Present:

Ellen Diskin (ED) Chair
Stephen O'Sullivan (SOS) Secretary
Derek Hynes (DH) DSO
Tony Hearne(TH) DSO

Padráig Lyons (PL) ESB Networks (presenting)

David Lindsay (DL) CRU Lisa McMullen (LMcM) TSO

Carlos Galvan (CG) Embedded Generators (solar)
Ger Beatty (GB) Synchronous Generators Ireland
David McMullin Embedded Generators (wind)

Apologies:

Robert O'Rouke (ROR) CRU Michael O'Hara (MOH) ETCI

Conor Minogue (CM) Major Customers

Jim Wynn (JW) PES/Independent Suppliers

1. Review of Previous Minutes:

- It was noted in a review of the minutes from the previous meeting that at that time a copy of the revised Conditions Governing Connection to the Distribution System had been provided to the CRU for comment. CRU had no comment on the revised proposal. As such, it was agreed that a copy of this proposal would be provided to all attendees for comment. GB queried when comments should be provided by. ED confirmed that the document is for approval in September, so comments in July and August would be welcome.
- Attendees were updated that ESBN's Planning Standards review project is currently being discussed with stakeholders, and an update will be provided at the Autumn DCRP meeting.

2. <u>Derogations Update:</u>

- LMcM explained that it will be September before the TSO is able to allocate resources to assessing derogation applications.
- SOS explained that the DSO currently has 61 permanent derogation applications to assess, and has assessed a number of temporary derogations.

3. Modification proposal #44 - 1.1 p.u Clarification and Adoption of Declared Supply Voltage:

- TH presented Modification #44, which was circulated to the panel on 24 May. This Modification is driven by a requirement in the European Network Codes Requirements for Generators [RfG], which would require either a change to the planning standards, which was opposed by industry as it would result in higher connection costs in some cases, or a proposal as per Modification #44.
- Modification #44 introduces a new term "Declared supply voltage". ESBN clarified that this does not change system planning or operation in any way it is simply a reference voltage against which EU Network Code requirements would apply. Incidentally, as the most recent version of EN 50160 prescribes voltage remaining within a band of a "declared supply voltage" a term not previously used by ESBN, introducing the term formalises ESBN's compliance with EN 50160.
- TH stated that ESB Networks would be weary of unintended consequences if nominals
 were changed, which was an alternative approach proposed by industry previously.
 TH confirmed that the nominal voltages are used and reflected in many different
 practices and procedures, thus changing them could have practical implications.
- ESB Networks confirmed that Modification #44 does not result or create any opportunity for changing planning standards or operational voltages. There is no intent to go outside the max and min operating voltages stated in the Distribution Code, nor does introduction of the Declared Voltage allow ESBN to do this. The absolute max and min operating voltages are stated in the Distribution Code and another, different, modification would be required to remove these.
- ED asked the panel if this Modification could be recommended for approval.
- LMcM commented that the TSO has concerns with the proposed Modification. The TSO have concerns with the wording surrounding +/- 10% of Connection Point values, and the impact it could have for the transmission system. LMcM made reference to the TSOs concerns over section DPC4.2.2 of the Distribution Code and how it interacts with tables 2 and 6. ED and TH confirmed that the proposal would have no impact at all for the transmission system, as it neither results in nor allows any change in planning or operation of the system. TH will attempt to redraft section DPC4.2.2 or

potentially even remove the paragraph if possible, to ensure that the Modification cannot be read or misinterpret to suggest that it would result in any change or impact.

- ED asked the panel if it would approve the proposed Modification in principle providing that the DSO and TSO come to an agreement.
- Modification #44 was approved in principle by the panel contingent on agreement between the SOs. Once an agreement is made between the SOs the Modification will be re-circulated to the panel via email. There will then be a period of 4 weeks for comment. If only assenting comments, or no comments, are received within this time the Modification will be deemed recommended for approval and submitted to the regulator.

Action:

- A meeting is to be arranged between the SOs to come to an agreement on the Modification.
- The agreed document will be re-circulated to the panel by email
- If comment is not received within 4 weeks the Modification will be deemed recommended for approval and submitted to the regulator.

4. Modification Proposal #43 - Proposed Distribution Code structural changes to facilitate adoption of RfG (and subsequent) Network Codes:

- At the previous meeting it was agreed that two mock ups of different styles demarking new or updated content arising of the EU Networks codes would be prepared. These were shown to the panel and discussed. As both suggestions would not be clear for colour blind readers, the original proposal was agreed as the preferred solution.
- As agreed at the last meeting, text referring to the date of effect and cohorts was removed from Modification #36 and the revision circulated to the panel.
- TH informed the panel that the reference to date of effect and cohorts must still be transferred into Modification #43 which is legally mandated to be non-retrospective. There were no objections in principle.
- Once this is completed, the revised Modification #43 will be re-circulated to the panel by email. There will then be a period of 4 weeks for comment. If no comment is received within this time the Modification will be deemed recommended for approval and submitted to the regulator.

Action:

 The date of effect and cohorts that were removed from Modification #36 are to be copied into Modification #43. This will be re-circulated to the panel by email, and if only assenting comments, or no comment, is received within 4 weeks, the Modification will be deemed recommended for approved and submitted to the regulator.

5. Modification Proposal #36 – Power Park Modules:

- TH confirmed that Modification #36 has been revised with text referring to Date of Effect and cohorts removed. A Class Derogation is in preparation so that in practice the modification is not retrospectively applied.
- The revised version was circulated to the panel on 23 May.
- ED and TH highlighted that approval of Modification #36 is urgent to accommodate solar and other inverter based generations in the Distribution Code.
- LMcM stated that the TSO has issue with the date of effect of the class derogation. It
 was noted that the proposed date of effect for the derogation circulated by email a
 number of weeks in advance of the meeting was the date of approval by the regulator
 of the Modification. LMcM noted that the TSO would call for the date to be July 2015.
- ED said the class derogation could be re-drafted with the TSOs preferred date and recirculated pending other attendees comment. There was no objection.
- GB stated that in principle he doesn't have any objection to the Modification but curious as to the cost of the RTU. TH said that the agreed technical solution developed for this to avoid the cost of a TSO RTU is a less costly DSO RTU.
- ED asked if the Modification can be recommended. Modification #36 was recommended and will be sent to the CRU for approval.

Actions:

- SOS to re-draft the class derogation to include the TSOs preferred date of effect.
- Modification #36 to be submitted to the CRU for approval.

6. Electric Vehicle Connections:

- PL gave a presentation to the panel on the overview of ESB Networks activities to
 ensure the distribution system cost effectively provides for the Electrification of
 Transport, as an the opportunity for attendees to comment on ESBN's proposals and
 approach.
- The presentation outlined ESBN's efforts to deliver policies and standards that provide
 the right capacity and services from the outset, with enhanced urban housing design
 in all new developments from Q2 2018 and enhanced rural LV design for all new
 developments Q3 2018. An increased design capacity from the outset offers over
 double the capacity per customer at a very low incremental cost. Additionally, low
 cost, low disruption retrofit solutions have been developed and are being introduced.
- Activities to ensure a whole system view were noted, including working with NSAI, DCCAE, DTTAS, eCars, CRU.
- ED noted that ESB Networks is shortly completing a Summary Report to accompany
 its previous (longer) Electric Vehicles Pilot report, which provides full background
 information on how these new designs and materials were developed and
 economically assessed, and on the development of the pilot electric vehicle
 infrastructure.
- GB asked whether the introduction of tap changing MV/LV transformers would widen
 the operating voltage range at low voltage. ED and TH confirmed that these would
 not widen the operating voltage range, but would actively manage voltage within the
 allowed range to provide additional voltage headroom.
- GB asked how the cost of retrofit provision of enhanced capacity in existing urban developments would be treated, for example if a cooperative or community were to pursue a local energy development. ED and PL said that this would be fed back into the project to be considered – to date only new estates or individual retrofits had been considered in detail.
- CG noted that it is an appropriate time to start providing for domestic charging in new designs, as there is a lot of construction beginning or happening now.
- CG noted that active management and signalling might provide opportunities for electric vehicles to offer some balancing load. ED agreed these ideas should be raised

and discussed early, noting that in GB legislation was being passed to require a signals / control port as standard in chargers.

7. Any Other Business:

 CG enquired whether the TSO or DSO consider the coincidence or otherwise of wind and solar in planning, and suggested that Met Éireann may have good models. LMcM confirmed that this is not provided for in planning today and that the TSO is not working on this kind of analysis. ED said that this suggestion would be passed on to the Planning Standards Review to be considered.

8. Next Meeting Date:

 A date in September was proposed for the next meeting and will be confirmed at a later date.