national**grid**

European Network Codes

Background



Developing a harmonised European energy market

The European Third Energy Package came into law on 3rd March 2011, with the aim of enabling a greater penetration of renewables, improving security of supply and enhancing competition.

Harmonisation

It looks to do this by developing a European internal energy market through the creation of a regulatory framework to support the harmonisation and integration of European Energy Markets. This harmonisation and integration is underpinned by the European Network Codes which form a legally binding set of common technical and commercial rules and obligations. A number of the European Network Codes have entered into force, with additional European Network Codes following over time.

Creation of ENTSO-E / ENTSOG

The role of ENTSOs (the European Network of Transmission System Operators for Gas or Electricity) is to facilitate and enhance cooperation between national transmission system operators (TSOs) across Europe in order to ensure the development of a pan-European transmission system in line with European Union energy goals. National Grid is a member of both ENTSOG & ENTSO-E.

Creation of Pan-European Network Codes

The ENTSOs are tasked with drafting binding network codes. They develop these codes by engaging with national TSOs and making use of their expertise.

The process begins with a request from the European Commission (EC) to ACER (Agency for the Cooperation of Energy Regulators) to submit a Framework Guideline. The ENTSO's then develop the related network code in line with the ACER Framework Guideline, conducting extensive public consultations throughout the development process. The code then goes through a Comitology process, which is where Member States agree on the final text. Then on the EC's approval, the network code becomes legally binding, being adopted in accordance with existing legislative processes.

This matters...

...to whom

The European Network Codes introduce a number of changes across the GB electricity industry to deliver the Single Energy Market. There are eight European Network Codes, each placing different obligations on GB with varying degrees of impact, the impacts have far reaching impacts that will affect many GB customers and stakeholders.

...when

Each European network code has its own date for entry into force and timescales for implementation, but this generally ranges from 2017 through to 2023 for some elements. There are fact sheets which detail each of these codes and what the timescales and impacts are.

...how

Where possible, we as an industry will be using existing GB frameworks and processes to implement the European network codes.

Ofgem are involved in each of the industry workgroups which are now progressing implementation of the changes in GB. Any changes must get Ofgem approval.

GB & EU Bodies

















There are currently 8 European network codes, grouped into 3 areas of focus: 'Markets', 'System Operation' & 'Grid Connection'.

Markets	Establishes a platform for managing capacity and flow around the interconnected system to facilitate the setup of a single EU market				
	Capacity Allocation & Congestion Management ("CACM")	Forward Capacity Allocation ("FCA")			
	Likely Applicability Includes: Trading, Power Exchanges, Interconnectors, Transmission System Operators, Distribution System Operators, Generators, Demand, Balancing Services				
System Operation	Harmonises the processes Transmission System Operators have to manage their systems, including system restoration				
	(Transmission) System Operation Guideline ("TSOG")		Emergency & Restoration ("ER")		
	Likely Applicability Includes: Generators >1MW, Transmission Connected Demand Facilities, Transmission System Operators, Distribution System Operators, Demand Side Response Services, HVDC systems				
Grid Connection	Sets consistent technical requirements across EU for new connections of user equipment (e.g. generation/ interconnectors)				
	Requirements for Generators ("RfG")	High Voltage Direct Current ("HVDC")		Demand Connection (Code) ("DCC")	
	Direct Applicability Includes: New generators ≥800W, Operators of new HVDC Links, new DC-connected offshore power park modules, new directly-connected Demand Users, new providers of Demand Side				

Response, Equipment Manufacturers