

European Network Codes: HVDC and Emergency & Restoration

DECC-Ofgem Stakeholder Group 1 May 2014

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HVDC Code

State of play

ACER received an informal draft 7th April 2014 which was submitted for ENTSO-E internal approval

There have been substantial improvements to address ACER areas of concern:

- 1. Clarification of significant grid users
- 2. Appropriate national scrutiny
- 3. Consideration of the cost implications of the code
- 4. More burdensome requirements loosened = lower cost impact on developers

ENTSO-E submitted the final code to ACER today (1st May 2014)

ACER have not yet seen any significant issues with the text

Next Steps

ACER HVDC Workshop will be held **19**th **May 2014 in Ljubljana**. All stakeholders are welcome. The deadline for <u>registration</u> is **14**th **May**

ACER has 3 months to provide an opinion on the code.



Emergency & Restoration Code

Code to cover:

Requirements related to the following System States – Emergency, Blackout, Restoration

System defence planning – DP Design, coordination, frequency & voltage management, market suspension etc

System restoration planning – RP Design, system restoration, re-synchronisation between TSOs, market restart

Information exchange, post-event analysis and testing

Alignment to other codes:

No duplication, only complementing other ENCs

Close alignment to other ENCs

RfG NC Gen classification will be used (A-D) to ensure requirements are proportionate

ENTSO-E timings

ENTSO-E started drafting: 1 April 2014
 First Public Workshop: 9 July 2014

Consultation & Workshop: October/November 2014

Submission to ACER: 1 April 2015



ENC handbook outline

- Purpose: the handbook sets out an overarching general approach to guide ENC implementation
- Scope: the handbook does not try to answer ownership or who is responsible for what questions
- At this time, the handbook does not include the supporting framework necessary for Ofgem to undertake it's role – it assumes that is in place
- Structure: the handbook consists of five "stages" / chapters:

1. Analysis – unpack code requirements

2. Analysis – where code fits in GB framework

3. Governance & stakeholder engagement

4. Implement & demonstrate GB framework is compliant

5. Monitor & enforce when all rules are in place



Key elements and interactions of the gas and electricity markets

Martin Crouch
AEWG Chair
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29 April 2014



Bridge paper analysis

1. Energy sector trends



2. Impacts for Europe's regulatory framework



1. Electricity Wholesale Market trends

A. Integration of wholesale markets

Effective network code implementation:

Driving coordinated cross-zonal capacity calculation, forward-capacity allocation, day-ahead and intra-day market coupling etc.

Benefits of cross-border trade and more interconnection:

- Enhanced competition
- shared reserve capacity and balancing services maximising efficient use of resources



1. Electricity Wholesale Market trends

B. Renewables growth

Maintaining frequency and voltage levels will become a bigger challenge due to volatility of renewables generation:

- More flexible tools will be required, such as fastreaction balancing services or congestion management services
- Greater coordination between TSOs and between TSOs and DSOs will be needed
- Gas-fired electricity generation plants may play a greater role



1. Electricity Wholesale Market trends

C. Policy interventions to ensure adequacy

Policy will need to support the adequacy of generation capacity and allow

- for capacity remuneration mechanisms (CRMs) that don't distort the European wholesale market
- the pricing of flexibility, which supports price discovery for products that can be rapidly activated and provides efficient price signals for investments in new flexible capacity
- balancing arrangements to sufficiently incentivise flexibility



A. An integrated electricity market across the continent

Although the immediate focus is the rapid implementation of the Electricity Target Model (ETM), regulators will continue to assess where improvements can be made.

B. Continued development of electricity wholesale markets



A. An integrated electricity market across the continent

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B. Continued development of electricity wholesale markets

Going forward key priorities for Regulators in shaping market arrangements are:

- Promoting a system where all parties are balance responsible
- Ensuring that generation and demand compete in a nondiscriminatory manner
- Further work towards a European balancing market
- Optimisation of capacity calculation methodologies to establish link between commercial and physical congestions
- Promote the visibility of the true value of electricity delivery



C. Intervention in electricity markets

NRAs are happy support Member States and the European Commission in the preparation and assessment phase of non-market based solutions to help ensure distortions are avoided.

D. Improved coordination

NRAs are committed to cooperate with each other TSOs and other relevant players to facilitate the further integration of the internal energy market.



Thank you for your attention!

