Cross-Border participation in the GB Capacity Market

Elaine O’Connell
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Agenda

• Capacity Market Results

• Cross border participation in the GB Capacity Market

• Next Steps
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

<table>
<thead>
<tr>
<th>Technology Type</th>
<th>Capacity (GW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCGT</td>
<td>22,259</td>
</tr>
<tr>
<td>Coal/Biomass</td>
<td>9,232</td>
</tr>
<tr>
<td>Nuclear</td>
<td>7,876</td>
</tr>
<tr>
<td>CHP</td>
<td>4,235</td>
</tr>
<tr>
<td>Storage</td>
<td>2,699</td>
</tr>
<tr>
<td>OCGT &amp; Reciprocating engines</td>
<td>2,101</td>
</tr>
<tr>
<td>Hydro</td>
<td>682</td>
</tr>
<tr>
<td>DSR</td>
<td>174</td>
</tr>
</tbody>
</table>

Source: National Grid
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
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

### Delivery

**IC**
- Obligation with party that does not have dispatch control
- Flows governed by market coupling, not guaranteed to GB

**Generator**
- Incentivises party with most (though not complete) influence
- Complex arrangements needed (capacity to procure, M&V, penalty enforcement)

### Availability

**IC**
- IC treated differently to national generation; distortion to investment incentives?
- Politically difficult?

**Generator**
- Non-GB generators treated differently to nat’l generation. Reduced/distorted investment incentives?
- Politically difficult?
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 – existing ICs enter auction as price-taker, same treatment for secondary trading.

**Delivery**
Same treatment as domestic generation – delivery 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
Next steps

For GB:
- Lay regulations in Parliament (including IA): January 2015
- Amended Regulations come into force: March 2015
- Amended Rules published & in force: March 2015
- Next CM Auction (Dec 2015) for DY 2019/20 to include interconnection

For EU solution:
- Need the Commission to coordinate all groups working on cross-border approach to CMs:
  DG COMP technical groups, DG ENER Electricity Coordination Group, Pentelateral forum, ACER, ENTSOe, IEA workshops…
- Coordinated timeline/programme for coming to an agreement
Annex: De-rating
De-rating

- Secretary of State will provide the de-rating factor based on a number of inputs including analysis from National Grid
- Complex calculation – first step is to embed modelling to ensure consistency through FES, winter outlook, capacity report etc.
- Publish de-rating factors annually in June to the same timeline as for domestic generation (these are published by the Delivery Body in the auction guidelines)
- Interconnectors de-rated individually according to:
  - technical reliability and
  - likelihood of importing at times of system stress