

Promoting choice and value for all gas and electricity customers



## **Technical Working Group**

Jonathan Hodgkin / Anthony Mungall Meeting 3 Glasgow 9 August 2011





## **Review and feedback from last meeting**

- Draft minutes from last meeting
- Actions
- Wider stakeholder feedback





## **Objectives of today's meeting**

- Re-cap on WG2
- Identify practical and technical issues and if possible agree one option for each of postalised and improved ICRP charging options for the themes:
  - 3. Treatment of security provision
  - 4. Reflecting new transmission technology (HVDC)
- Anticipate Thursday's wider stakeholder event





## **Outline of the day**

### Now

Updated straw man – themes 1 and 2

**Break** (11.00 – 11.15)

Theme 3: Treatment of security provision

Lunch (12.45 – 13.30)

- Socialised charging straw man
- Theme 4: Reflecting new transmission technology (HVDC) **Break** (15.30 – 15.45)
- Presentation to the stakeholder event
- Actions summary

**Close** (16.30)





## **Theme 1 – Reflecting User Characteristics (Postalisation)**

| Original strawman  | WG discussion                                    |   |   | Updated strawman   |
|--|--|---|---|--|
| <ol> <li>Calculate<br/>annual load factor (ALF)<br/>based on historical data</li> <li>Generator's<br/>£/kW tariff based on<br/>uniform tariff scaled by its</li> </ol> | Alternatives                                     | For   | Against   | No change.   |
|  | Uniform<br>£/kW tariff<br>without ALF<br>scaling | Consistent with socialisation principle       | Overstretch<br>socialisation;<br>Arbitrary basis  | -Principle is to remove<br>location-related cost signal<br>-Still need to have a<br>reasonable charge base |
| ALF  | Uniform<br>£/MWh<br>tariff                       | Clear principle<br>of usage-based<br>charging | Uncertain<br>charges &<br>complicated<br>application;<br>Incompatible<br>with peak-<br>based demand<br>charge<br>Negative<br>despatch signal<br>for wind? |  |





## **Theme 1 – Reflecting User Characteristics (Improved ICRP)**

#### **Original strawman**

**WG discussion** 

1.Apply dual criteria with technology-based scaling to study two flows

Use the maximum flow to identify investment trigger and determine:
Peak security tariff
Year-round tariff

3. Calculate annual load factor (ALF) based on historical data

4. Generator's £/kW tariff based on dual tariffs and its ALF

| Alternatives  | For  | Against                                     | Possible<br>conside               |
|---|--|---|-----------------------------------|
| Reflect combination   | Better accuracy                            | Complexity;                                 | trigger.<br>balance               |
| of plant types<br>in zone   |  | Mismatch other<br>areas of<br>approximation | -Stabilit<br>-Practica<br>impleme |
| Identifying<br>investment<br>trigger from<br>both flows<br>instead of the<br>maximum<br>flow only | Less extreme<br>and more<br>stable results | ?[subject to<br>further inputs<br>from WG]  | No chan<br>put forw<br>proposa    |
|   |  |   |                                   |
|   | Subject to<br>further inputs               |   |                                   |

#### **Updated strawman**

Possible merit in further considering investment trigger. Choice need to balance:

-Stability of results -Practicality of implementation

No change if WG do not put forward specific proposals.





## Theme 2 – Locational cost differentiation (Postalisation)

| Original strawman   | WG discussion  |  |  | Updated strawman   |
|---|--|--|--|--|
| -Local/Wider boundary as<br>Status Quo                                  | Local/Wider boundary   |  |  | To be further considered   |
|   | Alternatives   | For  | Against  | based on:  |
| -Treatment of Local as<br>Status Quo<br>-Uniform tariff within<br>Wider | Remove<br>boundary and<br>apply uniform<br>tariff                          | Consistent<br>with principle<br>of removing<br>locational<br>differentiation               | Over-socialises<br>clearly user-<br>specific costs;<br>Removes<br>incentive for<br>generators to<br>choose efficient<br>connection | <ul> <li>-Principles for<br/>Postalisation charging;</li> <li>-Specific proposals from<br/>WG</li> </ul> |
|   | Keep<br>boundary but<br>with some<br>changes eg<br>"anticipatory<br>wider" | Improves<br>stability?<br>[ <i>subject to</i><br><i>further inputs</i><br><i>from WG</i> ] | Complicated?<br>[ <i>subject to</i><br><i>further inputs</i><br><i>from WG</i> ]   |  |
|   |  | Subject to further inputs  |  |  |
|   |  | from WG  |  | 7  |





## Theme 2 – Locational cost differentiation (Improved ICRP)

#### WG discussion **Updated strawman Original strawman** Local/Wider boundary -Local/Wider boundary as Local/Wider boundary Status Ouo **Alternatives** Against For No change if WG do not Keep ?[subject to ?[subject to put forward specific -Treatment of Local as boundary but *further inputs* further inputs proposals. Status Quo potential to from WG] from WG] improve -Method of locational Locational differentiation stability? differentiation in Wider within Wider (eq zoning) as Status Quo Locational differentiation within Wider No change. Alternatives For Against Island a Consistency -Reduces special case? with potential accuracy of S185? cost signal Irish Sharper - Volatility; methodology reflection of investment - Complication impact Subject to

further inputs from WG—



for all gas and electricity customers



## Ofgem "strawman" – postalised and improved ICRP for themes 3 and 4

| Theme | Key choices   | Postalised   | Improved ICRP   |
|-------|---|--|---|
| 3.    | • "Line of best fit" for wider and 1.0/1.8 for local circuit.   | <ul> <li>One generation zone for<br/>"wider" GB network</li> </ul> | No change   |
|       | <ul> <li>Alternative average factor (eg<br/>based on banded technology,<br/>regional average mapped to<br/>generation zone)</li> <li>Factor reflecting the specific<br/>technical nature of assets</li> </ul> | <ul> <li>No change to "local"<br/>definition</li> </ul>            |   |
| 4.    | <ul> <li>Local vs wider boundary and its applicability to HVDC</li> <li>Treatment of HVDC converter station costs</li> <li>Treatment of HVDC power flow in the model</li> </ul>                               | <ul><li>Uniform tariff</li><li>Treatment of local?</li></ul>       | <ul> <li>No change to<br/>boundaries and<br/>treatment of converter<br/>station costs</li> <li>NGET to advise on<br/>treatment of power flow<br/>in charging model</li> </ul> |





## **Next steps**

- Summarise actions
- Next meeting Thursday 18<sup>th</sup> August in London
  - Group discussion around themes 5 (unit cost of transmission capacity) and 6 (G:D split)
- Technical working group report



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