Modification P455 Digital Meeting Etiquette

- Welcome to the P455 Workgroup meeting 1 – we'll start shortly
- No video please to conserve bandwidth
- Please stay on mute unless you need to talk – use IM if you can't break through
- Talk – pause – talk
- Lots of us are working remotely – be mindful of background noise and connection speeds

P455 ‘On-Site Aggregation as a method to facilitate Third Party Access’

Meeting 1

12 September 2023

Meeting Agenda

Objectives for this meeting:

- Objective 1: Present the P455 issue and proposed solution
- Objective 2: Introduce the Modification's Terms of Reference

Agenda Item	Lead
1. Welcome and meeting objectives	Ivar Macsween (Elexon) – Chair
2. BSC Change process review	Cecilia Portabales (Elexon) – Lead Analyst
3. P455	Reg Platt (Emergent Energy) - Proposer
4. Terms of Reference	Christopher Day (Elexon) - Design Authority
5. Next steps	Cecilia Portabales
6. Meeting close - AOB	Chair

BSC CHANGE PROCESS REVIEW

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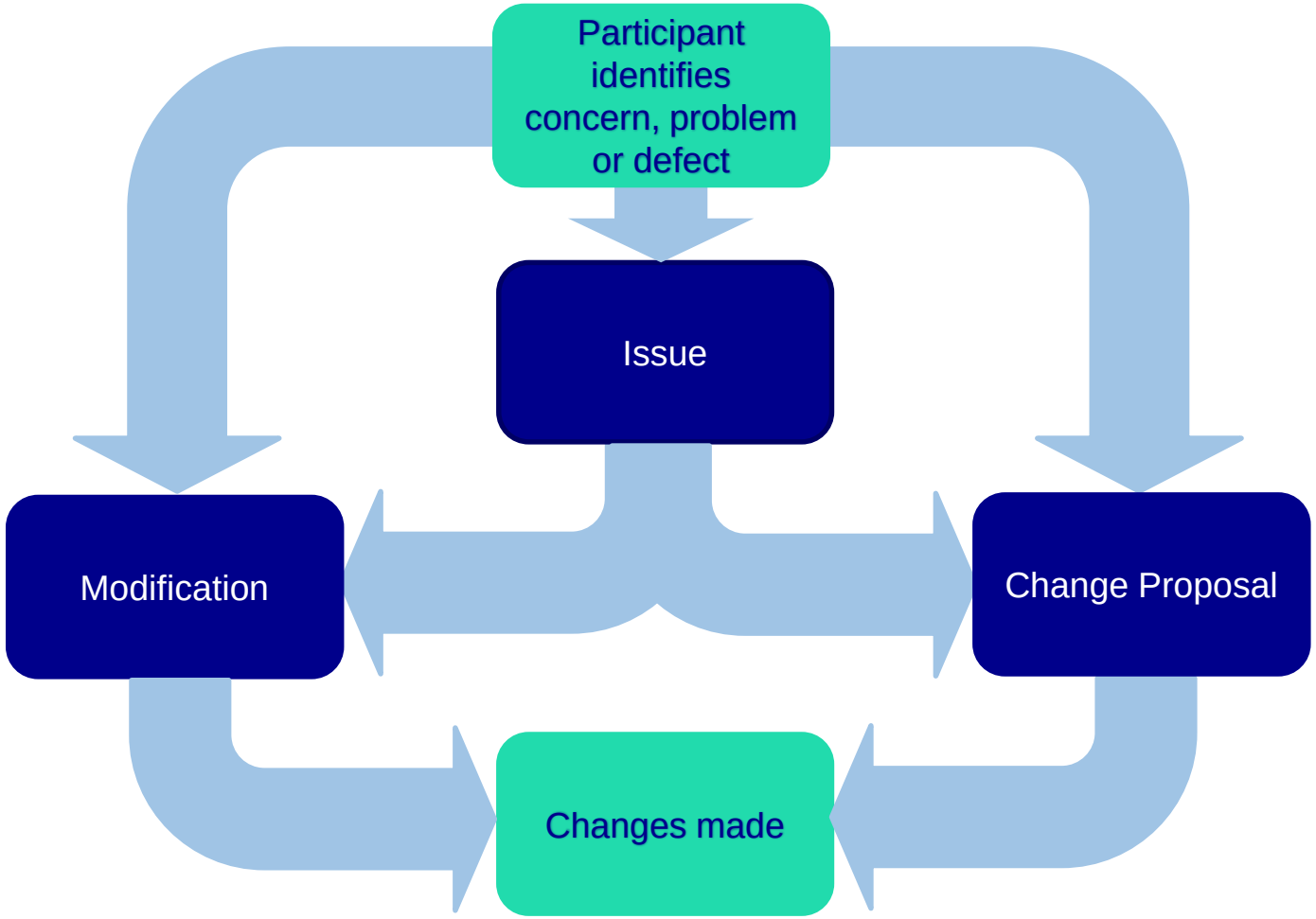
What type of change do I need?



Do I have a clear solution?		Will my solution amend the BSC?	
		Yes	**No**
	Yes	Modification	CP
	No	Issue	Issue

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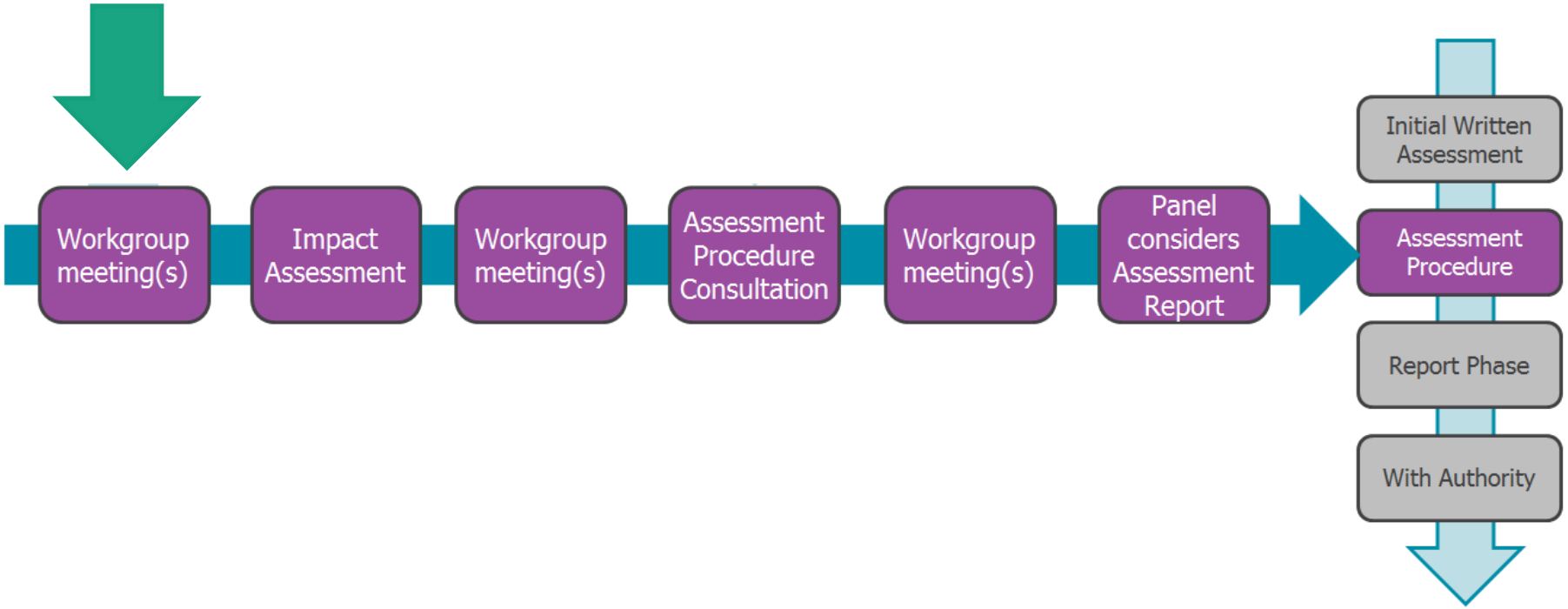
Where are we in the Assessment process?

- The role of the Workgroup is to assist the Proposer in developing the most appropriate solution, answer the Terms of Reference set by the BSC Panel and consider the costs and impacts of making the change



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Emergent

P455 ‘ON-SITE AGGREGATION AS A METHOD TO FACILITATE THIRD PARTY ACCESS’

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Background

- Emergent develops and operates private wire based microgrids for housing
- Problems with existing arrangements for facilitating 3rd party supply on private wires (i.e. customers choosing their supplier) were identified through pilot schemes
- Engaged Elexon and Ofgem over several years to find a solution; led to industry first application for a BSC Sandbox, approved May 2021
- Beginning Sept 2021, Sandbox provided a 3-year period to demonstrate solution and progress a Modification
- Modification must be implemented pre-Sep 2024, to avoid a gap at end of the Sandbox

Context

- Private wire microgrids can bring major industry benefits:
  - Equality of customer access to cost savings from on-site renewable
  - Accelerated and more cost-effective decarbonisation by unlocking capital funding for renewables via ‘energy as a service’ models
  - Improved grid efficiency through locally balanced loads and new route to market for flexibility
- But increased use of microgrids cannot occur to the detriment of customers, as can be the case today
- Modification will support the growth of microgrids:
  - Directly, by unlocking commercial viability in existing buildings increasing customer attractiveness
  - Indirectly, by strengthening the position of license exempt operators within the industry
- **Central BSC innovation advanced by the Mod is to enable sub-meter data to be used in settlement** (any precedent for this?)

ISSUE

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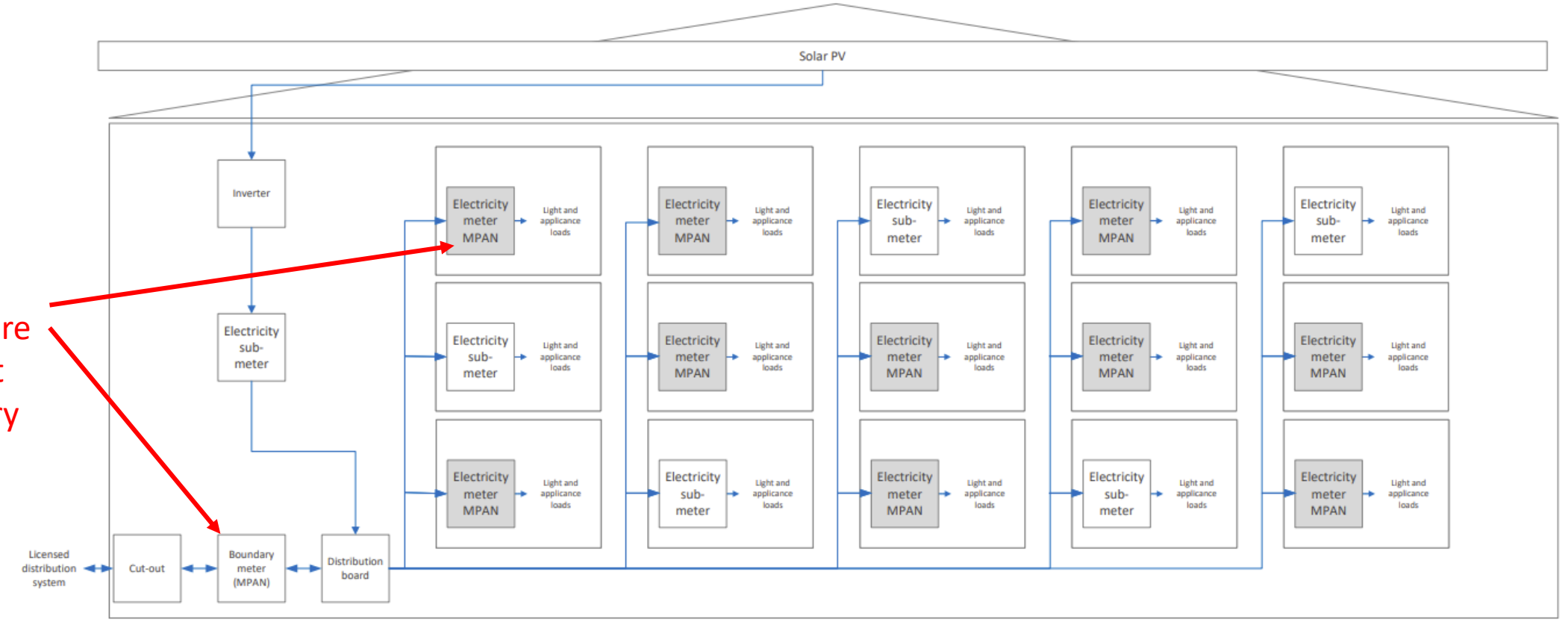
Issue

- Where one or more customers on a private wire network (PN) opt for a 3rd party supply, corrective action is required to avoid the double counting of metered volumes in Settlement

Loads of MPANs flow across and are measured at the boundary



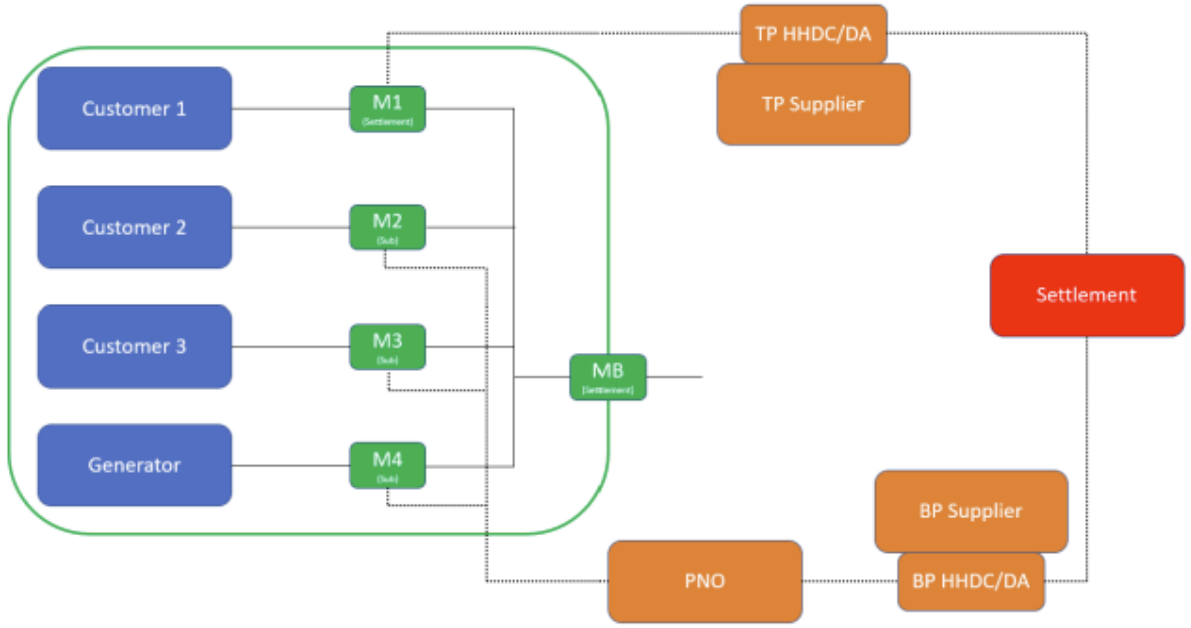
Existing options and issues

Existing option	Description	Issues
Difference metering	• Metered loads from 3rd party supplied Customers are subtracted from the Boundary meter loads • Boundary meter HHDC must be appointed by 3rd party suppliers to 3rd party supplied Customers • Customers are responsible for securing half hourly tariffs with 3rd party suppliers	V hard for Customer to secure bespoke tariff from potential 3rd party suppliers (i.e. HH settled using boundary point HHDC) given small loads
Shared metering	• Boundary meter supplier and 3rd party supplier/s agree to apportion boundary meter loads based on an allocation schedule	V hard for Customer to secure bespoke tariff from potential 3rd party suppliers (i.e. bespoke agreement in place with Boundary point supplier) given small loads and potential for multiple suppliers
Feed-through metering	• Private network operator installs sub-meter to meter exports to 3rd party supplied Customers (i.e. Customers are double metered)	Places high costs and operational burden on private network operators, who would receive less income as a result
Full settlement metering	• All Customers on a private network opt for 3rd party supply	Customers prevented from using on-site renewables

SOLUTION

Solution

- Aggregated data from sub-meters on PN (relating to customers not opting for 3rd party supply plus any on-site generation loads) submitted into Settlement, in lieu of data from the Boundary Point Settlement meter
- As a result, customers seeking a 3rd party supply arrangement and 3rd party Suppliers will no longer need to play an active role in the delivery of 3rd party supply arrangements beyond their business as usual operations



Design specifics of proposal:

Specified to make implementation of the solution as simple and uncontroversial as possible. Details to be discussed in subsequent WGs.

- Solution limited to use in schemes under 100kW capacity (larger schemes must use difference metering)
- Sub-metering to conform to CoP 10 standards
- Responsibility for integrity of sub-meter data and operations to sit with the HHDC/DAs and HHMOAs appointed to the PN Boundary Point Settlement meters (albeit PN operators are expected to play a role in the delivery of these responsibilities as part of their day to day activities)
- A complex site validation test must be undertaken for each scheme
- An unmetered loads test should not be required (as was the case for the Sandbox scheme)
- The MSIDs of Customers of a PN should be de-energised instead of logically disconnected, in order to minimise barriers to the Customer subsequently choosing a third party supply

SPECIFIC TERMS OF REFERENCE

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P455 specific Terms of Reference

ToR	Details
a)	Does the proposed on-site aggregation methodology result in accurate settlement outcomes (particularly in relation to difference metering)?
b)	Should the proposed on-site aggregation methodology be required to conduct unmetered load tests?
c)	Is it right that the boundary meter HHDC and HHMOA are responsible for operations related to the sub-meters, given private network operators are responsible for these meters on a day to day basis?
d)	Is it right that the sub-meters should conform to COP10 standards?
e)	Should there be a requirement for Elexon to maintain a central database of sites where on-site aggregation is applied? Do the benefits of maintaining a central register outweigh the costs of creating and maintaining his central register?
f)	Is there an impact on BSC Metering Dispensations?
g)	Is this proposal independent from any DCUSA change?
h)	Is a Cost-Benefit Analysis required?

STANDARD TERMS OF REFERENCE

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P455 standard Terms of Reference

ToR	Details
i)	How will P455 impact the BSC Settlement Risks?
j)	What changes are needed to BSC documents, systems and processes to support P455 and what are the related costs and lead times? When will any required changes to subsidiary documents be developed and consulted on?
k)	Are there any Alternative Modifications?
l)	Should P455 be progressed as a Self-Governance Modification?
m)	Does P455 better facilitate the Applicable BSC Objectives than the current baseline?
n)	Does P455 impact the EBGL provisions held within the BSC, and if so, what is the impact on the EBGL Objectives?

(i) How will P432 impact the BSC Settlement Risks?

- **List of SVA risks:**

  - 001 SVA Risk: Metering Point Registered Incorrectly
  - 002 SVA Risk: Metering System Attributes are incorrect
  - 003 SVA Risk: Metering Equipment Installations are incorrect
  - 004 SVA Risk: Metering Equipment changes are not notified
  - 005 SVA Risk: Metering Equipment Faults are not resolved
  - 006 SVA Risk: Incorrect Meter detail transfer on change of agent
  - 007 SVA Risk: Metered Data is not retrieved
  - 008 SVA Risk: Metered Data is not processed or transferred
  - 009 SVA Risk: Data Aggregator Processing incorrect
  - 010 SVA Risk: Transfer of Meter Read History incorrect
  - 011 SVA Risk: Unmetered Supplies volumes calculated incorrectly
  - 012 SVA Risk: Meter System Technical Details inaccurate
  - 013 SVA Risk: Manual Adjustments to Metered Data incorrect
  - 014 SVA Risk: Agent not appointed correctly
  - 015 SVA Risk: Reference Data incorrect
  - 016 SVA Risk: Energisation Status incorrect
  - 017 SVA Risk: exception reports not managed correctly
  - 018 SVA Risk: Revenue Protection volumes are not settled

(j) What changes are needed to BSC documents, systems and processes to support P455 and what are the related costs and lead times? When will any required changes to subsidiary documents be developed and consulted on?

Proposer view:

- Code and Subsidiary Documents
  - Section L 'Metering'
  - BSCP502 'Half Hourly Data Collection for SVA Metering Systems Registered in SMRS'

  - Document only change
  - Further document changes subject to Workgroup's views

- Impacts on other Codes
  - Retail Energy Code (REC):
    - P455 proposes to place a requirement on the SVA MOA appointed by the Boundary Point Supplier to rectify any faults found with the sub meters used in the on-site aggregation methodology, which falls under REC's scope
    - Therefore, a REC change will be raised

(l) Self-Governance criteria

A proposal that, if implemented

(a) does not involve any amendments whether in whole or in part to the EBGL Article 18 terms and conditions, except to the extent required to correct an error in the EBGL Article 18 terms and conditions or as a result of a factual change, including but not limited to:

(i) correcting minor typographical errors;

(ii) correcting formatting and consistency errors, such as paragraph numbering; or

(iii) updating out of date references to other documents or paragraphs;

b) is unlikely to have a material effect on:

(i) existing or future electricity consumers; and

(ii) competition in the generation, distribution, or supply of electricity or any commercial activities connected with the generation, distribution, or supply of electricity; and

(iii) the operation of the national electricity transmission system; and

(iv) matters relating to sustainable development, safety or security of supply, or the management of market or network emergencies; and

(v) the Code's governance procedures or modification procedures, and

c) is unlikely to discriminate between different classes of Parties.

(I) Should P455 be progressed as a Self-Governance Modification?

- **Proposer view:**
  - P455 should **not** be treated as a Self-Governance Modification as it will likely have a material impact on the BSC and subsidiary documents

(m) Does P455 better facilitate the Applicable BSC Objectives than the current baseline?

The Applicable BSC Objectives are:

a) The efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence

b) The efficient, economic and co-ordinated operation of the National Transmission System

c) Promoting effective competition in the generation and supply of electricity, and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity

d) Promoting efficiency in the implementation and administration of the balancing and settlement arrangements

e) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency [for the Co-operation of Energy Regulators]

f) Implementing and administrating the arrangements for the operation of contracts for difference and arrangements that facilitate the operation of a capacity market pursuant to EMR legislation

g) Compliance with the Transmission Losses Principle

Views against Applicable Objectives

- Applicable BSC Objective (c)
  - supports increased competition between Suppliers for Customers on private networks
  - supports increased competition for Customers in general from private network operators
- Applicable BSC Objective (d)
  - bespoke operational requirements no longer placed on Third Party Suppliers
- Applicable BSC Objective (e)
  - Customers on private networks no longer prevented in practise from switching Supplier, as required by the EU's Third Package of internal EU electricity market measures

(n) Does P432 impact the EBGL provisions held within the BSC?

- There are no identified impacts on the EBGL provisions

NEXT STEPS

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Progression plan

Event	Date
Present IWA to Panel	8 June 2023
Workgroup meeting 1 – Background and introduction to the process. Why is a new solution needed?	**12 September 2023**
Workgroup meeting 2 – Does the new solution work? Evidence from Emergent's Sandbox	October – November 2023
Workgroup meeting 3-4 – How will the solution work in detail?	
Workgroup meeting 5 – Legal text changes	
Assessment Procedure Consultation (15 WDs)	6 November 2023 – 24 November 2023
Workgroup meeting 6	December 2023
Present Assessment Report to Panel	11 January 2023
Report Phase Consultation	15 January 2024 – 30 January 2024
Present Draft Modification Report to Panel	February 2024
Issue Final Modification Report to Authority	February 2024

MEETING CLOSE

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THANK YOU

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12 September 2023