

Proposed Code Changes

Proposed Code Changes.

This appendix shows, in red line track changes, the core modifications that would give effect to the governance arrangements for implementation set out in this consultation document. Once these core changes are settled, we expect consequential changes to be developed. In the meantime, this appendix also shows the changes to the P413 BSC modification which would be required.

This appendix includes:

- A. Balancing and Settlement Code (BSC) Section C
- B. BSC Section D
- C. BSC Annex X-1
- D. Smart Energy Code (SEC) Section C7
- E. Retail Energy Code (REC) Clause 5
- F. Connection and Use of System Code (CUSC) Clause 8
- G. Distribution Connection and Use of System Agreement (DCUSA) Clause 7

We would welcome any comments which stakeholders may have on these proposed changes, including in respect of any further consequential changes.

A. BSC Section C - BSCCo and its Subsidiaries

3. POWERS AND FUNCTIONS OF BSCCO

3.1 General

- 3.1.1 Without prejudice to paragraph 1.2.2, BSCCo shall have the following powers, functions and responsibilities:
 - (a) to enter into, manage and enforce contracts with service providers (as BSC Agents) for the supply of the services required by BSC Service Descriptions,



- and negotiate and agree amendments to such contracts, as further provided in Section E and, where relevant, paragraph 10.1.5;
- (b) to advise the Panel and keep it advised as to and in respect of the matters which it is necessary or appropriate that the Panel should consider in order to discharge the Panel's functions and responsibilities in accordance with the Code;
- (c) to provide or arrange the provision of such facilities, resources and other support as may be required by the Panel to enable the Panel or any Panel Committee or Workgroup to discharge its functions and responsibilities under the Code;
- (d) to provide secretarial and administrative services in connection with meetings of the Panel and Panel Committees and Workgroups, including the convening and holding of such meetings, and taking and circulation of minutes;
- (e) to provide and make available to Parties such facilities, services and information in connection with the implementation of the Code as the Code may provide or the Panel may require;
- (f) to provide or arrange the provision of facilities, resources and other support in connection with the procedures for modification of the Code in accordance with Section F;
- (g) to enter into contracts (in terms complying with any applicable provisions of Section B) of employment or other engagement with persons from time to time to be appointed as Panel Chairman or Panel Members under Section B2.5;
- (h) to indemnify against liability and, if relevant, to reimburse the expenses of, Panel Members, members of Panel Committees, members of Workgroups and others as provided in the Code or as otherwise required in BSCCo's discretion in connection with any BSC Agent Contract;
- (i) to enter on behalf of all Parties into Accession Agreements with new Parties in accordance with Section A2.2, and to enter on behalf of all Parties into



Novation Agreements with Novation Applicants and Transferring Parties in accordance with Section A2.7;

- (j) to act as BSC Agent for the purposes of the Master Registration Agreement in accordance with Annex K-1;
- (k) to act as shareholder of the BSC Clearer in accordance with paragraph 7;
- (I) to receive, collect and hold such data and information, and to prepare and maintain such books and records, as may be required under the Code or reasonably necessary to enable BSCCo to comply with its functions and responsibilities under the Code; and to provide data and information held by it to the Panel upon request and to other persons in accordance with any express provision of the Code;
- (m) without prejudice to the generality of paragraph (I), where it is not the function of a BSC Agent to do so, to maintain records of the extent to which Parties have satisfied requirements of the kind referred to in Section A4.5.3, and to provide details thereof to BSC Agents and other persons as required for the purposes of the Code;
- (n) to monitor whether any Party is, or with the lapse of time or giving of notice would be, in Default (in accordance with Section H3), and to give to any Party any notice the giving of which will result in that Party being in Default (but not for the avoidance of doubt to give any notice consequent upon a Party's being in Default unless expressly authorised to do so by the Panel or by a provision of the Code);
- (o) to act as the Performance Assurance Administrator;
- (p) to prepare and/or (as the Panel may require) assist the Panel to prepare the Annual BSC Report for each BSC Year in accordance with Section B6.1;
- (q) to make recommendations to the Panel as to possible Modification Proposals in the circumstances mentioned in paragraph 3.8.8 and Section F2.1.1(d)(ii) and (iii);
- (r) to the extent provided in and in accordance with the policy from time to time established by the Panel, to act as a point of contact for persons from other



countries interested in, and to explain to such persons, the arrangements for and developments in wholesale trading of electricity in Great Britain and/or Offshore, and to participate in institutional comparative discussions of such arrangements and developments in other countries;

- (s) to provide Profile Administration Services (with the consent of the Panel) and to enter into, manage and (subject to the Code) enforce contracts with service providers for the supply of Profile Administration Services in accordance with Section C9;
- [P413](t) in conjunction with the other code administrators identified in the Code Administration Code of Practice, to maintain, publish, review and where appropriate (but subject always to the approval of the Authority) amend the Code Administration Code of Practice;
- (u) to delegate responsibility for performance of the powers, functions and responsibilities specified in this paragraph 3.1.1 and otherwise provided for in the Code, to the BSC Services Manager (save in respect of paragraph (k) and its obligations and responsibilities under Section E, paragraph 4); and
- [P413](v)to provide the Market-wide Half Hourly Settlement Implementation Managerment services in accordance with Section C12.
- 3.1.1A BSCCo shall obtain the Panel's consent prior to raising any potential amendments to the Code Administration Code of Practice.
- 3.1.2 To the extent to which the terms of reference (pursuant to Section B5.3.2) of a Panel Committee or Workgroup authorise the Panel Committee itself to request from BSCCo facilities, resources or other support (falling within paragraph 3.1.1(c)), BSCCo shall provide or arrange the provision of such facilities, resources or other support as may be so requested.
- 3.1.3 The facilities, resources and other support which BSCCo may be required to provide to or arrange for the Panel or a Panel Committee or Workgroup include:
 - (a) facilities for holding meetings;



- (b) the provision of advice and expertise in connection with any matter which (pursuant to the Code) is to be considered by the Panel or Panel Committee or Workgroup;
- (c) the preparation of draft and final working papers, reports and other documents; and
- (d) where BSCCo so decides or the Panel specifically so requests, the services of external firms of advisers and consultants or the attendance at meetings of experts (and paying the fees and expenses of such advisers, consultants and experts).
- 3.1.4 BSCCo shall have the powers, functions and responsibilities assigned to it in the Implementation Scheme (including without limitation those provided in connection with the Pooling and Settlement Agreement).

[....]

6. BUSINESS STRATEGY AND ANNUAL BUDGET

[...]

[P413] 6.6 MHHS Implementation Management First Year Budget

- 6.6.1 Each Party acknowledges that the commencement of the MHHS Implementation is unlikely to coincide with the adoption of the Annual Budget pursuant to paragraph 6.4 and consequently, in order to recover the costs relating incurred asto MHHS Implementation Managerment, it may be necessary for BSCCo to develop and adopt an amendment to the Annual Budget for the BSC Year in which the MHHS Implementation commences, in which case BSCCo shall:
 - (a) notify the Panel and all Parties, giving details of the MHHS Implementation additional expenditure; and
 - (b) submit to the Panel and all Parties a draft revision of the Annual Budget.
- 6.6.2 After seeking such further comments from the Panel and Parties as the Board considers necessary, BSCCo shall revise the Annual Budget.

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[P413]12. MARKET-WIDE HALF HOURLY SETTLEMENT IMPLEMENTATION MANAGEMENT

12.1 MHHS Implementation Management

- 12.1.1 For the purposes of the Code:
- (a) "MHHS Implementation" means the implementation of the systems and processes that will enable market wide Settlement on a half hourly basis;
- (b) "MHHS Implementation Assurance Provider" has the meaning given to that term in paragraph 12.3.1;
- (c) "MHHS Implementation Manager" means BSCCo to the extent that BSCCo is responsible for, and/or has been appointed to provide, some or all of the MHHS Implementation Management services pursuant to this paragraph 12 (or any part thereof); and
- (d) "Market-wide Half Hourly Settlement Implementation Management" or
 "MHHS Implementation Management" shall have the meaning given to that term
 in paragraph 12.1.3.
- 12.1.2 The provisions of this paragraph 12 shall apply to the extent, and for the duration that, BSCCo is responsible for, and/or has been appointed to provide, the MHHS Implementation Management services or any part thereof.
- 12.1.3 Subject to the further provisions of this paragraph 12, BSCCo shall provide (either itself or through service provider(s)) the activities and functions, and shall assume the responsibilities and duties, in connection with the management of the MHHS Implementation which may include:
- (a) programme management which shall include responsibility, amongst other things, for managing the delivery of the MHHS Implementation including mobilisation, design, build, test, integration and go-live;
- (b) system integration which shall include, amongst other things, supporting the programme's system design and build phases, and planning, co-ordinating and managing programme parties' activities and resources during the programme's system test and integration phases;



- (c) programme party coordination including, amongst other things, assessing programme party readiness during the build, and before each test and integration milestone to ensure programme parties are ready to meet programme milestones; and/or
- (d) such other roles as may be necessary for or reasonably ancillary to the delivery of MHHS Implementation Management,
- (collectively "MHHS Implementation Management"), in each case in accordance with the specification for such roles as is set out in a Code Subsidiary Document or as has otherwise been approved by the Authority from time to time. As regards each of the roles which comprise MHHS Implementation Management, BSCCo shall publish a statement on the BSC Website providing an explanation of its decision as to whether to appoint a service provider to perform such role.
- 12.1.4 BSCCo shall provide (without prejudice to paragraph 3.6) such reporting and information to the Authority, and shall attend such boards, steering groups and meetings, in each case in connection with the MHHS Implementation as the Authority may specify.
- 12.1.5 The costs, expenses and liabilities incurred by BSCCo in undertaking MHHS Implementation Management (including such additional expenses and liabilities as BSCCo may incur, including with respect to service providers, in the event that BSCCo's appointment or responsibilities pursuant to this paragraph 12 cease prior to the completion of the MHHS Implementation) shall be BSC Costs, but BSCCo shall keep account of such costs, expenses and liabilities separately from all other BSC Costs (including separately from any costs incurred by BSCCo in changing BSC Systems, documentation and processes in order to implement MHHS).
- 12.1.6 BSCCo shall prepare and make available to the Panel and to Parties regular reports in respect of its MHHS Implementation Management work, and the costs, expenses and liabilities incurred in undertaking such work, but BSCCo shall not be required to disclose to Parties or the Panel any information relating to the MHHS Implementation which the Authority expressly requests BSCCo to keep confidential.
- 12.1.7 The functions of, and the things done by, BSCCo under and pursuant to this paragraph
 12 shall be considered to be functions under and things done pursuant to the Code
 provided that, if and to the extent so specified by the Authority:



- (a) other than as provided in paragraph 3 of Annex D-3, the Panel shall have no duties or responsibilities in relation to MHHS Implementation Management; and
- (b) other than as provided in paragraphs 6.3.1, 12.1.6, 12.2.1 and Section D4, BSCCo shall owe no duties to the Panel in the carrying out of such functions.
- 12.1.8 In the event that BSCCo's appointment or responsibilities pursuant to this paragraph
 12 cease prior to the completion of the MHHS Implementation, BSCCo shall provide
 such reasonable co-operation to a replacement MHHS implementation manager
 (including the provision of materials and information relating to the MHHS
 Implementation) as may be reasonably necessary.

12.1 Introduction

- 12.1.1 This paragraph 12 sets out the roles, obligations, governance and assurance for the implementation of market-wide, half-hourly Settlement (referred to as MHHS Implementation).
- 12.1.2 This paragraph 12 contains obligations on BSCCo as MHHS Implementation Manager, and on Parties (including BSCCo) as MHHS Participants. It also places obligations on certain entities which are not Parties. Compliance by these entities is required by other Industry Codes to which they are party.
- 12.1.3 Assurance of MHHS Implementation is provided by the MHHS Independent Assurance Provider.

12.2 **Interpretation**

- 12.2.1 "DCC Licence" means a smart meter communication licence granted under the Act.
- 12.2.2 "IT System" means a system for generating, sending, receiving, storing (including for the purposes of back-up), manipulating or otherwise processing electronic communications, including all hardware, software, firmware and data associated with such activities.
- 12.2.3 "MHHS Affected Code Body" means each of the following entities in respect of the following Industry Codes: (a) for the Connection and Use of System Code (as defined in the Transmission Licence), the NETSO; (b) for the Smart Energy Code (as defined in the DCC Licence), SECCo (as defined in that code); (c) for the Retail Energy Code



- (as defined in the Supplier Licences), RECCo (as defined in that code); and (d) for the Distribution Connection and Use of System Agreement (as defined in the Supplier Licences), DCUSA Ltd (as defined in that agreement).
- 12.2.4 "MHHS DA" means BSCCo as the 'Design Authority' for MHHS Implementation, as described in paragraph 12.7.
- 12.2.5 **"MHHS Data Cleansing Plan"** means the data cleansing plan for MHHS Implementation.
- 12.2.6 "MHHS Data Migration Plan" means the data migration plan for MHHS Implementation.
- 12.2.7 "MHHS Defect Management Plan" means the defect management plan for MHHS Implementation.
- 12.2.8 "MHHS Governance Framework" means the document or documents setting out the detailed governance and assurance requirements for MHHS Implementation, as described in paragraph 12.3.
- 12.2.9 "MHHS Implementation" means the implementation of market-wide, half-hourly Settlement (including data migration and storage and other ancillary and incidental matters), including the following:
- (a) the energy licence modifications required to enable and facilitate such implementation;
- (b) the modifications to this Code and to other Industry Codes required to enable and facilitate such implementation;
- (c) the mobilisation, designing, building, testing, integration and go-live of the IT Systems and business processes required to enable and facilitate such implementation; and
- (d) establishing readiness for, and the determination of, relevant stages of MHHS Implementation, including the MHHS System Go-Live Date and the beginning and end of periods for MHHS Qualification, migration, completion of transition to new and completion of existing Settlement Runs and post-implementation steps.



- 12.2.10 "MHHS Implementation Manager" means BSCCo in its roles as MHHS SRO, MHHS PMO, MHHS DA, MHHS SI and MHHS PPC.
- 12.2.11 "MHHS Implementation Timetable" means the timetable for MHHS

 Implementation, as established under (and subject to change in accordance with) the

 MHHS Governance Framework.
- 12.2.12 "MHHS Independent Assurance Provider" means the independent assurance provider for MHHS Implementation, as described in paragraph 12.10.
- 12.2.13 "MHHS ISMS" means the information security management system arrangements put in place to ensure MHHS Implementation compliance with ISO 27001, or equivalent.
- 12.2.14 "MHHS Migration Plan" means the plan for the migration of Metering Systems as required for MHHS Implementation, as described in paragraph 12.11.3.
- 12.2.15 "MHHS Participant" means each of: (a) BSCCo (but excluding its role as MHHS Implementation Manager); (b) each Supplier; (c) each Licensed Distribution System Operator; (d) the DCC; (e) each MHHS Affected Code Body; (f) each Data Collector; (g) each Data Aggregator; (h) each Meter Operator Agent; and (i) any other person or category of person which the Authority directs.
- 12.2.16 "MHHS PMO" means BSCCo as the 'Programme Management Office' for MHHS Implementation, as described in paragraph 12.6.
- 12.2.17 "MHHS PPC" means BSCCo as the 'Programme Party Coordinator' for MHHS Implementation, as described in paragraph 12.9.
- 12.2.18 "MHHS Programme Steering Group" means the group of MHHS Participant representatives established from time to time under the MHHS Governance Framework.
- 12.2.19 "MHHS Qualification" means written confirmation from the Panel (or the Performance Assurance Board if delegated by the Panel) that, in the opinion of the Panel (or Performance Assurance Board as the case may be), the Party or Party Agent has, (a) met the requirements set out in the MHHS Qualification Plan as those which have to be met by that, or that class of, Party or Party Agent and (b) done so by the



- date specified in the MHHS Qualification Plan; and shall, if required, include re-Qualification.
- 12.2.20 "MHHS Qualification Plan" means the plan for the MHHS Qualification of those requiring MHHS Qualification for the purposes of MHHS Implementation, as described in paragraph 12.11.2.)
- 12.2.21 "MHHS SI" means BSCCo as the 'Systems Integrator' for MHHS Implementation, as described in paragraph 12.8.
- 12.2.22 "MHHS SRO" means BSCCo as the 'Senior Responsible Owner' for MHHS Implementation, as described in paragraph 12.5.
- 12.2.23 "MHHS System Go-Live Date" means the time and date designated as such by the MHHS SRO.
- 12.2.24 "MHHS Target Operating Model" means the target operating model for market-wide, half-hourly Settlement, as set out or referred to in the MHHS Governance Framework, and subject to change in accordance with the MHHS Governance Framework.
- 12.2.25 "MHHS Test Plan" means the test plan for each test phase of MHHS Implementation.

12.3 MHHS Governance Framework

- 12.3.1 The Authority may designate (and may, if it wishes from time to time, re-designate) one or more documents as the MHHS Governance Framework.
- 12.3.2 The MHHS Governance Framework shall set out supplementary rights, obligations and processes to apply in respect of MHHS Implementation, which may include some or all of the following:
- (a) a governance framework for MHHS Implementation, including the creation of the MHHS Programme Steering Group and other representative and/or specialist groups as are required for MHHS Implementation;
- (b) a change control process for MHHS Implementation;
- (c) further details in relation to performance assurance for MHHS Implementation;



- (d) the initial MHHS Target Operating Model;
- (e) the initial MHHS Implementation Timetable;
- (f) provision for the Authority to re-assign some or all of the roles of the MHHS

 Implementation Manager (or parts of those roles) to an entity other than BSCCo; and
- (g) the decision-making thresholds for matters which must and/or may be referred to the Authority.

12.4 BSCCo as MHHS Implementation Manager: General

- 12.4.1 BSCCo shall (either itself or through external service provider(s)) perform its MHHS

 Implementation Manager roles:
- (a) in accordance with Good Industry Practice;
- (b) without undue discrimination between MHHS Participants (or classes of MHHS Participants), which includes ensuring no undue discrimination between BSCCo (as an MHHS Participant) and other MHHS Participants;
- (c) with due consideration of the total cost to and impact on MHHS Participants, and taking into account (in so far as is relevant and possible) the likely impact on consumers;
- (d) in accordance with the MHHS Implementation Timetable;
- (e) in accordance with the MHHS Governance Framework;
- (f) in accordance with the MHHS ISMS:
- (g) (save as otherwise directed by the Authority) in accordance with the recommendations from time to time of the MHHS Independent Assurance Provider; and
- (h) in accordance with the Authority's directions from time to time.
- 12.4.2 BSCCo shall ensure that it maintains the service providers and personnel (with the necessary qualifications and experience), IT Systems and facilities necessary to enable it to perform its role as MHHS Implementation Manager.
- 12.4.3 BSCCo shall ensure that the service providers, personnel, IT Systems and facilities it uses to perform its role as MHHS Implementation Manager are sufficiently separated



- from those it uses as an MHHS Participant, as further described in the MHHS Governance Framework.
- 12.4.4 As regards each of the MHHS Implementation Manager roles, BSCCo shall publish a statement on the BSC Website providing an explanation of its decision as to whether or not to appoint an external service provider to perform such role. Where directed by the Authority, BSCCo shall appoint an external service provider to provide one or more of the MHHS Implementation Manager roles. BSCCo shall always remain responsible under this Code for the performance of the MHHS Implementation Manager roles.
- 12.4.5 BSCCo shall provide (without prejudice to paragraph 3.6) such reporting and information to the Authority, and shall attend such boards, steering groups and meetings, in each case in connection with the MHHS Implementation as the Authority may specify.
- 12.4.6 The costs, expenses and liabilities incurred by BSCCo in undertaking the role of MHHS

 Implementation Manager (including such additional expenses and liabilities as BSCCo
 may incur, including with respect to service providers, in the event that BSCCo's
 appointment or responsibilities pursuant to this paragraph 12 cease prior to the
 completion of the MHHS Implementation) shall be BSC Costs, but BSCCo shall keep
 account of such costs, expenses and liabilities separately from all other BSC Costs
 (including separately from the costs incurred by BSCCo as an MHHS Participant).
- 12.4.7 BSCCo shall prepare and make available to the Panel and to the MHHS Programme

 Steering Group regular reports in respect of BSCCo's activities as MHHS

 Implementation Manager, and the costs incurred as the MHHS Implementation

 Manager. However, BSCCo shall not be required to disclose any information relating
 to MHHS Implementation which the Authority expressly requests BSCCo to keep
 confidential.
- 12.4.8 The Authority may, in accordance with the MHHS Governance Framework, determine that an entity other than BSCCo is to perform some or all of the roles of the MHHS Implementation Manager (or parts of those roles). In such circumstances:
- (a) BSCCo shall cease to perform the relevant role(s), and the remainder of this paragraph

 12 shall be interpreted accordingly;



- (b) the MHHS Implementation Manager and each MHHS Participant shall co-operate and provide reasonable assistance in relation to the transfer of functions;
- (c) BSCCo shall, if so directed by the Authority, contract with and pay the replacement provider of the relevant role(s) on the contract terms directed by the Authority; and
- (d) the MHHS Implementation Manager and each MHHS Participant shall continue to comply with its obligations in respect of MHHS Implementation vis-à-vis the replacement provider of the relevant role(s).

12.5 **BSCCo as MHHS Implementation Manager: MHHS SRO**

- 12.5.1 BSCCo shall act as and perform the role of the 'Senior Responsible Owner' for MHHS

 Implementation (the "MHHS SRO"). The MHHS SRO shall be responsible for delivery
 of MHHS Implementation in accordance with the MHHS Implementation Timetable,
 and accountable for ensuring that MHHS Implementation delivers the MHHS Target
 Operating Model and achieves the other outcomes specified by the Authority as part
 of the market wide half-hourly settlement Significant Code Review.
- 12.5.2 The responsibilities of the MHHS SRO shall include (without limitation):
- (a) identifying, and informing the Authority of, any and all modifications to energy licences which are required for MHHS Implementation;
- (b) ensuring that the modifications to this Code which are required for MHHS Implementation are developed in consultation with MHHS Participants and provided to the Authority for implementation;
- (c) co-ordinating the development of the modifications to other Industry Codes which are required for MHHS Implementation (in conjunction with the MHHS Affected Code Bodies and in consultation with MHHS Participants), and ensuring that those modifications are presented to the Authority for implementation;
- (d) ensuring the efficient, economical and co-ordinated design, build, testing and delivery of efficient, economical, co-ordinated and secure IT Systems and business processes for MHHS Implementation across all MHHS Participants;
- (e) developing and documenting the MHHS ISMS for review by the Authority;



- (f) overall responsibility for the governance and change process set out in the MHHS

 Governance Framework; and
- (g) subject to paragraph 12.5.3, being responsible and accountable for all programme decisions made as part of MHHS Implementation.
- 12.5.3 Where the MHHS Governance Framework identifies a decision which should be escalated to the Authority, or the MHHS Independent Assurance Provider determines that a decision should be escalated to the Authority, then the MHHS SRO shall escalate the decision to the Authority, together with the MHHS SRO's recommendation in respect of the decision.

12.6 BSCCo as MHHS Implementation Manager: MHHS PMO

- 12.6.1 BSCCo shall act as and perform the role of the 'Programme Management Office' for MHHS Implementation (the "MHHS PMO"). The MHHS PMO shall be responsible for providing full and effective programme management to support MHHS Implementation.
- 12.6.2 The responsibilities of the MHHS PMO shall include (without limitation):
- (a) establishing and administering the governance groups required by the MHHS

 Governance Framework, including the organisation of meetings, chairing of meetings,
 setting of agendas, preparation and circulation of papers, and the production of
 accurate minutes of meetings;
- (b) managing programme documentation, including dissemination of information to and consultation with MHHS Participants, timely provision of documentation, clear and accessible presentation of documentation, strict version control of documents, and baselining of approved documents;
- (c) establishing and administering the document change control process as required by the MHHS Governance Framework (where relevant, in conjunction with the MHHS DA), including impact assessment and consultation (which must include consideration against any factors specified in the MHHS Governance Framework, and cover impact on consumers, costs to different classes of MHHS Participants and the affect on MHHS Participants to meet the MHHS Implementation Timetable;



- (d) ensuring that any decisions that will ultimately require modifications to this Code or any other Industry Code are developed and consulted upon in accordance with good regulatory practice;
- (e) maintaining the MHHS Implementation Timetable, and updating it to reflect changes made in accordance with the MHHS Governance Framework;
- (f) proposing, consulting on and confirming the timelines and milestones for MHHS

 Qualification under the MHHS Qualification Plan and the timetable for migration under the MHHS Migration Plan, all of which must be performed in accordance with the MHHS

 Governance Framework, including being consistent with the MHHS Implementation Timetable;
- (g) tracking and reporting on progress against the MHHS Implementation Timetable to the MHHS SRO and the MHHS Programme Steering Group; and
- (h) identifying risks to successful completion of MHHS Implementation Timetable milestones (including via a risk, assumptions, issues and dependencies (RAID) log), reporting on those risks to the MHHS SRO and MHHS Programme Steering Group, and proposing to the MHHS SRO measures to address those risks.

12.7 BSCCo as MHHS Implementation Manager: MHHS DA

- 12.7.1 BSCCo shall act as and perform the role of the 'Design Authority' for MHHS Implementation (the "MHHS DA"). The MHHS DA shall be responsible for securing the robust and stable design of the IT Systems via which market-wide, half-hourly Settlement is to be provided, including the existing and new IT Systems of BSCCo and any other new central IT System and the interface of those IT Systems with those of other MHHS Participants (but excluding the IT Systems of such other MHHS Participants).
- 12.7.2 The responsibilities of the MHHS DA shall include (without limitation):
- (a) identifying the design documents and artefacts that will be required to secure effective
 MHHS Implementation, and allocating responsibility for producing and maintaining
 each such design document or artefact;



- (b) baselining all design documents and artefacts in accordance with the MHHS Governance Framework, and managing changes to those design documents and artefacts in accordance with the MHHS Governance Framework;
- (c) ensuring that the design documentation and artefacts are complete and adequate and set out the design with a precision and at a level of detail that allows all MHHS Participants to fulfil their obligations in relation to MHHS Implementation;
- (d) documenting the policies, processes and procedures required by the MHHS ISMS; and
- (e) identifying omissions and other deficiencies in the design documentation and artefacts, reporting on those to the MHHS SRO and MHHS Programme Steering Group, and proposing to the MHHS SRO measures to address those deficiencies.

12.8 BSCCo as MHHS Implementation Manager: MHHS SI

- 12.8.1 BSCCo shall act as and perform the role of the 'Systems Integrator' for MHHS

 Implementation (the "MHHS SI"). The MHHS SI shall be responsible for securing the robust and stable integration of the IT Systems to be used by MHHS Participants for the purposes of market-wide, half-hourly Settlement.
- 12.8.2 The responsibilities of the MHHS SI shall include (without limitation):
- (a) procuring the production of an end-to-end test plan (consistent with the MHHS

 Implementation Timetable), which sets out the test phases for MHHS Implementation
 and the MHHS Participants required to participate in each such test phase (which endto-end plan shall be subject to change control in accordance with the MHHS
 Governance Framework);
- (b) proposing, consulting on, and confirming (in accordance with the MHHS Governance
 Framework) an MHHS Test Plan for each test phase of MHHS Implementation (which
 shall be subject to change control in accordance with the MHHS Governance
 Framework), which must cover for the relevant test phase:
- (i) the MHHS Participants that are required to, or eligible to, participate in the test phase;
- (ii) the objectives for the test phase (which may include intermediate stages) and the pass/fail criteria;



- (iii) the test tools, test data and test environments to be made available;
- (iv) the timetable for the test phase (which may include intermediate stages within the test phase);
- (v) the entry criteria for the start of the test phase (and for any intermediate stage);
- (vi) the reports required to be produced by the MHHS SI and MHHS Participants;
- (vii) the exit criteria for completion of the test phase (and any intermediate stage); and
- (viii) the process by which the test phase (and any intermediate stage) will be determined to have been successfully completed;
- (c) providing assistance to the MHHS Participants in complying with their obligations under each MHHS Test Plan;
- (d) proposing, consulting on, and obtaining approval for (in accordance with the MHHS

 Governance Framework) an MHHS Data Cleansing Plan, an MHHS Data Migration Plan
 and an MHHS Defect Management Plan (which shall each be consistent with the MHHS

 Implementation Timetable and subject to change control in accordance with the MHHS

 Governance Framework); and
- (e) tracking the progress of MHHS Participants against the MHHS Test Plans, and reporting on such progress to the MHHS SRO and the MHHS Programme Steering Group.
- 12.9 BSCCo as MHHS Implementation Manager: MHHS PPC
- 12.9.1 BSCCo shall act as and perform the role of the 'Programme Party Co-ordinator' for MHHS Implementation (the "MHHS PPC"). The MHHS PPC shall be responsible for full and effective co-ordination of MHHS Participants in relation to MHHS Implementation.
- 12.9.2 The responsibilities of the MHHS PPC shall include (without limitation):
- (a) obtaining individual programme plans from MHHS Participants and verifying that each

 MHHS Participant has a plan which is consistent with the MHHS Implementation

 Timetable;



- (b) monitoring each MHHS Participant's progress against its programme plan, and reporting to the MHHS SRO and the MHHS Programme Steering Group on such progress;
- (c) providing support and advice to MHHS Participants on their obligations in respect of MHHS Implementation;
- (d) facilitating effective communication with MHHS Participants in respect of MHHS Implementation;
- (e) ensuring that MHHS Participants are able to raise issues with the MHHS PMO and the MHHS Programme Steering Group; and
- (f) ensuring that MHHS Participants understand and can comply with their obligations under the MHHS ISMS.

12.10 MHHS Independent Assurance Provider

- 12.10.1 The MHHS SRO shall pay for the services of the entity from time to time contracted by the Authority to perform the role of MHHS Independent Assurance Provider and shall, if required by the Authority, enter into an agreement with the MHHS Independent Assurance Provider in relation to such payment.
- 12.10.2 Although the MHHS SRO will pay for the services of the MHHS Independent Assurance

 Provider and will manage the MHHS Independent Assurance Provider's service

 provision in accordance with 12.10.4, such services shall be contracted by the

 Authority and the MHHS Independent Assurance Provider shall owe a duty of care to

 the Authority.
- 12.10.3 The MHHS Independent Assurance Provider must not be:
- (a) BSCCo, any Party, or any other MHHS Participant;
- (b) an Affiliate of BSCCo, of any Party, or of any other MHHS Participant; or
- (c) a service provider to the BSCCo in respect of the MHHS Implementation Manager roles.
- 12.10.4 Save as otherwise directed by the Authority, the MHHS SRO shall ensure that the MHHS Independent Assurance Provider performs its role:



- (a) in accordance with Good Industry Practice;
- (b) without undue discrimination between MHHS Participants (or classes of MHHS Participants);
- (c) in accordance with the MHHS Implementation Timetable;
- (d) in accordance with the MHHS Governance Framework; and
- (e) in accordance with the Authority's contract and/or Authority or any MHHS Programme

 Steering Group directions from time to time.
- 12.10.5 The duties of the MHHS Independent Assurance Provider shall include (without limitation):
- (a) providing confidence to the MHHS Participants that MHHS Implementation will be successfully delivered against the MHHS Implementation Timetable, deliver the MHHS Target Operating Model and achieve the other outcomes specified by the Authority as part of the market wide half-hourly settlement Significant Code Review;
- (b) managing and giving effect to the assurance principles and mechanisms set out in the MHHS Governance Framework;
- (c) where there are disagreements between the MHHS Implementation Manager and

 MHHS Participants in relation to MHHS Implementation, providing an independent

 assessment of the issue and recommendations for resolution;
- (d) delivering independent assurance reporting to the MHHS SRO, to the MHHS

 Programme Steering Group and to the Authority in relation to MHHS Implementation;
- (e) providing advice to the MHHS SRO, to the MHHS Programme Steering Group and to the Authority on any required improvement to MHHS Implementation in order to ensure its successful delivery in accordance with the MHHS Implementation Timetable, and delivery of the MHHS Target Operating Model and achievement of the other outcomes specified by the Authority as part of the market wide half-hourly settlement Significant Code Review; and
- (f) Ensuring that there is independent assurance of compliance with the MHHS ISMS.

12.11 MHHS Participants: BSCCo



- 12.11.1 Separate from its role as MHHS Implementation Manager, BSSCo is an MHHS

 Participant. In addition to its general obligations as an MHHS Participant (as to which see paragraph 12.12), BSCCo also has particular responsibilities as an MHHS

 Participant in respect of the MHHS Qualification Plan and the MHHS Migration Plan.
- 12.11.2 BSCCo shall undertake the following in relation to the MHHS Qualification of Parties and Party Agents in order to participate in market-wide, half-hourly Settlement:
- (a) BSCCo shall propose, consult on, and obtain approval for (in accordance with the MHHS Governance Framework) a plan (the "MHHS Qualification Plan") which identifies: (i) which classes of Party or Party Agent will require MHHS Qualification in order to participate in market-wide, half-hourly Settlement; and (ii) the requirements to be satisfied by each such Party or Party Agent (in sufficient detail to enable them to prepare for and complete such MHHS Qualification). The BSCCo shall also ensure that the MHHS Qualification Plan includes the timelines and milestones for MHHS Qualification set by the MHHS PMO;
- (b) BSCCo shall provide access to any of its IT Systems and business processes necessary to enable the relevant Parties and Party Agents to complete any MHHS Qualification required by them to participate in market-wide, half-hourly Settlement;
- (c) BSCCo shall provide such access on the basis that all such Parties and Party Agents
 can access such systems and processes simultaneously, or (if this is not reasonably
 practicable) on the basis of a non-discriminatory order of access; and
- (d) BSCCo shall provide reasonable information, advice and support to all the relevant Parties and Party Agents to support them in completing MHHS Qualification.
- 12.11.3 BSCCo shall undertake the following in relation to the migration of Metering Systems required for MHHS Implementation:
- (a) BSCCo shall propose, consult on, and obtain approval for (in accordance with the MHHS Governance Framework) a plan (the "MHHS Migration Plan") which identifies:

 (i) which classes of MHHS Participant are to participate in the required migration of Metering Systems; and (ii) the requirements with which each such MHHS Participant must comply (in sufficient detail to enable them to prepare for and complete such migration) The BSCCo shall also ensure that the MHHS Migration Plan includes the timetable for migration set by the MHHS PMO;



- (b) BSCCo shall provide access to any of its IT Systems and business processes necessary to enable the relevant MHHS Participants to complete the required migration of Metering Systems;
- (c) BSCCo shall provide such access on the basis that all such MHHS Participants can access such systems and processes simultaneously, or (if this is not reasonably practicable) on the basis of a non-discriminatory order of access; and
- (d) BSCCo shall provide reasonable information, advice and support to all the relevant MHHS Participants to support them in completing the required migration of Metering Systems.

12.12 MHHS Participants: General

12.12.1 Each MHHS Participant shall:

- (a) deliver the new and modified IT Systems and business processes required of it as part of MHHS Implementation, including the mobilisation, design, building and testing of such IT Systems and business processes and their integration with those of other MHHS Participants (and shall do so in accordance with the MHHS Implementation Timetable);
- (b) take all reasonable steps within its control to facilitate completion of MHHS Implementation in accordance with the MHHS Implementation Timetable, including taking any action reasonably recommended by the MHHS Independent Assurance Provider;
- (c) (in accordance with Good Industry Practice) develop, keep up-to-date and comply with its own programme plan (consistent with the MHHS Implementation Timetable) for MHHS Implementation;
- (d) refrain from any action which would compromise or unduly delay MHHS Implementation;
- (e) comply with the MHHS Governance Framework;
- (f) provide the Authority, the MHHS Independent Assurance Provider or MHHS

 Implementation Manager with such information as they may reasonably request in



- relation to MHHS Implementation, including regarding the MHHS Participant's planning for and progress in relation to MHHS Implementation;
- (g) promptly identify, escalate and report to the MHHS Implementation Manager and MHHS Programme Steering Group any and all risks or disputes that may adversely affect MHHS Implementation;
- (h) comply with the Authority's directions from time to time relating to MHHS Implementation;
- (i) ensure it is able to meet the various milestones on the dates specified in the MHHS

 Implementation Timetable; and
- (j) comply with its obligations under the MHHS ISMS.
- 12.12.2 For clarity, an MHHS Participant cannot seek to avoid or delay undertaking its obligations as an MHHS Participant by reason of cost. The MHHS Implementation Timetable has been set on the basis of engagement with parties and evidence as to an appropriate and overall cost effective implementation timetable, and will be subject to evidence-based review and change as appropriate. If an MHHS Participant considers that the costs of compliance become or are likely to become disproportionate, then it may raise the issue or seek a change under the MHHS Governance Framework, but shall nevertheless continue to comply with its obligations from time to time as an MHHS Participant.
- 12.12.3 The following obligations apply to those MHHS Participants required by an MHHS Test

 Plan to participate in the testing required by that MHHS Test Plan (or who are eligible
 to participate and choose to do so):
- (a) they shall comply with the MHHS Test Plan;
- (b) they shall participate in testing under the MHHS Test Plan, and shall in doing so act reasonably, fairly, co-operatively and in accordance with Good Industry Practice;
- (c) if they are required by the MHHS Test Plan to make their IT Systems available for other MHHS Participants to use for testing, then they must allow such access on the terms proscribed by the MHHS Test Plan;



- (d) if they are required by the MHHS Test Plan to produce test reports demonstrating their successful completion of the test phase (or an intermediate stage), then they must do so; and
- (e) they must provide all information and access reasonably required by the MHHS SI, cooperate with the MHHS SI, and act in accordance with the reasonable instructions of the MHHS SI.
- 12.12.4 The following obligations apply to those MHHS Participants required by the MHHS Data

 Cleansing Plan and/or MHHS Data Migration Plan to participate in the cleansing and/or

 migration of data required for MHHS Implementation:
- (a) they must comply with their obligations under that plan;
- (b) they must report their progress as required by the MHHS SI or MHHS PMO;
- (c) they must undertake the cleansing, migration and synchronisation of data in accordance with the specified timetables; and
- (d) they must provide all information and co-operation reasonably required by the MHHS SI or MHHS PMO.
- 12.12.5 The following obligations apply to all MHHS Participants in respect of the MHHS Defect

 Management Plan:
- (a) they must comply with the MHHS Defect Management Plan;
- (b) they must report and manage defects arising during MHHS Implementation in accordance with the MHHS Defect Management Plan; and
- (c) they must ensure that any defects it identifies are resolved in accordance with the MHHS Defect Management Plan.
- 12.12.6 Those Parties and Party Agents required by the MHHS Qualification Plan to undertake

 MHHS Qualification must comply with the MHHS Qualification Plan. No Party or Party

 Agent will be able to participate in market-wide, half-hourly Settlement until it has

 successfully completed such MHHS Qualification. Failure to complete such MHHS

 Qualification by the date set out in the MHHS Qualification Plan shall result in the Party



- not being able to become a Registrant for Metering Systems for which it is not already a Registrant until such time as it has completed MHHS Qualification.
- 12.12.7 Each MHHS Participant is responsible for ensuring that its agents, employees, service providers and other contractors undertake the activities necessary to enable such MHHS Participant to comply with its obligations as an MHHS Participant. Lack of cooperation from such third parties shall not excuse delays or failures on the part of an MHHS Participant.

12.13 MHHS Participants: DCC

12.13.1 Although the DCC is not a Party to this Code, the DCC is required under the DCC Licence to comply with the obligations expressed in this Code to apply to the DCC as an MHHS Participant, including those that apply to MHHS Participants generally.

12.14 MHHS Participants: MHHS Affected Code Bodies

12.14.1 Although not all of the MHHS Affected Code Bodies are a Party to this Code, each of those that is not a Party has an obligation in the relevant Industry Code to comply with the obligations expressed in this Code to apply to the MHHS Affected Code Bodies as an MHHS Participant, including those that apply to MHHS Participants generally.

12.15 MHHS Participants: Party Agent

- 12.15.1 Although Data Collectors, Data Aggregators and Meter Operator Agents are not Parties, they will have to undergo MHHS Qualification before they are MHHS Qualified to participate in market-wide, half-hourly Settlement.
- 12.15.2 Without limiting the application of paragraph 12.15.1, each Supplier shall ensure that the Data Collectors, Data Aggregators and Meter Operator Agents appointed by it comply with the obligations expressed in this Code to apply to Data Collectors, Data Aggregators and Meter Operator Agents as MHHS Participants, including those that apply to MHHS Participants generally.

12.16 MHHS Participants: Suppliers

12.16.1 Each Supplier which participates in testing under an MHHS Test Plan shall ensure that such testing includes testing in respect of the IT Systems of its Party Agents.



12.16.2 Each Supplier must comply with the MHHS Migration Plan.

12.17 MHHS Performance Assurance

- 12.17.1 The MHHS Independent Assurance Provider shall provide performance assurance in respect of MHHS Implementation, as described in the MHHS Governance Framework.
- 12.17.2 Without prejudice to the Panel's rights and duties in respect of BSCCo, unless and until the Authority otherwise directs, the Panel and Performance Assurance Board's roles in respect of compliance or performance assurance of the obligations of MHHS Participants in respect of MHHS Implementation, shall be limited to:
- (a) those decisions and actions specified in relation to MHHS Qualification; and
- (b) such decisions or actions as are specified in the MHHS Migration Plan.
- 12.17.3 Further, non-exhaustive, details in respect of the assurance which may be conducted by the MHHS Independent Assurance Provider shall be set out in the MHHS Governance Framework, and may include some or all of the following:
- (a) requiring an MHHS Participant to procure its own independent assurance of its readiness to meet specified programme milestones;
- (b) requiring a statement by an MHHS Participant signed by one or more board directors (or, if the MHHS Participant is not a company, an equivalent representative) regarding the MHHS Participant's readiness to meet specified programme milestones, accompanied by the evidence they have relied upon to make that statement;
- (c) when the MHHS Independent Assurance Provider sees fit, notifying each MHHS

 Participant of any failure, or expected failure, by a MHHS Participant to meet such

 MHHS Implementation milestone(s) as the provider considers appropriate; provided that:
- (i) the MHHS Independent Assurance Provider shall have regard to all the circumstances when deciding which milestone(s) to issue notifications in respect of and when to issue such notifications; and
- (ii) the MHHS Independent Assurance Provider shall also notify each MHHS Participant when the MHHS Participant has met, or is expected to meet, such milestone.



12.17.4 Each MHHS Participant is required to comply with the assurance processes applied by the MHHS Independent Assurance Provider in accordance with the MHHS Governance Framework, and BSCCo shall (insofar as within its control) give effect to any decisions of the MHHS Independent Assurance Provider.

12.[182] Tendering for the MHHS Implementation Manager Role

- 12.[218].1 In the event that the appointment of the MHHS Implementation Manager is undertaken through a competitive tender process then BSCCo may participate in that process provided that:
 - (a) the maximum amount that BSCCo may incur in participating in such process shall not in any event exceed the sum of one hundred thousand pounds sterling (£100,000.00) in connection with:
 - (i) its third party costs (including in respect of professional advisors), expenses, other outgoings and liabilities incurred in connection with the planning, preparation, negotiation and award (or any other process leading to an award), of the proposed MHHS Implementation Manager role; and
 - (ii) its overhead costs (including, without limitation, personnel costs),and any such costs, expenses and liabilities shall be BSC Costs;
 - (b) BSCCo shall keep account of such costs, expenses and liabilities separately from all other BSC Costs; and
 - (c) BSCCo shall ensure that such costs are subject to a statutory audit and the findings of such audit are reported to the Panel and Parties.

12.3 MHHS Independent Assurance

12.3.1 BSCCo may, and shall if requested by the Authority (subject to approval by the Authority), appoint a person to provide assurance that the implementation of Market-wide Half Hourly Settlement is being performed effectively (the "MHHS Implementation Assurance Provider").

12.3.2 BSCCo shall:



- (a) in appointing the MHHS Implementation Assurance Provider, put such measures in place as may be necessary, including any measures specified by the Authority, to ensure the independence of the MHHS Implementation Assurance Provider from the MHHS Implementation Manager; and
- (b) if directed to do so by the Authority, remove any person appointed as MHHS

 Implementation Assurance Provider from time to time.
- 12.3.3 The costs, expenses and liabilities incurred by BSCCo in respect of the MHHS Implementation Assurance Provider shall be BSC Costs, but BSCCo shall keep account of such costs, expenses and liabilities separately from all other BSC Costs.

B.BSC SECTION D - BSC COST RECOVERY AND PARTICIPATION CHARGES

- 8.1 For the purposes of the Code:
 - (a) "MHHS Implementation Management Monthly Charge" means the Specified BSC Charges determined in accordance with Annex D-3 to recover MHHS Implementation Management Costs;
 - (b) "MHHS Implementation Management Costs" means the BSC Costs incurred by BSCCo as associated with MHHS Implementation Manager (including paying the ment and MHHS Independent Assurance Provider, as defined in Section C12.2) as such costs are determined by BSCCo under Section C6 and in accordance with Section C12, and for the purposes of this paragraph 8:
 - (c) the "P413 Reconciliation Date" shall be the later of:
 - (i) 1 April 2021; or
 - (ii) the first day of the BSC Year during which the P413 Systems Implementation Date falls;



- (d) the "P413 Reconciliation Period" shall be the period commencing on the P413 Reconciliation Date and ending on the day immediately preceding the P413 Systems Implementation Date; and
- (e) "P413 Systems Implementation Date" means the date notified to Parties in advance by BSCCo on which the system changes needed to determine MHHS Implementation Management Monthly Charges are implemented by BSCCo.

C. BSC ANNEX X-1: GENERAL GLOSSARY

MHHS Implementation	has the meaning given to that term in Section D8.1;
Management Costs	
"MHHS Implementation	has the meaning given to that term in Section
Manager"	C12. <u>2</u> 1.1;
[P413] "MHHS	has the meaning given to that term in Section
Implementation"	C12. <u>2</u> 1.1;
[P413] "MHHS	has the meaning given to that term in Section
Implementation Assurance	C12. <u>2</u> 1.1;
Provider"	
[P413] "MHHS	has the meaning given to that term in Section D8.1;
Implementation	
Management Costs"	
[P413] "MHHS	has the meaning given to that term in Section D8.1;
Implementation	
Management Monthly	
Charge"	
[P413]"MHHS	has the meaning given to that term in Section C12.1.1;

Implementation Manager[®]



D.Smart Energy Code (SEC)

Add a new Section C7.13 to the SEC as follows:

"Market-wide Half-Hourly Settlement Implementation

7.13 SECCo shall (and the Panel shall ensure that SECCo shall) comply with the obligations expressed to apply to SECCo (either specifically or generically as a category of participant) under section C12 (Market-wide Half-Hourly Settlement Implementation) of the Energy Code known as the Balancing and Settlement Code."

E. REC

Add a new Clause 5.24 to the main body of the REC as follows:

"Market-wide Half-Hourly Settlement Implementation

5.24 RECCo shall (and the REC Board shall ensure that RECCo shall) comply with the obligations expressed to apply to RECCo (either specifically or generically as a category of participant) under section C12 (Market-wide Half-Hourly Settlement Implementation) of the Balancing and Settlement Code."

F. CUSC

Add a new Clause 8.2.3 to the main body of the CUSC as follows:

"Market-wide Half-Hourly Settlement Implementation

8.2.3 National Grid Electricity System Operator Ltd ('NGESO Ltd') (and the Panel shall ensure that NGESO Ltd shall) comply with the obligations expressed to apply to NGESO Ltd (either specifically or generally as a category of participant) under section C12 (Market-wide Half Hourly Settlement Implementation) of the Balancing and Settlement Code."



G. DCUSA:

Add a new Clause 7.42 to the main body of the DCUSA as follows:

"Market-wide Half-Hourly Settlement Implementation

7.42 DCUSA Ltd shall (and the Panel shall ensure that DCUSA Ltd shall) comply with the obligations expressed to apply to DCUSA Ltd (either specifically or generically as a category of participant) under section C12 (Market-wide Half-Hourly Settlement Implementation) of the Balancing and Settlement Code."