



Department  
of Energy &  
Climate Change

# Cross-Border participation in the GB Capacity Market

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9<sup>th</sup> October 2015



# Interconnection to GB



Existing Projects				Developer(s)
IFA	France	2 GW	1986	NGIL / RTE
Moyle	N. Ireland	500 MW	2002	Mutual Energy
BritNed	Netherlands	1 GW	2011	NGIL / TenneT
East-West	Ireland	500 MW	2012	EirGrid

Pipeline			Date*	Developer(s)
NEMO	Belgium	1 GW	2018	NGIL / ELIA
Eleclink	France	1 GW	2016	JV: Eurotunnel & Star Capital
NSN	Norway	1.4 GW	2019	NGIL / Statnett
IFA2	France	1 GW	2019	NGIL / RTE
FABLink	France	1.4 GW	2020	JV: Alderney/ Transmission Inv't LLP] & RTE
GreenLink	Ireland	0.5	2020	Element Power
NorthConnect	Norway	1.4 GW	2021	Consortium
IceLink	Iceland	1 GW	2020+	NGIL / Landsvirkjun
Viking	Denmark	1 GW	2020+	NGIL/Energinet.dk

\*From National Grid's Interconnector Register (a record of connection agreement dates between developers and the System Operator)



# Why should I/C participate in the CM?

1

## **Security of Supply**

Interconnectors provide valuable Security of Supply benefits – fairness

2

## **Single European Market**

Cross-border EU Rules, State-Aid commitment

3

## **Incentivise further interconnection**

& not unfairly disadvantage existing IC: a strategic priority for UK government

# How did we come to a GB approach?

- 2 public consultations – October 2013 & September 2014
- Extensive stakeholder engagement:
  - meetings with industry (IC developers, industry associations representing GB and non-GB generators)
  - relevant ministries in other European governments
  - European Commission: DG Energy, DG Comp
  - European agencies and associations.
- Consultancy study

# Options considered

Initially considered simply extending eligibility to non-GB capacity but enhanced coordination needed between member states, TSOs, Regulators & EC:

- Agreement on what product is being traded
- Preparation for implementation:
  - determination of how much capacity to auction in the interconnected countries i.e. common approach to de-rating interconnectors
  - agreement on how to prequalify and de-rate plants in interconnected countries (UK currently connected to FR, NL & IRL)
  - inter-TSO agreements on how to test and verify/monitor these plants (and how to pay for this service)
  - the implementation of a zonal auction which is likely to have different clearing prices in different countries
  - international cooperation on the enforcement of penalties, agreement on how to split the penalty between the generators & interconnector
- Even if all this is achieved, it would be impossible to guarantee flows to GB during stress events - the basis of the current GB delivered energy model

# Options for including Interconnection

	IC	Generator
Delivery	<ul style="list-style-type: none"><li>- Obligation with party that does not have dispatch control</li><li>- Flows governed by market coupling, not guaranteed to GB</li></ul>	<ul style="list-style-type: none"><li>- Incentivises party with most (though not complete) influence</li><li>- Complex arrangements needed (capacity to procure, M&amp;V, penalty enforcement)</li></ul>
Availability	<ul style="list-style-type: none"><li>- IC treated differently to national generation; distortion to investment incentives?</li><li>- Politically difficult?</li></ul>	<ul style="list-style-type: none"><li>- Non-GB generators treated differently to nat'l generation. Reduced/distorted investment incentives?</li><li>- Politically difficult?</li></ul>

# Interim GB approach: Interconnector-led delivery obligation

## Capacity to procure

Interconnection contribution included in the amount to procure  
(no longer an amount to be subtracted)

## Eligibility & Prequal

Interconnectors (individually de-rated) eligible to bid directly  
into the Auction for one year agreements

## Auction & Trading

Same treatment as domestic generation – ICs enter auction as  
price-taker, same treatment for secondary trading

## Delivery

Same treatment as domestic generation – performance  
monitored during periods of GB system stress

## Payment

Same treatment as domestic generation – capacity payments  
made to interconnector owner.  
Payments treated as market revenues for applicable revenue  
caps managed by Ofgem.

# Benefits of GB approach

- Practical and implementable, builds confidence
- Good first step to improve modelling of individual markets
- Offsets any dampening effect on the wholesale price by the CM, thereby preserving investment opportunity for interconnection – enabling GB to deepen integration with the Single Energy Market
- One year agreements would give us flexibility to move to an EU solution



# Status & Next steps

- Next CM Auction (Dec 2015) for DY 2019/20 to include interconnectors
- Regulations came into force March 2015
- De-rating factors published on June 29<sup>th</sup>:

	LWR		
	country flow	with technical	de-rated capacity
IFA	60%	52%	1.04
Eleclink	60%	56%	0.56
BritNED	71%	69%	0.69
NEMO	58%	54%	0.54
Moyle and EWIC	6%	6%	0.06
Total			2.89



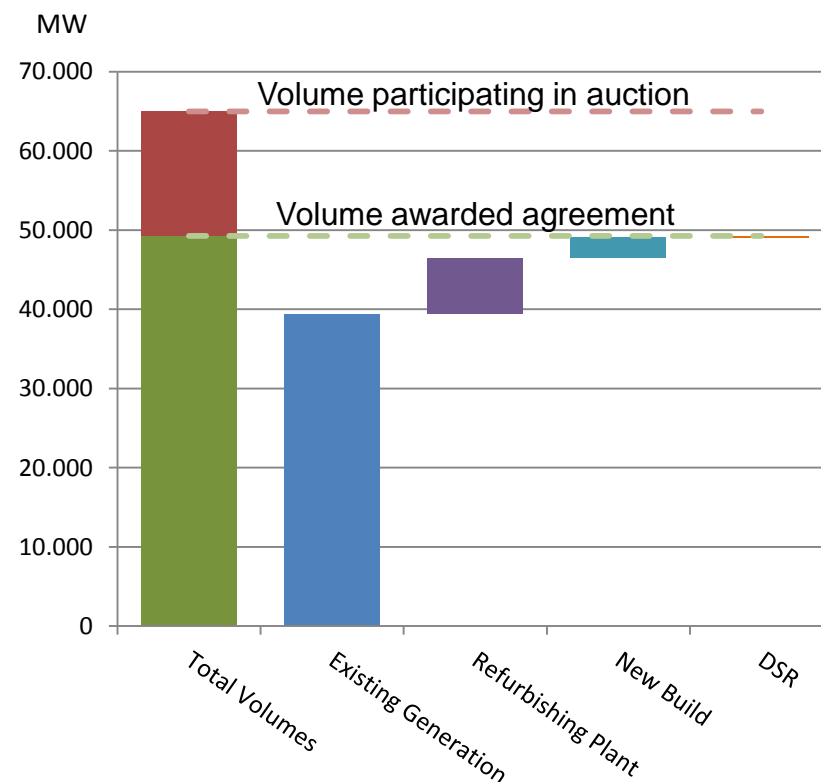
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# Annex: 2014 Auction Results



# Results of 2014 Capacity Auction

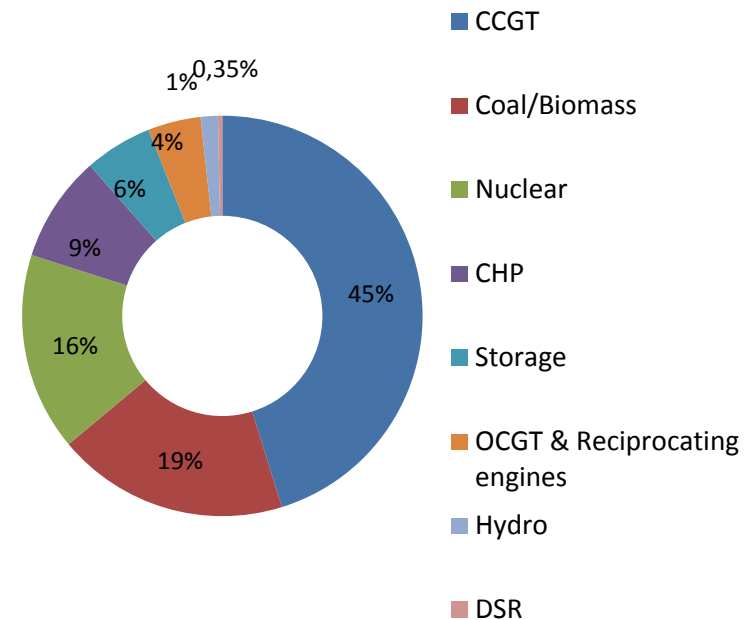
- 65GW participated in auction
- 49.3GW of capacity secured for 2018/2019 – 76% of volume participating
- Capacity Price of £19.40 per kW p. a.
- 2.6GW of new generation including 1.6GW CCGT
- 39.4GW of existing generation
- 7GW of Refurbishing plant
- 0.17GW of DSR



Source: DECC analysis; CM Register

# Results of 2014 Capacity Auction

Capacity by Technology Type	
CCGT	22,259
Coal/Biomass	9,232
Nuclear	7,876
CHP	4,235
Storage	2,699
OCGT & Reciprocating engines	2,101
Hydro	682
DSR	174



Source: National Grid