• An HVI Received At Date greater than, or equal to the Message From Date and less than or equal to the Message To Date,
• Sender being SW
• The T015.0 has been successfully processed
• The T015.0 D2025_SPID Status is not DEREG or TTRAN.

Step 4 Calculate Business Days Between (BDB) for each T015.0 (the number of BDs from the T015.0. D4006_Effective From Date to the T015.0 HVI Received At Date, inclusive of the Effective From Date, but exclusive of the T015.0 HVI Received At Date)

Step 5 Identify failures, being, for each T015.0:
• BDB is greater than the R6A Business Day Threshold 1 or R6A Business Day Threshold 2 (depending on SPID Status), for an R6A Failure and
• BDB is greater than the R6B Business Day Threshold 1 or R6B Business Day Threshold 2 (depending on SPID Status), for an R6B Failure.

Step 6 Identify Success Dates and Failure Dates for each such instance = T015.0 BDD

Step 7 Calculate R6A and R6B CMA Performance Charge Components
Sum all R6A Failures and multiply by the Level 2 Charge.
Sum all R6B Failures and multiply by the Level (3-2) Charge.</td>
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<tr>
<td>**Output Data and Location**</td>
<td>• GPSUR 4. R6A Failures, with Failure Dates and associated T015.0s.
• GPSUR 4. R6B Failures, with Failure Dates and associated T015.0s.
• PPSUR 1.3. Sum of Level 2 Charges for SW
• PPSUR 2.3. Sum of Level (3-2) Charges for SW</td>
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<tr>
<td>**PPSUR – 3.7**</td>
<td>**R7A/R7B/R7C/R7D Late Meter Reads (SW) Performance Charge Components**</td>
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<tr>
<td>**Summary**</td>
<td>These parameters identify the components of charge for the sum of the failures within the Reporting Month, by SW, to provide:
• A valid SW Meter Read (a T005.0) for an I, F, X, Y, or C read for non-market meters, or
• A valid Meter Swap (a T017.0) for an E and O read
Where failure is determined to be:
• No valid I, F, E, O, X, or Y read within 5 BDs of the Meter Read Date for a meter with a Meter Treatment of SW Water, Private Water or Private Effluent – creating a Level 2 Charge.
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	• No valid I, F, E, or O read within 8 BDs of the Meter Read Date for activities involving an Accredited Entity – creating a Level 2 Charge. • No valid I, F, E, O, X, or Y read within 13 BDs of the Meter Read Date for a meter with a Meter Treatment of SW Water, Private Water or Private Effluent – creating a Level (3-2) Charge • No valid I, F, E or O read within 16 BDs of the D3009_Meter Read Date for activities involving an Accredited Entity – creating a Level (3-2) Charge. • No valid C read for a non-market meter within 5 BDs of the Meter Read Date – creating a Level 1 Charge • No valid C read for a non-market meter within 60 BDs of the Meter Read Date – creating a Level (2-1) Charge
Input Data and Source	• Period Start Date: being the first calendar day of the Reporting Month • Period End Date: being the last calendar day of the Reporting Month • R7A Business Day Threshold for SW Water, Private Water and Private Effluent Meters • R7A Business Day Threshold for Accredited Entity Install. • R7B Business Day Threshold for SW Water, Private Water and Private Effluent Meters • R7B Business Day Threshold for Accredited Entity Install • R7C Business Day Threshold • R7D Business Day Threshold • Level 1 Charge • Level 2 Charge • Level (2-1) Charge • Level (3-2) Charge • Relevant T005.0/T017.0s
Calculation/Process	Step 1 Calculate Message From Date (the date and time of the beginning of the second from which relevant T005.0s/T017.0s shall be considered): Message From Date = Previous Message To Date + 1 second Step 2 Calculate Message To Date (the date and time of the beginning of the last second in which relevant T005.0s/T017.0s shall be considered): Message To Date = 23.59.59 on the Period End Date Step 3 Identify all relevant T005.0s/T017.0s (to be checked for success/fail): Relevant T005.0s/T017.0s = T005.0s/T017.0s with: • An HVI Received At Date greater than, or equal to the Message From Date and less than or equal to the Message To Date • Sender as SW • Successfully processed • Excluding meters with D3002_Meter Treatment set to Pseudo Water, Logical Water, or Tankered Effluent. • Excluding C reads for market meters (i.e. associated to a SPID).

	Step 4 Calculate Business Days Between (BDB) for each T005.0/T017.0 (the number of BDs from the T005/T017.0. D3009_Meter Read Date to the T005.0/T017.0, inclusive of the Read Date, but exclusive of the HVI Received At Date). For the T017.0, the later of the D3009s for the old and new meter shall be taken. Step 5 Identify failures, being, for each T5/T17, for identified D3002_Meter Treatments: • For SW Water, Private Water, Private Effluent Meters/I, F, E, O, X, Y reads: BDB is greater than the R7A Business Day Threshold for SW Water Meters for an R7A Failure. • For SW Water, Private Water, Private Effluent Meters/I, F, E, O reads: BDB is greater than the R7A Business Day Threshold for Accredited Entity Install for an R7A Failure. • For SW Water, Private Water, Private Effluent Meters/I, F, E, O, X, Y reads: BDB is greater than the R7B Business Day Threshold for SW Water Meters for an R7B Failure. • For SW Water, Private Water, Private Effluent Meters/I, F, E, O reads: BDB is greater than the R7B Business Day Threshold for Accredited Entity Install for an R7B Failure. • For SW Water Meters/C reads: BDB is greater than the R7C Business Day Threshold for an R7C Failure. • For SW Water Meters/C reads: BDB is greater than the R7D Business Day Threshold for an R7C Failure. Step 6 Identify Success Dates and Failure Dates for each such instance = T005.0/T017.0 HVI Received At Date. Step 7 Calculate R7A to R7D CMA Performance Charge Components Sum all R7A Failures and multiply by the Level 2 Charge. Sum all R7B Failures and multiply by the Level (3-2) Charge. Sum all R7C Failures and multiply by the Level 1 Charge. Sum all R7D Failures and multiply by the Level (2-1) Charge.
Output Data and Location	• GPSUR 4. All Failures, with Failure Dates and associated T005.0s/T017.0s. • PPSUR 1.3 Sum of Level 1 Charges for SW • PPSUR 1.3 Sum of Level (2-1) Charges for SW • PPSUR 1.3. Sum of Level 2 Charges for SW • PPSUR 1.3. Sum of Level (3-2) Charges for SW

PUR – 3.8	R8A/R8B Extremely Late Meter Reads (SW)
Summary	These parameters identify the components of charge for the sum of the failures within the Reporting Month, by SW, to provide: • A valid SW Meter Read (a T005.0) for an I, F, X, or Y read, or • A valid Meter Swap (a T017.0) for an E and O read Where failure is determined to be: • No valid I, F, E, O, X, or Y read within 160 BDs of the Meter Read Date for a meter with a Meter Treatment of SW Water, Private Water, or Private Effluent and a Meter Read Frequency of Bi-Annual – creating a Level 2 Charge and a Level (3-2) Charge. • No valid I, F, E, O, X, or Y read within 40 BDs of the Meter Read Date for a meter with a Meter Treatment of SW Water, Private Water or Private Effluent and a Meter Read Frequency of Monthly – creating a Level 2 Charge and a Level (3-2) Charge.
Input Data and Source	• Period Start Date: being the first calendar day of the Reporting Month • Period End Date: being the last calendar day of the Reporting Month • R8A Business Day Threshold • R8B Business Day Threshold • Level 2 Charge • Level (3-2) Charge • Relevant T005.0/T017.0s and D3011 Meter Read Frequency
Calculation/Process	Step 1 Calculate Message From Date (the date and time of the beginning of the second from which relevant T005.0s/T017.0s shall be considered): Message From Date = Previous Message To Date + 1 second Step 2 Calculate Message To Date (the date and time of the beginning of the last second in which relevant T005.0s/T017.0s shall be considered): Message To Date = 23.59.59 on the Period End Date Step 3 Identify all relevant T005.0s/T017.0s (to be checked for success/fail): Relevant T005.0s/T017.0s = T005.0s/T017.0s with: • An HVI Received At Date greater than, or equal to the Message From Date and less than or equal to the Message To Date, • Sender as SW • Successfully processed • Excluding meters with D3002_Meter Treatment set to Pseudo Water, Logical Water, or Tankered Effluent. • For Step 8 only: Excluding T005.0s and T017.0s for meters that are not part of an active Meter Network and have no D2001_SPID in the T005.0/T017.0. Step 4 Calculate Business Days Between (BDB) for each T005.0/T017.0 (the number of BDs from the T005/T017.0.D3009_Meter Read Date to the T005.0/T017.0 HVI Received At Date, inclusive of the Read Date, but

exclusive of the HVI Received At Date). For the T017.0s, the later of the D3009s (for the old and new meters) shall be taken.

Step 5 Identify failures, being, for each T005.0/T017.0:
- For D3011_MeterReadFrequency of bi-annual: BDB is greater than the R8A Business Day Threshold for an R8A Failure.
- For D3011_MeterReadFrequency of monthly: BDB is greater than the R8B Business Date Threshold for an R8B Failure.

Step 6 Identify Success Dates and Failure Dates for each such instance = T005.0/T017.0 HVI Received At Date.

Step 7 Identify relevant LPs for the SWLP charge components:
- For market meters – The Current LP for the SPID identified in the T005.0/T017.0.
- For domestic meters – The Current LP for the SPID associated with the Main Meter in the Meter Network that includes the meter identified in the T005.0/T017.0 as a Sub-Meter.

Step 8 Calculate R8A and R8B CMA Performance Charge Components:
- Sum all {(BDB-160)/160 rounded up to the nearest whole number} for all R8A Failures with R8A Failure Dates on or after the Period Start Date and on or before the Period End Date and multiply by the Level 2 Charge.
- Sum all {(BDB-40)/40 rounded up to the nearest whole number} for all R8B Failures with R8B Failure Dates on or after the Period Start Date and on or before the Period End Date and multiply by the Level 2 Charge.

Step 9 Calculate R8A and R8B SWLP Performance Charge Components:
- Sum all {(BDB-160)/160 rounded up to the nearest whole number} for all R8A Failures with R8A Failure Dates on or after the Period Start Date and on or before the Period End Date and multiply by the Level (3-2) Charge.
- Sum all {(BDB-40)/40 rounded up to the nearest whole number} for all R8B Failures with R8B Failure Dates on or after the Period Start Date and on or before the Period End Date and multiply by the Level (3-2) Charge.

Output Data and Location	- GPSUR 4. All Failures, with Failure Dates and associated T005.0s/T017.0s. - PPSUR 1.3 Sum of Level 2 CMA Charges for SW - PPSUR 1.5 Sum of Level (3-2) SWLP Charges for SW - PPSUR 2.5 Sum of Level (3-2) SWLP Charges payable to each LP

PPSUR – 3.9 (A)	R9A/R9B/R9C Late Meter Reads (LP) Performance Charge Components
Summary	These parameters identify the components of charge for the sum of the failures within the Reporting Month, by each LP, to provide: • A valid LP Meter Read (a T005.1) for a C, U, or R read on a meter with Meter Treatment of SW Water, Private Water, or Private Effluent. Where failure is determined to be: • No valid C or R read within 5 BDs of the Meter Read Date – creating a Level 0 Charge. • No valid U read within ~~5~~ 10 BDs of the Meter Read Date – creating a Level 0 Charge. • No valid C, U, or R read within 60 BDs of the Meter Read Date – creating a Level 0 Charge.
Input Data and Source	• Period Start Date: being the first calendar day of the Reporting Month • Period End Date: being the last calendar day of the Reporting Month • R9A Business Day Threshold • R9B Business Day Threshold • R9C Business Day Threshold • Level 0 Charge • Relevant T005.1s
Calculation/Process	Step 1 Calculate Message From Date (the date and time of the beginning of the second from which relevant T005.1s shall be considered): Message From Date = Previous Message To Date + 1 second Step 2 Calculate Message To Date (the date and time of the beginning of the last second in which relevant T005.1s shall be considered): Message To Date = 23.59.59 on the Period End Date Step 3 Identify all relevant T005.1s (to be checked for success/fail): • The relevant LP being the Sender. • A Transaction HVI Received At Date greater than, or equal to the Message From Date and less than or equal to the Message To Date. • Sender is an LP. • Successfully processed. • Excluding meters with D3002_Meter Treatment set to Pseudo Water, Logical Water, or Tankered Effluent. Step 4 Calculate Business Days Between (BDB) for each T005.1: • The number of BDs from the T005.1 D3009_Meter Read Date to the T005.1. • For the above: inclusive of the Read Date/RSD, but exclusive of the Transaction HVI Received At Date. Step 5 Identify failures, being, for each T005.1: • For C and R reads: BDB is greater than the R9A Business Day Threshold for an R9A Failure.

	• For U reads: BDB is greater than the R9B Business Date Threshold for an R9B Failure. • For C, U and R reads: BDB is greater than the R9C Business Day Threshold for an R9C Failure. Step 6 Identify Success Dates and Failure Dates for each such instance = T005.1 HVI Received At Date. Step 7 Calculate R9A to R9C CMA Performance Charge Components Sum all R9A Failures and multiply by the Level 0 Charge. Sum all R9B Failures and multiply by the Level 0 Charge. Sum all R9C Failures and multiply by the Level 0 Charge.
Output Data and Location	• GPSUR 4. All Failures, with Failure Dates and associated T005.1s. • PPSUR 2.3 Sum of Level 1 0 Charges for each LP • PPSUR 2.3 Sum of Level (2-1) Charges for each LP

> **Commented [DS5]:** Documentation change only. Already implemented from April 2025

PPSUR – 3.9 (B)	R9D/R9E Late Meter Reads (LP) Performance Charge Components
Summary	These parameters identify the components of charge for the sum of the failures within the Reporting Month, by each LP, to provide: • A valid LP Meter Read (a T005.1) for a T or S read on all meters associated with the SPID with Meter Treatment of SW Water, Private Water, or Private Effluent. Where failure is determined to be: • No valid T or U read within 2 4 BDs or S read within 5 BDs of the latest RSD for the associated SPID, excluding S reads in a T005.1 with a D3028 of PLR – creating a Level 2 Charge. • No valid T, U or S read within 10 BDs of the latest RSD for the associated SPID, excluding S reads in a T005.1 with a D3028 of PLR – creating a Level (3-2) Charge. A valid T, U or S read must be within +/- 2 BDs of the latest RSD.
Input Data and Source	• Period Start Date: being the first calendar day of the Reporting Month • Period End Date: being the last calendar day of the Reporting Month • R9D Business Day Threshold • R9E Business Day Threshold • Last completed RSD for SPIDs associated with a relevant meter. • All meters associated with the SPID • T005.1 D3028 S Read Reason Code. • Level 2 Charge • Level (3-2) Charge • Relevant T003.1s, T005.1s and T008.2s
Calculation/Process	Step 1 Calculate Message From Date (the date and time of the beginning of the second from which relevant RSDs shall be considered):

Message From Date = Previous Message To Date + 1 second

Step 2 Calculate Message To Date (the date and time of the beginning of the last second in which relevant RSDs shall be considered):
- Message To Date (R9D) = 23.59.59 on the Period End Date - R9D Threshold (Business Days only)
- Message To Date (R9E) = 23.59.59 on the Period End Date – R9E Business Day Threshold (Business Days only)

Step 3 Identify all relevant RSDs (to be checked for success/fail), with the relevant LP being the Current LP for the SPID associated with the meter from T008.2 transactions (NOTE: The Current LP in the T008.2 will have been the Incoming LP for the transfer):
- An RSD greater than, or equal to the R9D/R9E Message From Date and less than or equal to the R9D/R9E Message To Date
- The SPID is metered (i.e. with an active meter on the RSD)
- If a licence transfer has taken place between the R9D/R9E Message From Date and the Performance Standards run date, then the Performance charges shall be attributed to the transferee (taker)
- Excluding SPIDs with only meters with D3002_Meter Treatment set to Pseudo Water, Logical Water, or Tankered Effluent.
- Excluding RSDs where the Incoming LP is SWx.

Step 4 Identify the evaluation date period window for T, U or S reads, for each relevant RSD:
- Identify the earliest business day that a T, U or S read can be submitted for the R9D/R9E and read type
- Then identify the associated T003.1 that was successfully submitted (between the T005 message from date and the Performance Standards run date)

> **Commented [DS6]:** Do we need to amend this step or add a new step to include a check on the meter read date?

Step 5 Identify all market meters that are associated with the R9D/R9E test population, where:
- The meter is active on or before the R9D/R9E Message From Date
- The meter is also active on R9D/R9E Message To Date
- The meter treatment type is one of the following:
  - SW Water
  - Private Water
  - Private Effluent

Step 6 Identify any meter readings that have been submitted for the meters and SPIDs identified in the previous steps
- Ensuring the T/ U/ S read is within the evaluation date period window
- If there are multiple T / U / S reads for the same meter, the reading from the earliest transaction submitted shall be used for further assessment

	Step 7 Calculate the number of business days that have elapsed between the T008.2 transaction and the T005.1 transaction - For each identified meter reading, calculate the reporting order of each reading; if a SPID has multiple meters the latest transaction date identified in Step 6 shall be used for further assessment Step 8 Calculate the number of passes and failures for each SPID where there have been meter readings submitted - Identify the total number of active meters assigned to the SPID - Count the number of meters that have passed (the number of business days is equal to or less than the threshold value) - Count the number of meters that have submitted a meter reading but have failed (where the number of business days is higher than threshold value) Step 9 Identify Successes: - The number of passes equals the number of active meters associated to the SPID for the R9D/R9E measures - The meter reading attributed to the pass will be the most recently submitted meter reading; the business day between calculation will be based on the number of business days between the RSD and this successful T005.1 submission Step 10 Identify Failures: - If there have been meter reading submissions which have failed the R9D/R9E measures, or there have not been meter read submissions for all active meters - The meter reading attributed to the failure will be the most recently submitted meter reading that has failed. The business day between calculation will be based on the number of business days between the RDS and this T005.1 submission. - If there are no meter readings or insufficient readings for the SPID, then the business day between calculation will be the number of business days between the RSD and the Performance Standards Run date Step 11 Identify Exclusions, and remove from the population pool - Excluding T005.1s with a D3028 S Read Reason Code of PLR. Step 12 Calculate R9D/R9E CMA Performance Charge Components: Sum all R9D Failures and multiply by the Level 2 Charge. Sum all R9E Failures and multiply by the Level (3-2) Charge.
Output Data and Location	- GPSUR 4. All Failures on or after the Period Start Date and on or before the Period End Date, with Failure Dates and associated T005.1s. - PPSUR 2.3 Sum of Level 2 Charges for each LP - PPSUR 2.3 Sum of Level (3-2) Charges for each LP

	• PPSUR 2.3 Sum of Level 3 Charges for each LP

PPSUR – 3.10	R10 Missed Meter Reads (LP) Performance Charge Component

Summary	These parameters identify the components of charge for the sum of the failures within the Reporting Month, by an LP, to provide:
	
	• A valid meter read within the required timescales for that meter (being SW Water, Private Water or Private Effluent). Where failure is determined to be:
	
	• For a bi-annually read meter: No valid read within six calendar months of the later of:
	   o 2010-12-31
	   o The meter install date, being the meter EFD.
	   o The last read for that meter
	   o The most recent completed RSD
	   o The date on which the last R10A performance charge for the meter occurred.
	
	• For a monthly read meter: No valid read within the preceding calendar month provided:
	   o the SPID was registered to the Licensed Provider for the entire Month
	   o no I, O or Y read was submitted for the meter in the Month
	   o the Meter Read Frequency did not change during the Month
	
	• In both cases, failure creates a Level 3 Charge.

Input Data and Source	• Period Start Date: being the first calendar day of the Reporting Month • Period End Date: being the last calendar day of the reporting month • R10A Default Date • R10A Calendar Month Threshold • R10B Calendar Month Threshold • Level 3 Charge • Meter ID • Last completed RSD • Meter Read Frequency • Meter Reads with type and date
Calculation/Process	Step 1 Identify all relevant meters (to be checked for success/fail), being meters that meet the following criteria: • Meters with a D3002_MeterTreatment of SW Water, Private Water, Private Effluent. • Meter EFD prior to, or equal to the Period End Date • Meter ETD later than the Period End Date, or the Meter is still active (no ETD) • The population of identified meters shall be stored; the R10 measure key for Biannually read meters shall be 'R10A' and monthly meters shall be 'R10B'

Step 2 Identify the Previous Action Date and the Previous Action Type as being the later of:
- The R10A/R10B Default Date, as appropriate.
- Meter Read and Date – being the latest read prior to the Period Start Date (e.g. we are looking for the most recent read before the reporting period)
- The most recent completed RSD for the associated SPID where the RSD is less than or equal to the Period End Date.
- Meter Install and Date - being the EFD of the meter.
- Performance Charge Date - being the most recent Failure Date that the last R10A occurred.
- The most recent date that the Meter Read Frequency of the meter changed to a Monthly Meter Read frequency from a Bi-Annual read frequency for meters in the R10B population
- The most recent I, O or Y read (SW reads) read date before the Period End Date
- The previous action date will be most recent date from the identified dates above

Step 3 Identify the Compare To Date as being the earliest of:
- Period End Date
- D3009_MeterReadDate – being the first meter read on or after the Period Start Date and on or before the Period End Date.
- Where a Compare To Date is on or after the Period End Date, the Meter shall be treated as not relevant (to be checked for success/fail), in addition to those considered in Step 1.
- Meters associated with WS SPIDs that have a D2025 SPID Status other than Partial, REC (i.e. Tradable) or TDISC on the Previous Action Date or on the Compare To Date will be excluded from the population.
- Meters which are in the R10B population will be excluded if there has been a change in registration, read frequency or if there has been a I, O or Y read on or after the Period Start Date.

Step 4 Calculate Calendar Months Between (CMB) for each R10A meter as:
- CMB = calendar months for (Compare To Date – Previous Action Date) rounded up to the next whole number of months

Step 4A Calculate Number of Meter Readings in a Calendar Month (NMRCM) for each R10B meter that is being evaluated as:
- NMRCM = Number of readings for a meter between the Period Start Date and on or before the Period End Date

Step 5 Identify failures, being, for each R10A meter:
- CMB is greater than the R10A Calendar Month Threshold, for an R10A Failure (for bi-annually read meters)

Step 5A Identify failures, being, for each R10B meter:

Commented [DS7]: The R10B Performance Charge Date is not required as a read should be submitted every calendar month for monthly meters.

	• NMRCM is less than the R10B Calendar Month Threshold, for an R10B Failure (for monthly read meters). Step 6 Identify successes, being, for each meter: • CMB is less than or equal to the R10A Calendar Month Threshold • NMRCM is greater than or equal to the R10B Calendar Month Threshold. • For both of the above, only if the Compare To Date is a D3009 Meter Read Date. Step 7 Identify Success Dates and Failure Dates for each instance identified in Step 5, Step 5A or Step 6: • Success Date = D3009 Meter Read Date – being the first meter read on or after the Period Start Date and on or before the Period End Date, if it exists. • Exclude meters from the population if, the R10A / R10B evaluation is a success but the success (on the compare to date) was not due to a meter read • Failure Date = Period End Date for R10B and for R10A where there is no meter read date on or after the Period Start Date and on or before the Period End Date • Failure Date = the latest meter read date for the R10A failure where there is a meter read on or after the Period Start Date and on or before the Period End Date Step 8 Identify the relevant LP: being the Current LP at a relevant Success Date, or the Current LP at the relevant Failure Dates. Step 9 Calculate R10A and R10B CMA Performance Charge Components for the LP responsible for the meter on the Failure Date: Sum all R10A Failures for all relevant meters for that LP and multiply by the Level 3 Charge. Sum all R10B Failures for all relevant meters for that LP and multiply by the Level 3 Charge.
Output Data and Location	• GPSUR 4. R10A and R10B Failures, with Failure Dates and: the Date of the previous Success or Failure, the Previous Action Type and Previous Action Date and BDB for each meter for each LP. • PPSUR 2.3. Sum of Level 3 Charges for each LP