

Distribution Code Review Panel

Meeting 64 – 8 June 2017

ER P2/6 Revision – Progress Update

Paper by Code Administrator

Background

The principle reason for the review of P2/6 is to ensure that as new Low Carbon Technology interventions becomes more prevalent, the underlying impact on supply reliability remains transparent and quantifiable and that the resultant supply security remains acceptable to customers.

As ER P2 had not been substantively reviewed for around 30 years and considering the many climate change drivers and significant technological developments, it was agreed by stakeholders that it was timely to review ER P2/6. As ER P2/6 is an annex 1 document to the Distribution Code a formal request to revise ER P2/6 was submitted to and approved by the Distribution Code Review Panel (DCRP).

Subsequently a DCRP stakeholder working group supported by a consortium consisting of DNV GL, NERA and Imperial College commenced work in January 2015 to undertake a review of ER P2/6. This work, referred to as Phase 1, delivered a series of work stream reports, all of which are published on the Distribution Code website, which culminated in a final report delivered by them in September 2016¹

Outputs of Phase1.

The Phase 1 analysis work was largely economic and recommended consideration of some potentially quite fundamental changes. It is of note that the time horizon and context for the analysis was not constrained by the structure and policy decisions put in place for ED1 nor by any assumptions about the level of supply security that would be acceptable to stakeholders in the future.

To test these proposals with stakeholders Phase 1 also included a series of stakeholder consultation events. Stakeholder feedback didn't align with or generally support the conclusions of the economic analysis and concerns were raised about the implications for the underlying reliability and availability of supply.

The primary objectives of Phase 1 were to assess the merit and direction of any revision of ER P2/6. It concluded there was a strong economic case to change P2/6 but that there were significant stakeholder issues remaining to be resolved.

It is of note that Phase 1 contains three somewhat separate sets of recommendations for further consideration;

1. More explicit guidance on the inclusion of Distributed Energy Resources's (DER's) in the assessment of security of supply. This is already permitted by P2/6 and hence there are no policy barriers to the realisation of associated benefits.

¹ <http://www.dcode.org.uk/dcrp-er-p2-working-group.html>

2. A change in the minimum level of security of supply, specifically a reduction. Such a revision would offer some material future economic benefits but it is clear that stakeholders have significant concerns over such a move and the economic costs of any reduction in quality or security of electricity supplies.

3. Additional expenditure not at present in allowances. The analysis shows additional expenditure as being efficient in areas such as High Voltage network automation and mitigation of High Impact Low Probability events. The case for these was compelling, however there are a number of factors that merit further consideration including; timing of investments versus ED1 allowances, the assessment of 'efficient expenditure' and the price impacts for customers.

Phase 1 suggests that all three of the above are implemented simultaneously; in that it finds them all to be 'efficient'. However, it does not provide any analysis of the net effect of all three in combination. This is considered to be an essential step in engaging further with stakeholders. For example stakeholder concerns in respect of item 2 may be alleviated in part or whole by the effect of 3.

It is also of note that the phase 1 work did not consider the operational aspects of these changes. For example whilst in isolation the changes in 2 may be attractive, their cumulative effect during periods of severe network depletion such as storms warrants further analysis. Other operational considerations include the effects on network access for routine maintenance activities and for establishing new connections.

The DCRP accepted the Phase 1 report and endorsed the need to move to Phase 2 which is now ongoing.

Phase 2 work – Implementation Plan

The scope of the potential changes suggested by Phase 1 were very significant but the report lacked detail on important implementation issues. As such Phase 1 could not be implemented by the DCRP without additional detailed work being undertaken.

DCRP met in December 2016 to both review Phase 1 and to determine how to structure and expediently progress to implementation. Mindful of the costs incurred in Phase 1, the DCRP asked a DNO sub group to devise an implementation framework known as Phase 2.

Two DNO workshops were held in February and a further two in March 2017, Ofgem were invited and attended the first of these workshops. The scope of the four workshops is detailed in Appendix 1. The sub group report is now being compiled and will be submitted to the DCRP P2 stakeholder working group (including Ofgem BEIS and others) for consideration and approval.

It is expected that the DCRP stakeholder working group will test the workshop output against their terms of reference.

Next Steps

It is expected that the Phase 2a changes will be drafted into a set of formal recommended changes to ER P2/6 & supporting Engineering Technical Report 130 towards the end of 2017. In line with open governance procedures these will be submitted to the DCRP, most likely in December 2017 or March 2018 for approval to proceed to consultation, and then followed by a final report to the Authority. Once the 2a changes have been accepted by DCRP work will commence on phase 2b.

ENA and members also believe that many of the issues will also form elements of the work undertaken as part of the TSO DSO project.

It likely that the implementation work will be structured in two sub phases:

Phase 2a - This will modify a number of the technical aspects of P2/6 and add clarity to the treatment of DER resources to bring benefits to customers. These changes have been the primary focus of the four workshops and in the main the changes are compatible with the overall RIIO-ED1 regulatory package.

Phase 2b - This will address those items requiring more fundamental changes (recommendation sets 2 and 3 above) and with which there are potentially associated regulatory discussions needed.

Once this approach has been ratified by the DCRP P2 stakeholder working group a detailed project delivery plan will be produced including all milestones and deliverables. For information a high level timeline for Phase 2 is included Appendix 2.

The Panel is requested to note progress.

Appendix 1 – Summary of DNO scoping workshops:

Workshop 1: Defining the purpose of P2/6 and a new/revised P2/7 - 13/2/17

- What is the purpose P2/6? Is it a demand or demand & generation standard and should it include operational standards as well as design.
- Going forward as distribution networks become more active, is P2 fit for purpose if it remains purely demand security based without Network capability guidance/ direction?
- Even if P2 does not plan network capacity, should it provide tools to help estimate the increased contribution of generation and other DER within its networks?
- Is it best to change ETR 130/131 or P2 itself?
- How should P2/6 or any revised standard link to and align with SQSS in the future?

Workshop 2: Defining demand - 27/2/17

- Defining demand – how is it calculated?
- Impacts of definition on SQSS
- Week 24 data implications.
- Visibility of demand/generation (latent).
- Treatment Flexible vs. inflexible demand and the consideration of diversity factors for generation and demand.
- Identifying regional aspect to demand and generation.

Workshop 3: Automation and Demand/Generation Side Response - 10/3/17

- Assessing the treatment of Active Network Management (ANM).
- Automation and transfer capacity - how are these treated?
- Reliability of DSR, time of use tariffs and other technologies.

Workshop 4: F-Factor Contribution 17/3/17

- Assessment of existing f-factors.
- Evaluation of 2017 persistence supported by a consultant if required.
- Identifying the contribution of directly vs. indirectly contracted storage (and other technologies).
- Assessment of the interaction of f-factor and continuous vs. cyclic ratings.
- Modifications to ETR 130 and ETR 131 which should be considered.

Appendix 2 - High Level Phase 2 timeline:

Phase 2a	
DNO scoping workshops report to DCRP	Q2 2017
Review with DCPR	Q3 2017
Open Consultation on forward options with stakeholders	Q3 2017
Work up changes to P2 for P2/7 based on stakeholder feedback – using customer panel to validate changes	Q3 2017
Formal DCRP proposal for modification	Q4 2017
Consultation	Q1 2018
Implement P2/7	Q2 2018
Phase 2b	
DNO assessment of potential impacts and savings	Q3 2017
Identify options for future demand security – firm/essential v flexible demands – requirements for future services inc transport and heat	Q1 2018
Establish informed stakeholder panel (academic, customer (Citizens Advice – other social representatives), suppliers, service providers, storage operators, generators, transportation - public and vehicle providers.	Q2 2018
Undertake stakeholder consultations to assess economic and societal values and impacts expressed in feedback from phase 1	Q3 2018
Develop options for P2/8	Q3-4 2018
Consult on options	Q1 2019
Recommendations to DCRP, Ofgem and BEIS	Q2 2019