EMR Collaborative Development Wash-Up Session

10th September 2013

Attendees (as per sign-in sheet)

Ronan O'Regan (Chair) – PwC
Belinda Littleton – PwC
Sam Khiroya – PwC
Kasia Kirkland – PwC

Trent Hardman - Elecon
Steve Wilkin - Elexon
Roisin Quinn – National Grid
Ian Nicholas – National Grid
Chris Woodall – National Grid
Simon Francis - DECC
Dale Sharpe – DECC

Russell Dodgson – Immingham VPI
Ron Ramage - Flextricity
Lisa Waters – Waters Wye Associates
Phil Jeffrey - Centrica
Deirdre Powers - SSE
Stuart Noble – Scottish Power
Grazina Macdonald – Scottish Power
Nick Sillito – EON Global Commodities
Mark Jones – Green Frog Power
Andrew Normington – Green Frog Power
Jeremy Taylor – Green Frog Power
Vincent Galea – EDF Energy
Jeremy Bush – EDF Energy
Louise Schmitz – EDF Energy
Raoul Thulin – RWE Supply and Trading
Simon Hale - Vitol
Gregg Scott-Cook - EON

1. Introduction and recap of CDP approach

Introduction

- CMU definition paper being prepared for Expert Group meeting on Thursday 12/09/13.
- CDP approach is looking at how EMR processes can be implemented in practice.
- PwC are to revise process maps based on amendments that have been discussed at various workshops.
- PwC are to produce a baseline operating model as well as a detailed implementation plan.

2. Policy Discussion around recently published papers

Definition of a CMU paper overview

- This is an issue that was raised at previous workshop.
- Paper prepared for discussion at expert group and will feed into upcoming consultation
- Whoever is able to respond to the system stress event needs to be in control of the asset/capacity obligation.
- Definition of portfolio included in update – this hinged around secondary trading, providing sufficient headroom around prices for secondary trading (depends upon cap)
- Defining liability caps at portfolio level

Review of CMU definition paper

- Feedback received over last month which has fed into the paper
- Entity in which you will participate in pre-qualification, and entity which you bid, and entity which you receive capacity if successful at auction.
- If you are the party that owns a particular asset, then it is your responsibility to take this asset through the pre-qualification process.
- 2 types of CMU (Generating CMU or Demand Side Response CMU)

Terminology

- Terms vary throughout the process.
- When CMU has pre-qualified, they are termed as a pre-qualified CMU.

- When a CMU is successful at auction, they are termed as a Capacity Committed CMU.
- Owners of CMUs will be known as "Applicants" (pre-qual) then "Capacity Providers" once successful at auction.
- Each CMU is taken through the process in isolation.

- If you have 2 main units plus 2 smaller units plus a station load (all owned by same company), what happens to the station transformer as these 4 CMUs go through the process. Further attention needs to be given to the treatment on-site demand for industrial users and station load. Is export net or gross of station load

Generation Unit

- Generation CMUs can be 1 of 6 states.
    1. New
    2. CMU requiring support for refurbishment (the refurbishment has to be for emissions reductions purposes – refurbishment category will be 3 years long)
    3. Existing CMU wanting to opt-in
    4. Existing CMU looking to opt-out but remain open for rest of delivery year. There is the option to opt-in to the T-1 auction when in this state.
    5. Existing CMU looking to opt-out but become non-operational
    6. Retiring

- "Retiring" defined as when CMU is looking to decommission.
- Refurbishment will be discussed further at the Expert Group. There is a chance that there may not be a refurbishment category in the first launch.

- Important to define "Operational" before the time comes to select one of the 6 states in the list above.

- DECC ask that a CP make a declaration as to why a they have decided to a) opt out and not be operational in the delivery year or b) retire. This declaration will be a tick box. Industry are reluctant to disclose why they are choosing to opt out.

- Is a lead time of 4 years too long to get an accurate reflection? Company can only make its decision based on current state.

- If opting-out of 4 year auction, there needs to be a reassessment of these CMUs in order to ensure that the demand curve is reflected appropriately as a result (year-ahead auction also changes as a result of these decisions).

- Same de-rating factor would apply to plant if opting-in or out. For example if opted-out at T-4, then back in at T-1. Is this reasonable?

- If opting-out and choosing a state of non-operational then cannot opt back in.

- For a plant who is considered an opt-out plant as a result of price not clearing at auction, which of the above 6 states do they fall into?

- Should length of contract be allowed to change throughout the different rounds?

- New or refurbishing plants must indicate an exit price and also indicate whether they are willing to enter the 1 year auction at a lower price. If new plant, the maximum that can be bid for is a 10 year contract, but they will have the option to bid for a shorter contract.

- Generation CMUs must be above a minimum threshold of 2MW. It is possible to aggregate units together to meet this threshold but they must be of the same classification i.e. it is not allowed to mix and match new or all refurbished etc.

- Generation Unit will be:
    - Capable of exporting electricity
    - Controlled independently from any other generating unit
    - Connected to HH meter specific to that generating unit
    - Registered capacity in excess of 2MW
- Work needs to be done on "site load", various scenarios need to be tested (including that of a several units sharing a station transformer).
- Policy decision needed with regards to on site demand for industrial sites? Will it work gross of station load or net of station load?
- If you have a CCGT with multiple gas turbines and steam. May choose to operate only one or some of the gas turbines. This is difficult to operate under the current definition of CMU.
- Interaction between on-site demand and power used for generation behind it – don't want double counting or missing demand.

DSR Unit

- Secured by one person through ownership of DSR CMU component, contractual control of the DSR CMU or ownership of permitted DSR generator
- Ownership vs generator license holder
- DSR perspective based around contractual arrangements
- DSR threshold likely to be smaller, to be measured using half-hour meter.
- Requirement for baseline to be established across the meters.
- 2MW threshold to be met either individually or aggregated.

Portfolio

- Portfolio holder needs to have a degree of control or decisive influence
- CMU can only sit in one portfolio – no ambiguity as to where it sits in corporate structure.
- Hierarchical series of tests determine which portfolio a CMU sits in.
    - Test 1 – who has control over CMU? This must be the person that has (direct or indirect) control of the Applicant as defined by the Companies Act.
    - Test 2 – who is the person that has decisive influence over the Applicant and control of the Operator? The operator is to be defined (day-to-day person)
    - Test 3 – Does any party have decisive influence over applicant?
    - Test 4 – If in test 3 more than 1 party has decisive influence, then applicant nominates one.
    - Test 5 – CMU is in a portfolio of 1 if none of the tests above are met.
- In example 2 in the paper, AssetCo is the applicant, and they are responsible for registering the CMU.
- Scenario of company being owned by an investor who has 51% of the company, how are they treated? An investment bank can't be a portfolio. Some investment houses will ensure they have control of the generator – needs to be a system for seeing who is running the generator aside from just owning it.
- Example on Powerpoint Slide.
    - CMU under SPV1 – Test 1 would fail. Test 2 AssetCo has both decisive influence over the applicant and the control over operations therefore this CMU is within GenCo's portfolio
    - CMU under SPV2 – Test 1 would fail. This CMU is outside this portfolio
    - CMU under AssetCo – This CMU is within GenCo's portfolio.
    - CMU under SPV3 – Test 1 indicates that this CMU is under GenCo's portfolio.
    - CMU under SPV4 – CMU is within another portfolio.

- To be an applicant, must be UK-based

- However, if parent company is based overseas, DECC are looking into this scenario. Attendees are keen to get this issue resolved soon, as under Appendix 2 example companies that owned by investor may face barriers as a result of this.

- For Limited Liability Companies (who sit ringfenced away from their Parent Company), does liability now sit with Parent Company under the mechanism. The impact on Limited Liability Companies still needs to be explored as it seems counter to the point of a limited liability company to pass liabilities through to the parent.

- Formulae at portfolio level still need to be broken down.

- If an ownership change halfway through a delivery year, how is the cap (calculated based on ownership) adjusted? There would be a requirement to notify DECC, and the cap would have to be updated. If the cap has already been met but then the asset is sold to a larger portfolio does the cap increase?

3. Question Log review

High Level review

- Issues have been categorised under 3 different themes – New issues to be fleshed out as part of collaborative process, issues that DECC have been aware of, and items that are not going to be carried forward.
- Any gaps in terms of key questions being missed off?
- Have questions been categorised in the correct group?
- Issues with no categorisation are currently being processed by DECC.

- People to look through these in their own time.

4. Discussion of specific items on the question log

4a. Industry input to demand curve production

- Challenges were raised at workshops around industry participation in production of the demand curve.
- Could industry participate more following initial interaction with National Grid?

- National Grid are involved in establishing the target volume as opposed to drawing the demand curve. National Grid are to support DECC by providing analysis and evidence to inform the decision on the Target Volume, all subject to scrutiny by Panel of Technical Experts.

- National Grid to prepare a number of scenarios for DECC with input from industry for information purposes. Consultation with industry will be development of assumptions which underpin the model.

- NG will build on Future Energy Scenarios. This is an annual consultation which initiates NG's annual planning process. The consultation process consists of workshops and bilateral meetings in October. Following this consultation, a Stakeholder Feedback document will be published which provides a summary of the feedback received through the consultation process, highlighting the key themes and NG's next steps. There will be no second consultation with industry. Send RQ and email for more details.

- Consultations with National Grid to take place in October.

- Demand Curve set for first auction, assumption needs to be made for first auction. Is National Grid's

methodology applied before or after de-rating is defined?

- De-rated capacity and demand (difference between the two should be a small amount).

- During auction – participants raised that NG would be blind when reducing prices during the auction, as they are 'blind' to companies exit price until after they have set a lower price than the exit price.

- Scenario development sessions should address many of the industry issues.

- Proactive stance required towards the DNOs.

- How much DSR capacity is to be held aside for the T-1 auction at 4 years ahead? DECC are still to work the figure out (possibly 2GW). If it is 2GW then this incurs huge market risk (this has been added to the questions log).

- Questions were raised as to whether there was a risk asymmetry between a DSR CMU and a BMU generator given the respective penalties are calculated differently. This could lead to a position where DSR could only trade with themselves.

Demand Curve Publications

- First Indicative Demand Curve published based on June 2013 consultation draft, shared in October 2013.

- Once winter data is in and NG publish their analysis there is another revised Demand Curve.

- When pre-qualification ends, there is a 3rd Demand Curve adjusted for opt-outs.]

- When the appeals process ends, we get the 4th and final Demand Curve in late autumn.

    - Appeals are for those who wish to be involved in auction but were assigned a wrong de-rating factor or haven't been involved due to providing incorrect information.

- Final publications following pre-qualification could affect appetite to get involved.

Summary

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4b. DECC & NG data publications

- Prior to prequalification the following will be published
    - Target derated capacity through CM
    - Total derated capacity assumed outside of CM
    - Rules for derating
    - Rules for derating plant
    - Rules for distinguishing from existing plant
- Post qualification
    - Total amount of derated capacity assumed from opt-out
- But not;
    - Which plants are opting in / out
    - Which existing plants qualified for long term contracts
- Main concern is that published materials may infringe upon confidentiality.
- Demand curve will be set out well in advance so that liquidity of auction can be learnt in advance.
- Liquidity is measured at first round of auction (just volume)

4c. De-rating definition

What is definition of capacity in context of the de-rating process?

- What are we actually de-rating? Answer: DECC have a figure of reliable capacity as defined by the Grid Code, not CUSC.
- Final definition will be going into the October consultation. It will be applied on a plant basis.
- The term for de-rating is not dynamic.
- Needs to be linked to Grid Code.

- National Grid (via October consultation methodology) will calculate the mean average de-rating figure. From this, there will be a range by fuel type based on 2 standard deviations around the mean
- Reason for 2 S.Ds it will cover around 98% of CMU's availabilities.

- Industry want to be consulted on what Megawatts they can provide as part of their capacity obligation as they are in the best position to provide this information ("what would you like the capacity obligation on?"). National Grid should then de-rate the class after these obligations have been given out at the level that CMUs specified that they wanted. This shifts the commercial risk, and the market risk has been accounted for in the calculations.

- Industry are against receiving an obligation which has already been de-rated and are in favour of the bullet above.
- Ideally ,need to account for seasonal variations or even greater granularity (CMU provide two numbers?)

- National Grid can make their own assessment of the capacity that is available.
- Generators want to be able to control price, volume and risk.

- De-rating algorithm to be included in the October consultation document.

- DECC proposal – are you allocated a figure? Or a range to choose from?

- By January, generators need to be able to calculate their de-rating figure.

- The concept of centrally assigned CO is now fixed in policy however, there is scope for discussion around whether CPs are assigned a single de-rating figure or a range.

- Plant modification if generators win new contract – how is this incorporated in the de-rating process.

How does de-rating take account of TEC?

- Need to prove through analysis that the constraints will be strong enough during a stress event.
- Other parameters which could be used – station CEC, TEC, as there is a relationship between CMUs and BMUs. Definition of TEC includes BMUs and on-site generation.
- CEC is the physical limit of how much you are able to export in emergency situations.
- Need to ensure that good communication between DNO, NG and CP is in place so that a CP is informed if their TEC is being withdrawn.

4d. Streamlining inputs by parties to physical trading process

- Issues arose at workshop around getting the process more streamlined (e.g. joint submissions, automating the notification process, consequences of novation being rejected).
- Having a single point of notification as part of the process for the two parties involved in trade is something that DECC are open to incorporating.
- The more automated the process, the more likely parties are to get involved. If the system is all computerised, then the confirmation is received as default.
- Industry proposed that National Grid could notify a jointly agreed single point of contact.
- A series of working groups might be beneficial to discuss this further.
- Can a single party trade with multiple other parties? (This has been captured on the questions log)
- Are qualified parties who do not have a CO limited to taking on one CO via trade or can they take on several? DECC believe that they are not limited.
- Trades can be rejected on the grounds of not pre-qualifying.
- Novation – need to staple auction clearing price to trades (for purposes of calculating
- BMU IDs to be used for trade notification?

4e. Portfolio level trading caps

- How does your cap change as obligation is bought and sold?
- Cap is based on clearing price at auction and obligation that is owned across that portfolio.
- Cap is adjusted as CP buy and sell obligations.
- When capacity obligation is physically traded, it goes to acquiring party with no historical liability. It then begins to build its own liability.

4f. Physical testing requirements

- To what extent will payments be reduced if a Cap Provider does not reach its de-rated level?
- Generators CMUs and DSR CMUs will have to demonstrate 3 times over winter peak their de-rating capacity figure.(There was some discussion as to whether the testing should be done on the derated capacity or the maximum available capacity) Failure to do so results in suspension of capacity payments until successfully retested, or until CMU could point to a settlement period when the figure had been reached. In subsequent delivery year there would be a reduction to payments due to failing the test in the previous year.
- Once a CP is on the risk register you will receive 6 hours' notice prior to a test. If the CMU then fails this test then they have 2 options. 1) The CMU approaches the SO when they are ready to be retested or 2) The CP points to a specific settlement period when they were able to meet their derated obligation.
- The exact reduction in capacity payments in the subsequent delivery year still need to be established.
- There is also a need to look into why the CMU failed that test in the first instance. There needs to be some consideration as to the reasons why the CP was unable to meet its obligation. Industry noted that currently those who are unable to meet their de-rating are being overly penalised particularly in the case of a major failure that requires significant downtown time and expenditure to fix.
- Having the plant demonstrate de-rating capacity 3 times over the winter peak may not be cost-effective, and will have a knock-on effect on consumers.
- Should the financial ramification be cancelled once CMU can show the original de-rating figure?
- CMU is still going to be penalised in the following delivery year regardless. The punishment is in place as the CMU has not demonstrated what was agreed following auction.
- Payment and Obligation have to match. When payments have been suspended, the obligation should not remain in place.
- Industry were in agreement that if a CMU does not generate over winter there is no need for testing, payments should just stop. Payments would only restart when a CMU is able to generate again.
- De-rating figure in year T+1 is calculated by using a "testing output factor". It is this factor which is adjusted downwards as a result of failing to demonstrate the original code-rating capacity factor, and this downwards adjustment impacts upon the payments for the following year.
- Physical trades are with any party who is pre-qualified or anyone who is not constrained by any previous obligations.

5. Timeline to get to first auction

Progress to date

- In June 2013 a consultation draft of the Delivery Plan setting out CONE, LOLE, and VoLL were published. This will be finalised in late Q4/2013 or early Q1/2014 (that is 2 milestones). The final DP will have an Indicative Demand Curve.

From this point onwards

- October 2013 - consultation on CM setting out APC, Net CONE, z factor, DSR quota, PM threshold.
- Between Oct and December DECC anticipate talking to industry.
- Industry voiced concerns that a consultation document will go out in October despite no industry input on DSR.

Gant Chart commencing 31/03/14

- 2. NG is at point where they have a complete data set for winter. It will take 9 weeks to carry out analysis, resolve issues and support DECC in producing the target volume for the demand curve.
- 4. DECC takes 2 weeks to create a demand curve which excludes opt-outs.
- 5. On 13/06/14 DECC publish a demand curve and the draft auction guidelines (12)
- 6. Query raised as to what the de-rate is in relation to?
- 8. A final demand curve will be published 7 weeks later which includes opt-out analysis.

- 13 & 14 –Secondary legislation will be laid before the house in mid-April. Legislation is expected to be enacted in mid-July. The final auction rules will be within this.

- 15. It is likely that between the publication of the draft auction guidelines and final guidelines, industry will be preparing for registration
- 16. Registration and data submission will be open for 2 weeks.
    - Industry have 4 weeks to prepare where they have sight of the requirements and then a 2 week window in which they are able to submit.
    - This point should include 'pre-qualification submission' in the name
    - Industry made a recommendation that NG should have forms pre-populated which industry would simply have to confirm/edit where necessary. Industry believe that 2 weeks in the summer holiday is insufficient time for them to register and collect and submit data.
    - Recommendation that existing generators should not have to provide information about existing connectivity to prove that they can generate as this information already exists and is held by NG / Elexon
    - Although no applications can be processed until after 15/07/14 NG hope that industry will have access to the system at least 1 month prior to submission in order that industry can familiarise themselves with the system.
    - NG will not be able to advise if a CMU has prequalified or if the data submitted meets requirements until weeks after 15/07/14 otherwise they would be in breach of agreement.
    - Applicants are able to nominate an agent to act on their behalf.
    - NG will notify an applicant if they have been successful and unsuccessful and the reasons for the latter. There will then be an ability to appeal and submit supplementary information / correct information
- Point 16 enables point 6.

- 18. 19. & 20. On 10/09/14 pre-qualifications are complete and applicants are notified of their status. The derated volume at the aggregate level will be published. This will enable the final demand curve to be published (8).

- 21. This is a procedural appeal

- 29. Once the final demand curve has been published (8) applicants must finalise their bidding strategy – applicants have 4 weeks to do this. Industry believe that whether or not this is a sufficient amount of time depends on which board is required for approvals.

- Applicants are able to make their declaration of price maker/ taker status within prequalification or up to 2 working days ahead of the start of the auction. As part of the declaration they must state that they are able to provide justification of this within 48 hours of Ofgem's request for it.

    - Will DECC/NG state what will be count as sufficient justification to be a price maker? DECC stated that an internal business case that was put in front of their own board for approval will suffice and hence should not require any additional effort..
    - Industry stated that they wish to know the powers that NG will be using to request more information?
    - Applicants will not be told the status of other applicants i.e. who is a price maker or taker.

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