

Issue Report

Issue 72 'Ensuring measurement transformer assets installed by a non-BSC Party are successfully Commissioned within BSC timescales'

ELEXON



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About This Document

This document is the Issue 72 Group's Report to the BSC Panel. ELEXON will table this report at the Panel's meeting on 9 May 2019.

There are four parts to this document:

- This is the main document. It provides details of the Issue Group's discussions, proposed solutions to the highlighted issue, and contains details of the Workgroup's membership.
- Attachment A contains the Issue 72 Proposal Form.
- Attachment B contains the draft of the Change Proposal Form to be raised following Issue 72.
- Attachment C contains the draft redlined changes to Code of Practice (CoP) 4 for the draft of the Change Proposal.

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Issue

[Issue 72 'Ensuring measurement transformer assets installed by a Non-BSC Party are successfully Commissioned within BSC timescales'](#) was raised by SSE Ltd on 11 September 2018 to address issues identified in the Commissioning process where Measurement Transformers installed by a non-Balancing and Settlement Code (BSC) Party are not owned by the Licensed Distribution System Operator (LDSO). The Proposer suggests this results in the Meter Operator Agent (MOA) being required to complete full Commissioning testing, which may not be practical or possible in the case of high voltage (HV) and extra high voltage (EHV) connections.

The issues the Proposer has identified relate to:

- A current misalignment between the Commissioning of non-BSC Party owned measurement transformers process as outlined in [Code of Practice 4 \(CoP4\) 'The Calibration, Testing and Commissioning Requirements of Metering Equipment for Settlement Purposes'](#) and certain industry operational processes whereby a measurement transformer is not Commissioned by an MOA but a non-BSC Party (e.g. Independent Connection Provider (ICP)).
- In many cases the MOA does not possess the correct level of safety authorisation to complete Commissioning on HV or EHV connections; and
- Although it is the Registrant's responsibility to authorise Metering System energisation, in some cases new connections are energised before the Meter has been installed.

The Proposer suggests the lack of clear requirements on the provision of Commissioning records from non-BSC Parties is contributing to inaccurate data entering Settlement and exacerbating operational and Settlement risks.

Conclusions

The Issue 72 group developed a potential solution to the issue of measurement transformers installed by Independent Connection Providers (ICPs).

- A BSC Change Proposal to amend CoP4 to clarify that a BSC Party will be responsible for the Commissioning of any measurement transformers that will be adopted into that BSC Party's ownership at a later date.
- The Issue Group requested and endorsed that, on its behalf, ELEXON raises a Modification to the Competition in Connections Code of Practice (CiCCoP) to change "Once the Connection Works are energised, the DNO will adopt those network assets" in clause 7.4 'Adoption' to "On Energisation, the DNO will adopt those network assets".



What is Commissioning?

Commissioning is a series of site tests and checks to confirm that the Metering Systems is accurately recording the flows of electricity at the Defined Metering Point. Without commissioning there can be no certainty; and if there is an underlying error it may not be seen for years.

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The Issue 72 group has not been able to identify an appropriate solution to the issue of measurement transformers installed by Building Network Operators (BNOs).

- Following cross-Code engagement and the presentation of a paper detailing the outcome of a joint BSC/Master Registration Agreement (MRA) workshop, Ofgem is conducting an internal review of Licence Exempt Networks (which encompasses BNOs).
- Issue 72 members agreed this review limits the progression of further actions related to BNOs as part of Issue 72 until further direction by Ofgem is made public
- However, the Issue 72 Group agreed its work could prove of value to assist Ofgem, as the Authority as part of its review, for which the group, as well as ELEXON, are willing to support in order that the wider market issue can be resolved.

Commissioning Requirements

[Code of Practice 4](#) describes the requirements for Commissioning Metering Equipment for Settlement purposes.

Historically, and pre-November 2014, the Registrant of a Metering System was always responsible for ensuring that the Metering Equipment that makes up that Metering System is Commissioned for Settlement purposes. However, Since the implementation of Modification Proposal [P283 'Reinforcing the Commissioning of Metering Equipment Processes'](#) on 6 November 2014, the responsibility for Commissioning new measurement transformers (in accordance with CoP4) sits with the Metering Equipment Owner where they are a BSC Party (e.g. the Distribution or Transmission System Operator). However, where the Equipment Owner is not a BSC Party (e.g. an ICP), responsibility remains with the Registrant. Registrants discharge this responsibility by appointing a MOA to the Metering System, to ensure that all Commissioning is completed in accordance with CoP4.

CoP4 paragraph 5.5 'Commissioning' states 'Where measurement transformers are not owned by a BSC Party the Registrant, via its appointed MOA, shall be responsible for the Commissioning of all Metering Equipment.'

Independent Connection Providers

An ICP is an accredited company that carries out works on behalf of clients on the electricity network.

Under the Competition in Connections Code of Practice (CiCCoP), ICPs operate in the market to complete the contestable activities of connections. As ICPs do not own or operate the networks, all new installed assets must be adopted by the LDSO.

Although it is the Registrant's responsibility to request energisation, a third party connection provider may often energise the supply once they have installed the measurement transformers as they may not be fully aware of the impacts and wider regulation, for example under the BSC, involved in installations.

Building Network Operators

Building Network Operators (BNOs) own, manage and operate localised Distribution Networks, often within large buildings that contain several occupants and multiple metering systems, such as a block of flats.

The legal status of BNOs is made possible by [The Electricity Act 1989](#), which allows certain organisations to operate without a distribution licence.

[The Electricity and Gas Internal Markets Regulations \(2011\)](#) introduced direct to market supply metering for embedded tenants of a multi-occupancy building, with the Energy Networks Association (ENA) providing a national standard for this type of building in [Engineering Recommendation G87](#) (LV Supplies to Multi-Occupied Buildings) which defined BNOs as:



What is a Registrant?

A Registrant is a Party to the BSC who registers Metering Systems in either the Supplier or Central Meter Registration Systems (SMRS or CMRS) and is responsible for it. The Registrant of the Metering System is responsible for ensuring all Metering Equipment is Commissioned and appoints a Meter Operator Agent (MOA) to ensure Commissioning is complete, and that overall accuracy is maintained in accordance with the relevant CoP.



What is a Meter Operator Agent?

Meter Operator Agent (MOA) means a Party Agent appointed in accordance with BSC Section L 'Metering' to install, Commission, test and maintain, and rectify faults in respect of, Central Volume Allocation (CVA) Metering Equipment and/or Supplier Volume Allocation (SVA) Metering Equipment.

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“The organisation that owns or operates the electricity distribution network within a multiple occupancy building, between the intake position and customers installations.”

In practise, a BNO could be a facilities, property or services management company working on behalf of the building owner, but it could also be a Distribution System Operator (DSO) or another licensed distributor fulfilling the role of BNO at a given multi-occupancy building.

BNOs are responsible for the Distribution Networks that they manage in a similar manner to DSOs, but unlike DNOs, BNOs are exempted from registration requirements under schedules 2 and 3 of The Electricity (Class Exemptions from the Requirement for a Licence) Order 2001, allowing them to hire contractors to perform electrical work as and when required.

All network operators are subject to the [Electricity Safety, Quality and Continuity Regulations \(ESQCR\)](#). Licensed BNOs are governed by national DSO requirements and BS 7671 whilst unlicensed BNOs will be governed by BS 7671 only, within a building environment.

For a more detailed overview on BNO operations and frequently asked questions, please see UK Power Networks' [guidance document](#).

The Competition in Connections Code of Practice

The CiCCoP provides governance for the delivery of input services by Distribution System Operators (DSOs) to facilitate competition in the electricity distribution connections market.

The CiCCoP was approved by Ofgem in June 2015, and contains provisions to make amendments to the code via Modification proposals that are overseen by the CiCCoP Panel. Representatives from DSOs and ICPs form the CiCCoP Panel, which acts as a governance forum for the progression of Modification Proposals to the Code. Modifications to the Code shall better facilitate the following CiCCoP objectives:

- I. Facilitate competition in the market for new electricity distribution connections through:
 - a. Minimising, to the fullest extent reasonably practicable, the number and scope of Input Services which are only available to the DNO;
 - b. Providing Input Services on an equivalent basis to all Connection Parties that operate in the Local Connections Markets; and
 - c. Harmonising, to the fullest extent reasonably practicable, the Input Services provided by Distribution Service Providers.
- II. Not to distort, prevent or restrict competition in the market for new electricity distribution connections.
- III. Facilitate compliance with the regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators.

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Assuming a modification proposal is deemed to meet the objectives and receives a favourable decision from the CiCCoP Panel, a working group is formed to develop the modification proposal further.

If the developed proposal is non-consequential (i.e if it has no material impact on parties) then modification proposal is submitted directly to the CiCCoP Panel, who will vote once more on whether the, now fully developed, modification proposal better achieves the above objectives.

If the solution is consequential then it is consulted on and the working group demonstrates how these responses have been taken into account before it is submitted for decision to the CiCCoP Panel.

If the proposal receives majority support then it is sent to the Authority with a recommendation to approve from the CiCCoP Panel. If a majority reject the proposal then it is sent to the Authority with a recommendation to reject. If a split vote occurs then no recommendation accompanies the modification proposal when it is sent to the Authority.

Where the Authority approves the modification proposal, the changes are made to the CiCCoP in line with the implementation date.

What is the Issue?

The current BSC requirement for the Registrant to instruct the MOA to complete full Commissioning Testing results in the MOA being responsible for the Commissioning of both the Current Transformers (CTs)/ Voltage Transformers (VTs) and Meters.

The Proposer suggests that current practices surrounding the provision and responsibility for Metering Equipment in respect of measurement transformers (i.e. Current Transformers (CTs) and Voltage Transformers (VTs)) make the BSC obligations difficult to meet, potentially putting Settlement at significant risk where full Commissioning to confirm accuracy of volumes has not been completed.

Metering Equipment which has not been fully Commissioned at installation may be significantly inaccurate and could have significant error associated with it, which can remain undetected for a considerable amount of time.

Current BSC Requirements

Where Metering Equipment has been installed by a non-BSC Party, the BSC places obligations on the Registrant to ensure that its MOA performs the required Commissioning of all Metering Equipment in accordance with CoP4, which includes Commissioning and testing of measurement transformers (CTs and VTs).

However, measurement transformers may be installed before the MOA is appointed, meaning there may not be an opportunity in practice for the MOA to perform Commissioning tests on this Metering Equipment.

The Commissioning of High Voltage (HV) and Extra High Voltage (EHV) connections by the MOA may not be possible as the MOA may not hold the correct level of authorisation for access to the measurement transformers or technical knowledge required by the LDSO.

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Where a measurement transformer is not Commissioned by a MOA but rather the Commissioning is completed by a non-BSC Party (for example an ICP), the MOA requires the Commissioning records. However, there is no established procedure in the BSC regarding this process, and as such there are no clear requirements on the provision of Commissioning and Calibration records from non-BSC Parties.

Safety and Authorisation Concerns

Each LDSO operates its own version of Distribution Safety Rules which outline the minimum electrical safety standards for personnel working on electrical networks. In order to work on HV or EHV equipment these safety rules apply, along with the required authorisations to complete such works, therefore the requirements of each LDSO applies and may differ.

Where the connection is at a HV, or EHV level, the MOA requires authorisation to complete the Commissioning of the Measurement Transformers. To work on this HV Metering Equipment, the network's operational safety rules require a safety document to be issued prior to work commencing, which states the processes that must be followed when working on their network (at all voltages).

Whilst it is the Registrant's responsibility to authorise the Metering System energisation, in some cases it has been reported that MOAs have visited sites to install Meters and found the supply to be live and energised.

This poses a potential risk to Settlement as the energy flowing to or from the Boundary Point may be unmetered and so does not enter Settlement causing an imbalance. Even if metered, there remains a risk that volumes are not accurate as full Commissioning to confirm accuracy has not been completed.

Further work to rectify the situation on the customer's premises would cause an inconvenience to the customer and may be challenging due to access or shutdown issues. This may impact customer billing, potentially leading to a scenario where the customer may be receiving free energy (where the supply is an Import supply) and would not be being billed by the Supplier, which may result in a large bill for the customer later down the line, depending on who was at fault.

It was noted as part of the consultation for [CP1505 'Off site Commissioning of current transformers'](#) that ELEXON cannot hold a non-BSC Party (such as an ICP) accountable for Commissioning errors requiring subsequent rectification.

Letter from the BSC Panel to the CiCCoP Panel

An issue was brought to the attention of the BSC Panel via its Performance Assurance Board (PAB) ([PAB209/05](#)) following feedback from a number of BSC Parties and BSC Party Agents indicating concerns around ICPs in the undertaking of Commissioning.

As part of this paper, it was noted that the CiCCoP makes no reference to Commissioning obligations and that, as such, a Modification might be required in order to address these concerns and provide further practical guidance on the scope of Commissioning requirements.

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The BSC Panel noted that, as it is believed that ICPs are within scope of CiCCoP obligations, it may be within the CiCCoP Panel's remit to help address the concerns highlighted around ICPs and Commissioning.

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3 Issue Group's Discussions

Over the course of three Issue 72 meetings, discussions focused on three scenarios whereby Commissioning is required and the measurement transformers are not owned by a BSC Party, having been installed by ICPs, BNOs or where they are owned by the customer.

While current BSC arrangements for Commissioning of Metering Equipment installed by non-BSC Parties were regarded as clear as the Registrant is ultimately responsible, the Issue group discussed how the obligations placed on the Registrant are not practical, and can be impossible to fulfil in reality, due to the aforementioned reasons in section 2 of this paper.

Issue 72 group discussions also focussed on complications faced when Commissioning measurement transformers owned by a non-BSC Party, alongside potential solutions to rectify or alleviate the problem.

Issue relating to ICPs

At the first Issue 72 meeting on 16 October 2018 a discussion took place regarding ICPs and how a DSO could ensure ICPs complete installation work compliantly to the requirements within CoP4.

Members debated the point at which ownership responsibility of Metering Equipment passes to DSOs, with a majority supporting the view that this ownership commences at the time of energisation.

Issue 72 members identified a potential misalignment between the Commissioning of non-BSC Party owned measurement transformers process as outlined in Code of Practice 4, and some industry operational processes. It was believed that this misalignment was creating further confusion, and potentially exacerbating the issue of Commissioning of non-BSC Party owned Metering Equipment when it comes to the passing of Commissioning information by ICPs within BSC timescales.

It was noted that the [CiCCoP](#), approved by Ofgem in June 2015, governs the way in which DSOs provide input services and so should be reviewed to ascertain its alignment to CoP4.

One member questioned at this point whether it would be possible to bring ICPs into the BSC as a Qualified Person, as described in [BSC Section X, Annex X-1 'General Glossary'](#). ELEXON responded that this would not be an efficient or appropriate solution, given that ICPs have no Settlement obligations to fulfil under the BSC, which combined with their existing remit under CiCCoP would make it inappropriate for another Code to place obligations on them.

It was additionally noted that the [National Electricity Registration Scheme \(NERS\)](#) assesses and provides accreditation to Independent Connection Providers and so should be reviewed to ascertain its alignment to CoP4.

Following discussion it was proposed that ELEXON review NERS, CoP4 and CiCCoP to ascertain the extent to which these documents (and their ancillary guidance) align in their recommendations or requirements for Commissioning information as it pertains to Issue 72.

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In the scenario that potentially beneficial amendments to CiCCoP were identified to the Issue 72 group, members desired further clarification as to the change process for Modifications to CiCCoP, and a further action was agreed for ELEXON to investigate this as outlined in section four of this paper.

It was noted by the group that CoP4 sets out a framework for working with non-BSC Parties but that DSOs often have their own policies in place for asset adoption.

Draft Change Proposal

The Issue Group highlighted the benefits in terms of clarity from a practical solution that takes into account the real-world practicalities of working with non-BSC Parties. Following the completion of actions arising from the first meeting, Issue 72 members discussed potential solutions to the issue as it relates to ICPs in the second meeting on 24 January 2019.

The Issue Group suggested that a change to CoP4 to clarify in CoP4 that LDSOs will be responsible for any connection installed by an ICP that will be later adopted by a BSC Party. This amendment would require a Change Proposal to be progressed, as CoP4 is a Category 1 Configurable Item as defined in [BSCP40 'Change Management'](#). The Issue group believes this would better reflect the practicalities of securing Commissioning records by making use of the commercial relationship that exists between ICPs and LDNOs to ensure that records are obtained.

The redlined changes to CoP4 to achieve this change, alongside a drafted Change Proposal form, were presented to the Issue Group for review at its third meeting on 2 April 2019.

In its review of the first draft of the redlining for the potential CP, members suggested new wording on the basis that the drafted redlining reads as if responsibility begins even prior to adoption.

Following a second draft of the redlining (detailed in section 4 and included in attachment C), members were satisfied that the new version aligned with their intent.

This involves the introduction of a definition of an 'Equipment Owner' in CoP4 Section 4 to facilitate this change. This definition will read as follows:

Means, in relation to a Metering System, a person which is the owner of Metering Equipment comprised in that Metering System but is not the Registrant of that Metering System.

Sections 5.3.1, 5.5 and 5.5.4 of CoP4 will be amended to read:

Where measurement transformers are owned by a BSC Party, or that BSC Party has agreed to adopt the measurement transformers, that Party shall be responsible...

For the avoidance of doubt where measurement transformers are comprised, or are to be, within a CVA Metering System(s), Commissioning must take place prior to the energisation of the Metering System. Where a BSC Party has agreed to adopt measurement transformers following energisation, the Registrant shall be responsible for Commissioning of all Metering Equipment irrespective of the Equipment Owner.

For the avoidance of doubt, a footnote ⁶ will be added, stating:

For example via an adoption agreement between a BSC Party and an Independent Connection Provider (ICP)

Issue Group members noted members that a concurrent work stream was reviewing CoP4 and sought clarity that this would not contradict the work. ELEXON confirmed that it would not.

Issue Group members agreed that this work should be undertaken outside of the concurrent CoP4 review.

Competition in Connections Code of Practice

As ICPs fall within the scope of CiCCoP obligations, members discussed the sending of a letter from the BSC Panel to the CiCCoP Panel on 20 August 2018 regarding the PABs concern over the lack of obligations on ICPs to complete Commissioning and pass Commissioning records on.

ELEXON confirmed to the group that, while the letter itself was confidential, the Panel's discussions arising from this were public. Members questioned whether there had been a response and ELEXON confirmed that there had been no response at the time of the first meeting on 16 October 2018.

At this point ELEXON asked the group whether engagement with CiCCoP would assist the Issue group's progression of the issue, and the development of a potential solution. The Issue Group indicated that interaction from the CiCCoP would be beneficial in informing its discussions, and an action to contact CiCCoP regarding this response was taken. ELEXON attended the 28 February CiCCoP meeting and discussed Issue 72 with the CiCCoP Panel, feeding discussions back to the Issue Group.

CiCCoP Modification

Following identification of CiCCoP as a body with a remit of ICPs, and thus a route to influence their behaviour, ELEXON reviewed the current wording in CoP4 and how it interacts with clause 7.4 'Adoption' of the CiCCoP. The CiCCoP does not explicitly refer to the BSC Commissioning process and that, under the CiCCoP, the LDSO is viewed as directly responsible for specifying which records are submitted as well as the timescales for doing so. Furthermore, the terminology in CiCCoP of "once the Connection Works are energised" could create ambiguity, as opposed to the more explicit and informational "on energisation". This resulted in the identification of a potential solution to the issue of ensuring ICPs provide Commissioning records - to amend the CiCCoP via its Modification process.

Issue Group members agreed a Modification to the CiCCoP would provide further clarity. As any member of the general public has the ability to raise a Modification to the CiCCoP, the Issue 72 group requested, and noted unanimous support for ELEXON to raise the CiCCoP Modification on behalf of Issue 72 to add clarity in the CiCCoP. ELEXON will raise this Modification following the closure of Issue 72. The CiCCoP Panel noted support of the

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clarification change to amend 'Once the connection works are energised' to 'on energisation' during previous engagement with ELEXON at a CiCCoP Panel meeting.

Issue relating to Customer-Owned Measurement Transformers

Following discussion at the first meeting, it was determined and agreed by all Issue 72 members that a solution to the issues related to the Commissioning of measurement transformers installed on a BNO-operated network would also rectify issues related to Commissioning of customer-owned measurement transformers.

The Issue Group agreed at its second meeting that customer-owned switchgear could be separated from the rest of the Issue 72 discussions where they are at the point of connection as they have no implications on discussions around Commissioning undertaken by ICPs and BNOs.

Issue as it relates to BNOs

Following discussion at the first meeting, Issue 72 members quickly reached a consensus that potential solutions to the Commissioning of measurement transformers owned by Building Network Operators (BNOs) were less easily identifiable than those of ICPs. In part, this was felt to be due to the lack of visibility and understanding of the volume of BNO sites within the electricity market.

Furthermore, members recognised the difficulty in controlling the activities of BNOs that do not implicate Settlement with a BSC solution. A member commented that getting the information to meet all Commissioning requirements was challenging, with another member adding that MOAs often do not know that a BNO has been on site until the Commissioning process has been completed.

The Issue Group noted that BNOs act in the same manner as electrical contractors and often make changes to the BNO system based on whatever they need to with little consideration paid to the requirements of CoP4.

The Issue Group discussed the risk that BNO's pose to the integrity of Settlement and the wider industry, with one member seeking clarification on the role of materiality in ELEXON's Performance Assurance Framework (PAF) review. ELEXON responded that the PAF team had designed the risk-scoring methodology to forecast a realistic materiality impact on Settlement in order for us to decide what mitigation is appropriate.

Cross-Code Engagement

During this discussion, one member commented that Commissioning under BSC timescales was just a small element of the BNO Metering issue, describing it as the 'tip of the iceberg'.

The benefits of seeking cross-Code support to examine the issues relating to BNOs were highlighted and the Issue group expressed their unanimous endorsement for ELEXON to engage externally on behalf of the Issue 72 group. It was felt that this would help to consolidate knowledge about issues faced with BNO sites, their role in the electricity market and build a broader case for change.

The Issue Group members noted that the BNO issue discussed by the Workgroup is one that the BSC alone cannot rectify fully due to the impacts across multiple Codes, and therefore a co-ordinated approach would bring the most clarity and benefit to BSC Parties and industry alike.

Following the concerns of members over the lack of visibility of in identifying where a BNO is operational at a site, members expressed their unanimous endorsement for ELEXON to engage externally on behalf of the group.

A joint BSC-Master Registration Agreement (MRA) workshop looking into better defining Licence Exempt Networks (LENs) such as BNOs and seeking a solution to identifying a LEN site was arranged for 1 March 2019 and Issue 72 members invited to attend. Discussions in the LEN workshop focused on how to recognise private networks and how owners of private networks can be identified.

A Distribution Connection and Use of System Agreement (DCUSA) representative presented [DCP328 'Use of system charging for private networks with competition in supply'](#) which aims to ensure that use of systems charging remains cost-reflective when competition in supply on a private network is in place.

It was noted that this could allow private networks to 'claim' some of Use of System (UoS) charges back from the Distribution Network and therefore offer a financial incentive for private network owners (such as BNOs) to identify themselves.

Attendees of the joint BSC-MRA workshop agreed that discussions would be captured in a paper for presentation at the 25th March 2019 Ofgem Design Forum Meeting.

Following the information from this meeting that Ofgem had indicated that the LEN issue required further work and had effectively been brought back "in house" for internal review following the presentation of this paper, Issue 72 members agreed that this limited the progression of any further actions related to BNOs as part of Issue 72 until further clarification by Ofgem is offered.

However, it was felt that the work of Issue 72 could prove of value to help the Authority and, as such, the Issue report should be presented to them and support offered as desired. On this basis, Issue Group members agreed that the Issue 72 report should be presented to the next Panel meeting on 9 May 2019 to allow the outcomes to be progressed and that Issue 72 should be closed.

Recommendation

Provision of Support to Ofgem

At the Ofgem Design Forum meeting on 25 March 2019, Ofgem indicated that further work on issues caused by BNOs in the electricity market required further work, which it will conduct in-house under further review.

Following this clarification from Ofgem, Issue 72 Group members agreed that the BNO aspect of concerns around Commissioning undertaken by non-BSC Parties may potentially need to be revisited following completion of the work by the Authority and once further direction has been provided to the wider industry. Issue Group members agreed that the determination of whether further work should or could be completed under the BSC would be influenced by the outcomes of the Authority's internal work as mentioned prior in this Issue Report.

Issue Group members recommended that this Issue Report be provided to Ofgem, along with offering appropriate support, should they request it, to assist in the work around this issue.

Change Proposal

The Issue 72 group recommend that a Change Proposal (CP) be raised to carry forward its findings. An Issue 72 member has agreed to act as the Proposer for this CP.

This CP shall seek to amend CoP4 to clarify that a BSC Party will be responsible for the Commissioning of any measurement transformers that will be adopted into that BSC Party's ownership at a later date.

In practice, if measurement transformers are installed by an ICP and will later be adopted by an LDSO, the responsibility for ensuring Commissioning requirements are met would fall on the LDSO under the proposed solution.

This involves the introduction of a definition of an 'Equipment Owner' in CoP4 Section 4 to facilitate this change. This definition will read as follows:

Means, in relation to a Metering System, a person which is the owner of Metering Equipment comprised in that Metering System but is not the Registrant of that Metering System.

Sections 5.3.1, 5.5 and 5.5.4 of CoP4 will be amended to read:

Where measurement transformers are owned by a BSC Party, or that BSC Party has agreed to adopt the measurement transformers, that Party shall be responsible...

For the avoidance of doubt where measurement transformers are comprised, or are to be, within a CVA Metering System(s), Commissioning must take place prior to the energisation of the Metering System. Where a BSC Party has agreed to adopt measurement transformers following energisation, the Registrant shall be responsible for Commissioning of all Metering Equipment irrespective of the Equipment Owner.

For the avoidance of doubt, a footnote ⁶ will be added, stating:

For example via an adoption agreement between a BSC Party and an Independent Connection Provider (ICP)

This Change Proposal will add clarity to the process, rectifying ownership in respect of the identified Issue relating to ICPs.

Modification to CiCCoP

The Issue 72 group recommend that a Modification to CiCCoP is raised to add clarity, assisting to the rectification of the originally identified Issue relating to ICPs. The group unanimously endorsed ELEXON to raise the Modification on its behalf.

This will propose an amendment to CiCCoP clause 7.4 'Adoption':

"Once the Connection Works are energised, the DNO will adopt those network assets" will be amended to "On Energisation, the DNO will adopt those network assets"

Appendix 1: Issue Group Membership

Issue Group membership and attendance

Issue 72 Group Attendance					
Name	Organisation	16 October 2018	24 January 2019	02 April 2019	
Elliott Harper	ELEXON (<i>Chair</i>)	✓	✓	✓	
Ivar Macsween	ELEXON (<i>Lead Analyst</i>)	✗	✗	✓	
Chris Day	ELEXON (<i>Subject Matter Expert</i>)	✓	✓	✓	
Dapo Opadere	ELEXON (<i>Attendee</i>)	☎	☎	☎	
Peter Gray	SSE (<i>Proposer</i>)	✓	✓	✓	
Colin Gentleman	SSE	✓	✓	✓	
Walter Hood	Scottish Power	☎	✓	✓	
John Greene	SSE	✓	✓	✓	
Tom Chevalier	Power Data Associates	✓	✓	✓	
Barry Winterbottom	E.ON Data Solutions	✓	✓	✓	
Lee Stone	E.ON Energy	✓	✓	✓	
Warren Lacey	Northern Powergrid	✓	✓	✓	
Andrea Duignan	WPD Smart Metering	✓	✓	✓	
Oliver Meeney	ESP Utilities	✓	✓	✓	
Nicholas Sawyer	NPower	✓	✓	✓	
Stephen Cuddihey	UK Power Networks	✓	✓	✗	
Chris Collins	Scottish Power	☎	✓	☎	
Drew Porte	Scottish Power	☎	✓	☎	
Graham Brewster	WPD	✓	✓	✓	
Kevin Walker	E.ON Energy	✗	✓	✓	
Dave Siggers	EDF Energy	✓	✓	✓	
Daniel Lewis	EDF Energy	✓	✓	✓	

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Appendix 2: Glossary & References

Acronyms

Acronyms used in this document are listed in the table below.

Acronyms	
Acronym	Definition
BEIS	Department for Business, Energy & Industrial Strategy
BSC	Balancing and Settlement Code
BNO	Building Network Operator
CiCCoP	Competition in Connections Code of Practice
CoP4	Code of Practice 4 'The Calibration, Testing and Commissioning Requirements of Metering Equipment for Settlement Purposes'
CT	Current Transformer
DCUSA	Distribution Connection and Use of System Agreement
DSO	Distribution System Operator
EHV	Extra High Voltage
ICP	Independent Connections Provider
HV	High Voltage
LDSO	Licensed Distribution System Operator
MOA	Meter Operator Agent
MRA	Master Registration Agreement
NERS	National Electricity Registration Scheme
PAB	Performance Assurance Board
VT	Voltage Transformer

External links

A summary of all hyperlinks used in this document are listed in the table below.

All external documents and URL links listed are correct as of the date of this document.

External Links		
Page(s)	Description	URL
2	Issue 72 'Ensuring measurement transformer assets installed by a Non-BSC Party are successfully Commissioned within BSC timescales'	https://www.elexon.co.uk/smg-issue/issue-72/
3	Code of Practice 4 'The Calibration, Testing and Commissioning Requirements of Metering Equipment for Settlement Purposes'	https://www.elexon.co.uk/csd/cop-code-of-practice-4/

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External Links		
Page(s)	Description	URL
3	P283 'Reinforcing the Commissioning of Metering Equipment Processes'	https://www.elexon.co.uk/mod-proposal/p283/
4	Engineering Recommendation G87	http://www.ena-eng.org/ENA-Docs/D0C3XTRACT/ENA_EREC_G87_Extract_180902050443.pdf
4	UK Power Networks BNO guidance document	https://www.ukpowernetworks.co.uk/internet/en/help-and-advice/documents/UKPN_BNO_Guide.pdf
5	Electricity Act 1989.	https://www.legislation.gov.uk/ukpga/1989/29/contents
5	The Electricity and Gas (Internal Markets) Regulations 2011	http://www.legislation.gov.uk/uksi/2011/2704/contents/made
6	CP1505 'Off site Commissioning of current transformers'	https://www.elexon.co.uk/change-proposal/cp1505/
6	Performance Assurance Board Paper PAB209/05	https://www.elexon.co.uk/documents/groups/pab/2018-meetings-pab/209-june/pab209-05-proposal-to-write-to-ciccop-regarding-icp-commissioning-concerns/
7	National Electricity Registration Scheme (NERS)	https://www.lr.org/en/utilities/national-electricity-registration-scheme-ners/register-ners-accredited-provider/
7	Competition in Connections (CiC) Code of Practice (CoP)	http://www.connectionscode.org.uk/assets/files/CiCCoP_final_April2017.pdf