Basic Power Quality Data Procedure

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Approved for distribution and use by:

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Contents

Current version release details

Version	Effective date	Summary of changes
1.0	1 July 2026	First Issue

Note: There is a full version history at the end of this document.

1. Introduction

1.1. Purpose and scope

The purpose of this Procedure is to establish the minimum requirements for the manner and form in which *Metering Coordinators* (MC) must provide *basic power quality data* (BPQD).

This Basic Power Quality Data Procedure is made under 7.16.6C of the National Electricity Rules (NER).

These Procedures specify:

- procedures for the collection and processing of BPQD
- the appropriate service levels for BPQD
- the processes and procedures for sharing BPQD data in accordance with the Rules
- any other matter necessary for the collection, processing and delivery of BPQD.

This Procedure has effect for the purposes set out in the NER. The NER and the National Electricity Law prevail over these Procedures to the extent of any inconsistency.

1.2. Definitions and interpretation

1.2.1. Glossary

Terms defined in the National Electricity Law and the NER have the same meanings in these Procedures unless otherwise specified in this clause.

Terms defined in the NER are intended to be identified in these Procedures by italicising them, but failure to italicise a defined term does not affect its meaning.

The Retail Electricity Market Procedures – Glossary and Framework:

(a)   Is incorporated into and forms part of this Procedure; and

(b)   Should be read in conjunction with the Procedure.

1.2.2. Interpretation

These Procedures are subject to the principles of interpretation set out in Schedule 2 of the National Electricity Law.

1.3. Related documents

Title	Location
Retail Electricity Market Procedures – Glossary and Framework	AEMO	Retail and metering
Metrology Procedure: Part A	AEMO	Metrology Procedures and Unmetered Loads

Title	Location
MSATS Procedures Principles and Obligations for all Connection Points	AEMO	Market Settlement and Transfer Solutions (MSATS)
AEMO BPQD Technical Specification	TBC
Guide to the role of Metering Coordinator	AEMO	Accreditation and Registration
Audit Guideline: Metering Coordinator Auditing	AEMO	Accreditation and Registration

2.   BPQD MC Responsibilities

(a)   The MC must ensure delivery of BPQD for a BPQD Period in accordance with this Procedure.[1] Refer to Appendix A BPQD Use Cases.

(b)   The MC must only access or retrieve BPQD in accordance with this Procedure.

(c)(b)   The MC must ensure that BPQD is treated as *confidential information* in accordance with the NER.

(d)   The MC must provide BPQD for a BPQD Period as specified in the NER 7.3.2(j) to (n) and where:

    (i)   NMI Status in MSATS is 'Active';

    (ii)   Meter Register Status Code in MSATS is 'Current';

    (iii)   Meter Installation Type Code in MSATS is 'COMMS4C' and 'COMMS4D'; and

    (iv)   NMI Classification Code is 'Small'

(e)(c)   The MC is not required to provide BPQD for a BPQD Period where:

    (i)   A *metering installation* meets NER 7.3.2(l); or

    (ii)   The MC and DNSP have in place a bilateral advanced PQD agreement, which includes the minimum BPQD requirements specified in this Procedure; or

    (iii)   A *metering installation* does not meet clause 2.1(d) of this Procedure; or

    (iii)   The MC is the DNSP of a Victorian AMI meterVICAMI Meter; or

    (iv)   Metering Installation Type Code in MSATS is not 'COMMS4C' or 'COMMS4D'; and

    (iv)(v)   The MC is not an active participant effective for a NMI ins the AEMO MSATS system.

    (v)   On the *day* on which Meter Churn took place; or

    (vi)   On the *day* of a new MC becoming MC.

(f)(d)   The MC must provide BPQD for a BPQD Period to DNSPs at no costfree of charge; and when requested, provide this data to AEMO or the Australian Energy Regulator at no cost.

(g)   The MC may provide BPQD for a BPQD Period to appointed Meter Data Providers and Metering Providers.

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[1] On behalf an MC, MDPs and MPBs can provide Basic PQD directly to a DNSP

(h)(e) The MC must ensure bilateral PQD agreements DNSP advanced PQD agreements with a DNSP are auditable.

3. BPQD Service Levels

(a) The MC will provide BPQD at a minimum at least once per calendar day for a BPQD Period. once per *day*.

(b) An MC has met its Procedural obligation to deliver BPQD for a BPQD Period where the MC receives a Positive AEMO BPQD TransmissionDelivery Signal.

(c) An MC has not met its Procedural obligation to deliver BPQD for a BPQD Period where the MC receives a Negative AEMO BPQD TransmissionDelivery Signal.

(d) Where MC receives a Negative Delivery AEMO BPQD Transmission Signal, the MC must attempt to resend BPQD for a BPQD Period within one two *business days*.

(e) An MC is not required to provide BPQD for a partial BPQD Period, i.e. Meter Churn.

(f)(e) A new MC is not required to provide BPQD for a BPQD Period the day they became MC.

(g)(f) Where an MC becomes aware of their inability to deliver BPQD for a BPQD Period due to system issues, in accordance with this procedure, the MC must advise the DNSP within one two *business days* of detection.

(g) Where an MC becomes aware that the BPQD that has been delivered to an incorrect recipient for a BPQD Period is incorrect, the MC must provide corrected BPQD for that BPQD Period to the correct recipient within one two *business days*.

(h) Where the MC becomes aware that BPQD data that has been delivered is incorrect, (i.e. BPQD associated with any or all of NMI, Meter Serial ID and Data Type Measurement is incorrect), the MC must provide corrected BPQD within two business days.

4. BPQD Processing

(a) The MC must validate provide the associated NMI, Meter Serial ID and Data Type Measurement with BPQD for a BPQD Period. with respect to the NMI and meter serial number.

(b) The MC must not Substitute or Estimate BPQD.

(c) The MC may deliver null BPQD.

(d) The MC must not edit BPQD.

5. BPQD Delivery

Refer to Appendix A for BPQD delivery diagrams.

(a) The MC must ensure that BPQD for a BPQD Period is scheduled for delivery so that congestion impacts do not occur (as contemplated in NER 7.15.5(b).

(b) *The MC is not obligated to confirm that the recipient of BPQD for a BPQD Period has received a BPQD Period.*

(c) In event of downstream system issues impacting delivery of BPQD for a BPQD Period, MCs are not required to attempt to resend impacted BPQD.

(d) Where a *metering installation*, that is required to produce BPQD has been tested, the MC must provide null BPQD for the period the *metering installation* has been tested.

(e)(d) The MC must be capable of identifying the following for a BPQD Period:

(i) Sender and recipient of BPQD for a BPQD Period.

(ii) Source of BPQD for a BPQD Period e.g. NMI, Meter Serial IDmeter serial number, Data Type Measurement.

(iii) Relevant BPQD dates and times.

6. BPQD Exchange Architecture

(a) MCs must send BPQD for a BPQD Period using the processes as specified in AEMO's BPQD Technical Specification.

7. BPQD Exception Management

(a) Where an MC becomes aware that incorrect BPQD for a BPQD Period has been delivered to a DNSP, the MC must provide a corrected BPQD for that BPQD Period to the DNSP within one business day of detection.

8.7. BPQD Compliance Monitoring

(a) AEMO must provide capability that allows Metering Coordinators, Metering Providers and Metering Data Providers to download, view and query BPQD Message ID logs

(a)(b) AEMO may perform BPQD compliance monitoring through annual MC audits as described in these Procedures.

(b) AEMO will use Positive AEMO BPQD Transmission Signal and Negative AEMO BPQD Transmission Signal as the basis of BPQD compliance monitoring.

(c)   The auditing process will be completed via negative assurance to confirm that the MC has met its Procedural obligations.

(d)   Each MC must take corrective **BPQD** action on any reported instances of non-compliance identified by AEMO or through the MC audit process to include evidence of compliance related to the correct action, which may include evidence of:

   (i)   Collection and processing of BPQD;

   (ii)   Delivery of BPQD for a BPQD Period;

   (iii)   Bilateral advanced PQD agreements; and

   (iv)   Compliance with 7.3.2(I).

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~~9.~~8. Appendix A: BPQD Use Cases

BPQD Daily delivery

1. On Day 0, MC to obtain *BPQD Period* for D-1.
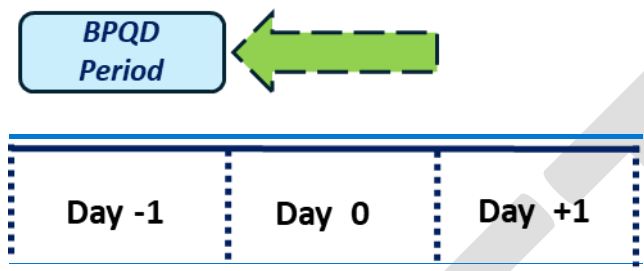
Incomplete data

1. On Day 0, MC to obtain *BPQD Period* for D-1.
2. MC supplies *BPQD Period* to the DNSP with Nulls and 'Actual' BPQD
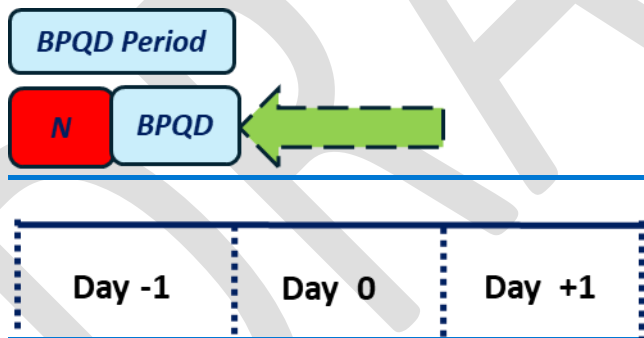
Meter exchange

1. On Day -1 on where a physical meter exchange occurs, the new MC need not obtain *BPQD Period* for Day -1
2. On Day +1, the MC to obtain *BPQD Period* for Day 0
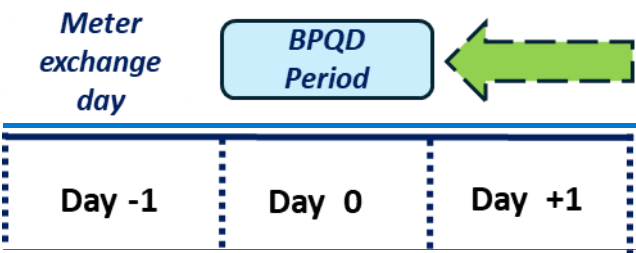
Communications Fault

1. On Day 0, MC cannot obtain BPQD Period for Day -1.

2. On Day 0, the MC need not reattempt obtaining BPQD Period for D-1

3. On Day +1, the MC to obtain BPQD Period for Day 0.

4. On Day +1, should the MC able to obtain BPQD Period for Day -1, the MC may distribute BPQD Period for Day -1
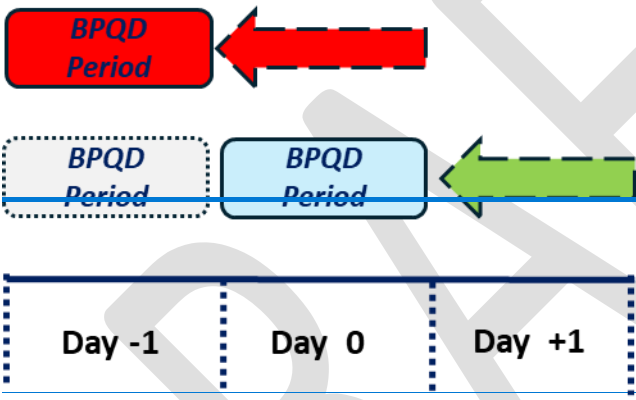
New MC and BPQD Period

1. On Day -1 on becoming an MC, the new MC need not obtain *BPQD Period* for Day-1.

2. On Day +1, the MC to obtain *BPQD Period* for Day 0
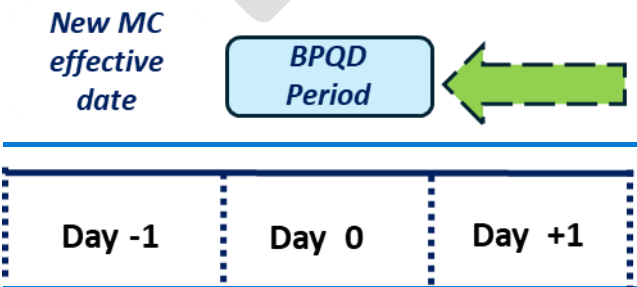
8.1. Use Case # 1 - Daily BPQD delivery
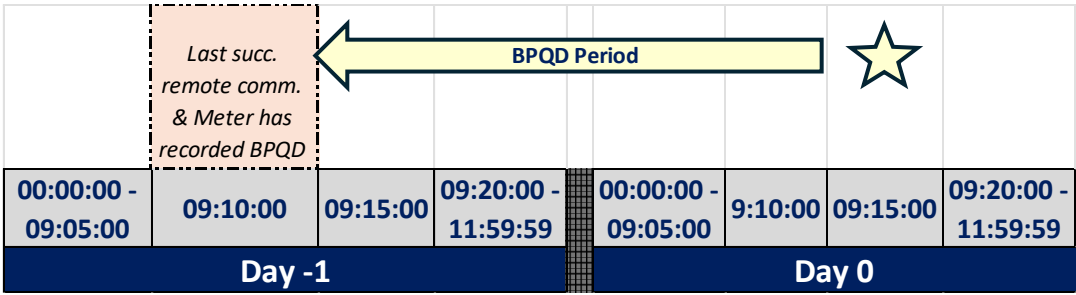
00:00:00 - 09:05:00	09:10:00	09:15:00	09:20:00 - 11:59:59		00:00:00 - 09:05:00	9:10:00	09:15:00	09:20:00 - 11:59:59
Day -1					Day 0			

Last succ. remote comm. & Meter has recorded BPQD

BPQD Period

In Day 0 @ 09:15:00 BPQD must be provided back to and including Day -1 @ 9:10:00 at least once in this 24-hour period providing BPQD at any time and frequency.

8.2. Use Case # 2 - New MC

00:00:00 - 09:05:00	09:10:00	09:15:00	09:20:00	9:25:00	9:30:00	09:35:00 - 11:59:59		00:00:00 - 09:05:00	9:10:00	09:15:00	09:20:00	9:25:00	9:30:00	09:35:00 - 11:59:59
Day -1								Day 0						

Last succ. remote comm. & Meter has recorded BPQD

BPQD Period

New MC

Following a new MC becoming effective on Day 0 @ 00:00:00, in Day +1 @ 09:15:00 BPQD must be provided back to and including Day -1 @ 09:10:00 at least once in this 24-hour period providing BPQD at any time and frequency.

8.3.   Use Case # 3a- Short term DNSP power outage

00:00:00 - 09:05:00	09:10:00	09:15:00	09:20:00	09:25:00 - 11:59:59	00:00:00 - 09:05:00	9:10:00	09:15:00	09:20:00	09:25:00 - 11:59:59
Last succ. remote comm. & Meter has recorded BPQD		*Power Outage*	*Power On*						
Day -1					Day 0				

BPQD Period

Following power supply return, in Day 0 @ 09:15:00 BPQD must be provided back to and including Day -1 @ 9:10:00 at least once in this 24-hour period providing BPQD at any time and frequency.
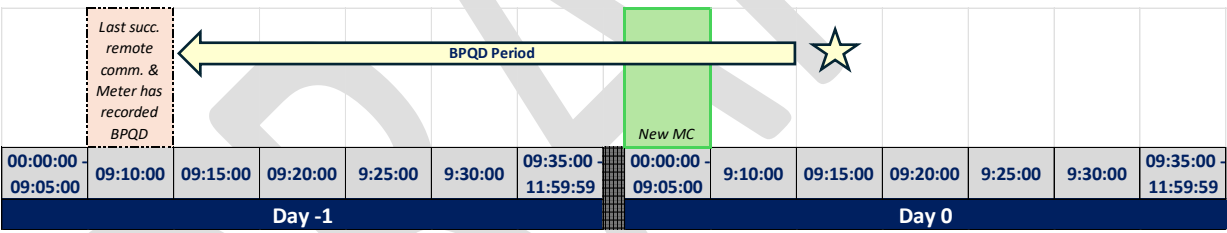
For Day -1 @ 9:15:00 during Power Outage, where a TI has a recorded basic PQD value has been recorded, the MC must provide this value.

8.4.   Use Case # 3b - Long term DNSP power outage

00:00:00 - 09:05:00	09:10:00	09:15:00 - 11:59:59	00:00:00 - 09:05:00	9:10:00	09:15:00	09:20:00	09:25:00 - 11:59:59	00:00:00 - 09:05:00	9:10:00	09:15:00	09:20:00	09:25:00 - 11:59:59	00:00:00 - 09:05:00	9:10:00	09:15:00	09:20:00	09:25:00 - 11:59:59
Last succ. remote comm. & Meter has recorded BPQD	*Power Outage*	*Power Outage*	*Power Outage*	*Power Outage*	*Power Outage*	*Power Outage*	*Power Outage*	*Power Outage*	*Power On*								
Day -1			Day 0					Day +1					Day +2				

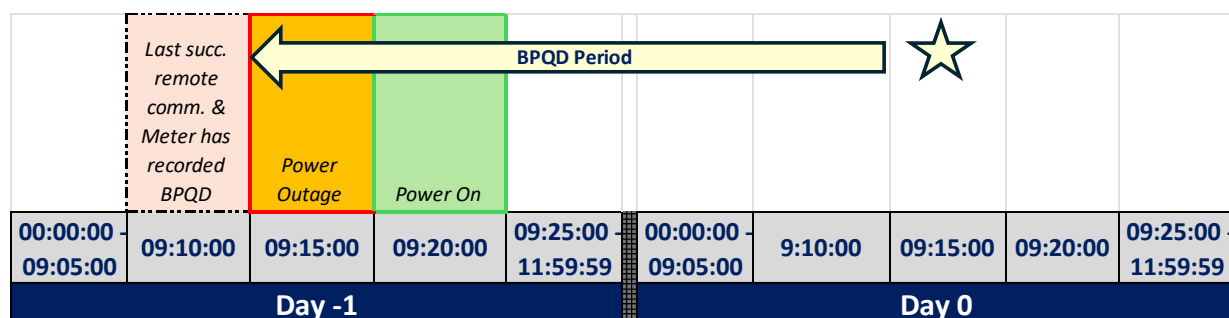BPQD Period

Following power supply return in Day +1 @ 09:10:00, in Day +2 @ 09:15:00 BPQD must be provided back to and including Day 0 @ 9:10:00 at least once in this 24-hour period providing BPQD at any time and frequency.
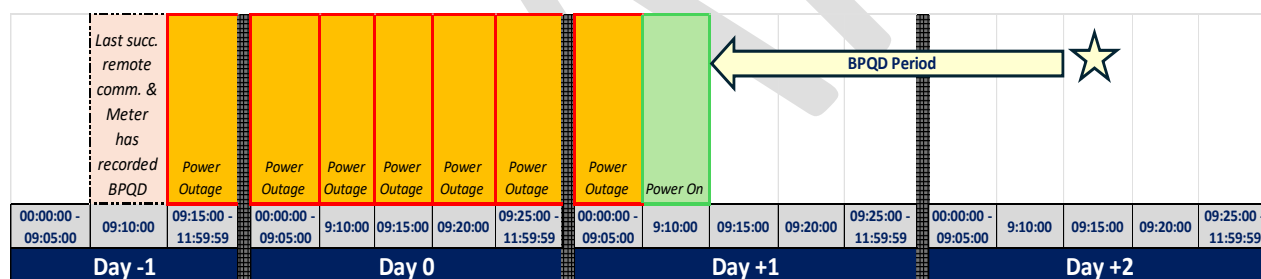
Where a TI has a recorded basic PQD value between Day -1 @ 9:15:00 to Day +1 @ 09:05:00 during Power Outage, the MC must provide these values.

8.5.   Use Case # 4a - Short term Meter Comms Fault

00:00:00 - 09:05:00	09:10:00	09:15:00	09:20:00	09:25:00 - 11:59:59	00:00:00 - 09:05:00	9:10:00	09:15:00	09:20:00	09:25:00 - 11:59:59
	Last succ. remote comm. & Meter has recorded BPQD	Comms Fault	Comm fault end						
Day -1					Day 0				
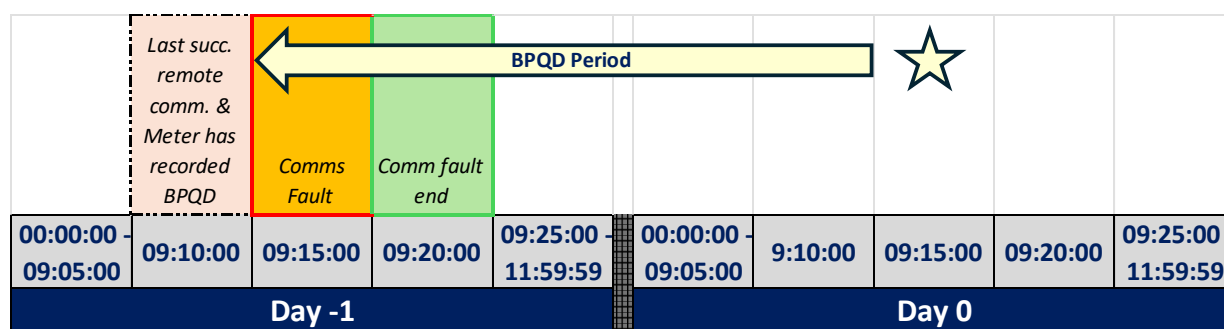
Following a smart customer meter remote communications returning on Day -1 @ 09:20:00, in Day 0 @ 09:15:00 BPQD must be provided back to and including Day -1 @ 9:10:00 at least once in this 24-hour period providing BPQD at any time and frequency.

8.6.   Use Case # 4b - Long term Meter Comms Fault

00:00:00 - 09:05:00	09:10:00	09:15:00 - 11:59:59	00:00:00 - 09:05:00	9:10:00	09:15:00	09:20:00	09:25:00 - 11:59:59	00:00:00 - 09:05:00	9:10:00	09:15:00	09:20:00	09:25:00 - 11:59:59
	Last succ. remote comm. & Meter has recorded BPQD	Comms Fault	Comms Fault	Comms Fault	Comms Fault	Comms Fault	Comms Fault	Comms Fault	Comm fault end			

Following a smart customer meter remote communications return on Day +1 @09:10:00, in Day +1 @ 09:15:00 BPQD must be provided back to and including Day 0 @ 09:10:00 at least once in this 24-hour period providing BPQD at any time and frequency.
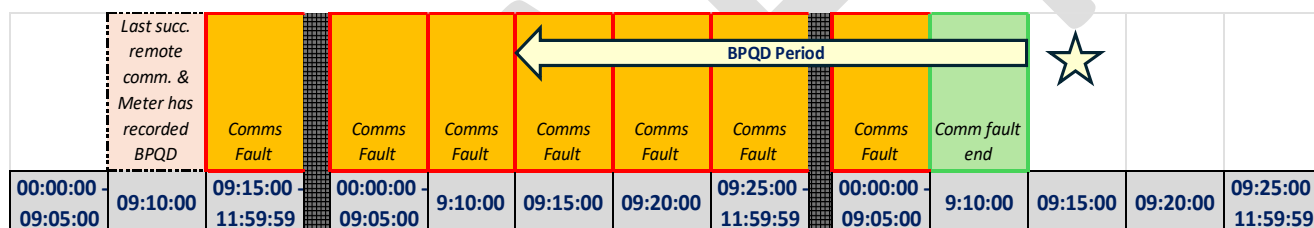
Where a TI has a recorded basic PQD value between intervals Day -1 @ 9:10:00 to Day +1 @ 09:05:00 during Long Term Comms Fault, the MC must provide these values.

8.7. Use Case # 5 - Meter Reset

00:00:00 - 09:05:00	09:10:00	09:15:00	09:20:00	09:25:00 - 11:59:59	00:00:00 - 09:05:00	9:10:00	09:15:00	09:20:00	09:25:00 - 11:59:59
Last succ. remote comm. & Meter has recorded BPQD		*Meter Reset*	*Meter Reset end*						
Day -1						**Day 0**			

Following a smart customer meter reset, in Day 0 @ 09:15:00 BPQD must be provided back to and including Day -1 @ 9:10:00 at least once in this 24-hour period providing BPQD at any time and frequency.
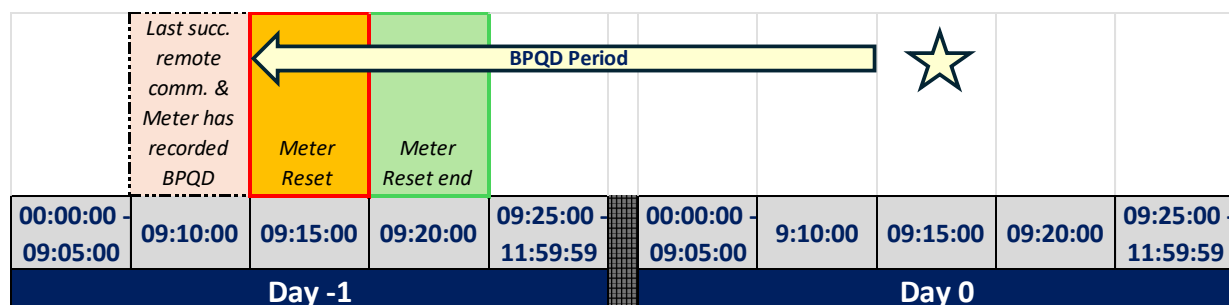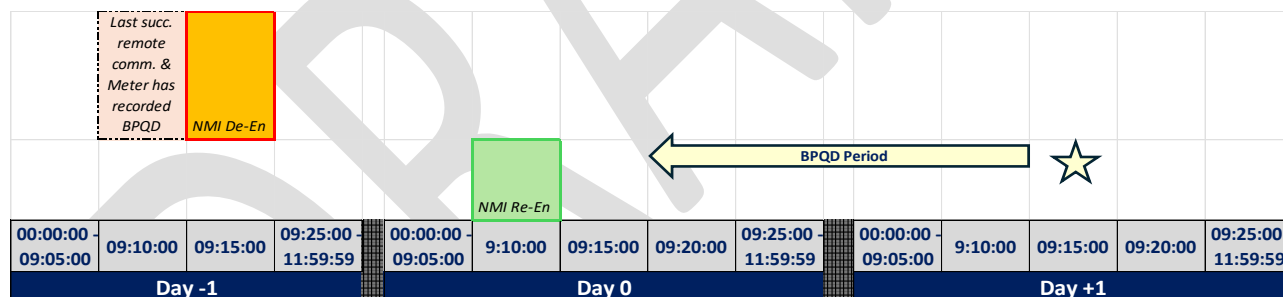
BPQD may not be recorded during period of Meter Reset and the MC need not create a null value/record for period of Meter Reset. However, for Day -1 @ 9:15:00 during Meter Reset, where a TI has a recorded basic PQD value has been recorded, the MC must provide this value.

This BPQD scenario would apply to similar scenarios such as but not limited Meter Re-Programme, clearing Meter memory and Meter Time Reset.

8.8. Use Case # 6 - NMI De-Energisation/Re-Energisation

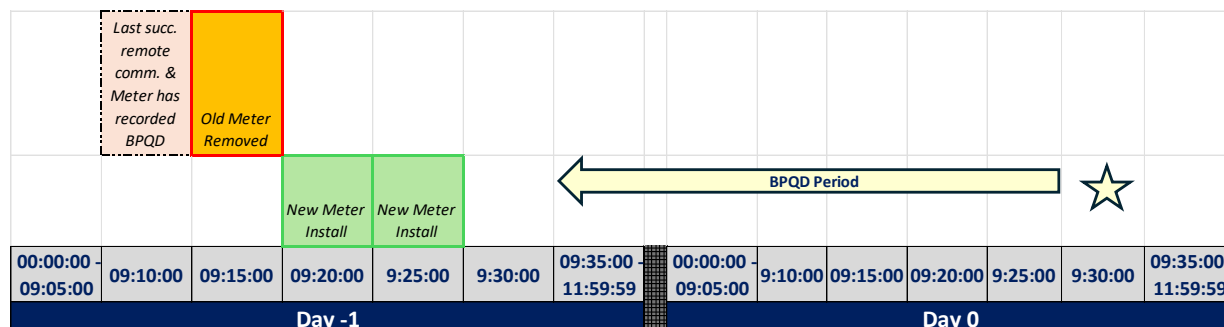| 00:00:00 - 09:05:00	09:10:00	09:15:00	09:25:00 - 11:59:59	00:00:00 - 09:05:00	9:10:00	09:15:00	09:20:00	09:25:00 - 11:59:59	00:00:00 - 09:05:00	9:10:00	09:15:00	09:20:00	09:25:00 - 11:59:59
Last succ. remote comm. & Meter has recorded BPQD	*NMI De-En*				*NMI Re-En*								
Day -1				**Day 0**					**Day +1**				

Following detection of a NMI De-energisation, an MC need not send BPQD.

Following detection of a NMI Re-energisation on Day 0 @ 09:10:00, in Day +1 @ 09:15:00 BPQD must be provided back to and including Day 0 @ 09:15:00 at least once in this 24-hour period providing BPQD at any time and frequency.

Where BPQD values have been recorded and are available from Day -1 @ 09:10:00, the MC may provide these values.

BPQD may not be recorded during period of NMI Re-En and the MC need not create a null value/record for period of NMI Re-End. However, for Day 0 @ 9:10:00 during NMI Re-End, where a TI has a recorded basic PQD value has been recorded, the MC must provide this value.

8.9. Use Case # 7 - Meter Installation / Exchange

00:00:00 - 09:05:00	09:10:00	09:15:00	09:20:00	9:25:00	9:30:00	09:35:00 - 11:59:59	00:00:00 - 09:05:00	9:10:00	09:15:00	09:20:00	9:25:00	9:30:00	09:35:00 - 11:59:59
Last succ. remote comm. & Meter has recorded BPQD	Old Meter Removed		New Meter Install	New Meter Install									
							Day 0						
Day -1													

Prior to removing a meter and where BPQD data has been recorded and can be extracted, i.e. a Final Read, an MC must extract and provide BPQD data.

Following installation of a new meter, in Day 0 @ 09:30:00 BPQD must be provided back to and including Day -1 @ 9:30:00 at least once in this 24-hour period providing BPQD at any time and frequency.

BPQD may not be recorded in the new meter during period of installation and MC need not create a null value/record for period of Meter Reset. Where a TI has a recorded basic PQD value between intervals Day -1 @ 9:20:00 to Day -1 @ 09:25:00 during Meter Exchange/Installation, the MC must provide these values.

This BPQD scenario would apply to similar scenarios such as but not limited Faulty meter exchange, New Connection and new meter installation request.

Version release history

Version	Effective Date	Summary of Changes
1.0	1 July 2026	First Issue