Review of the Capacity Market's penalty regime

Section – 1: Introduction

1. This paper discusses the scope of the review of the Capacity Market's penalty regime – one of the mini-project reviews instigated post the publication of the CM consultation package. The review is designed to ensure consistency and completeness and to stress test the penalty proposals, especially with reference to the investability proposition, in advance of the formal consultation responses.

2. The review will identify and highlight areas of stakeholder concern, along with potential mitigation measures, and propose simplification measures for the Expert Group's consideration.

Section – 2: Recommendation

3. The Expert Group are invited to agree the scope of the review and provide views on the questions posed.

Section – 3: Identified issues with the current design

4. Feedback from the debt/project finance community has suggested that the CM is not an investable proposition given the current design of the penalty regime and investors unwillingness to take on any form of market risk. Their primary concerns relate to the proposed rate at which penalties are incurred (£7-£9k/MWh, including the CM component of £1-£3k/MWh) and the level of the penalty cap (101- 150% of annual revenue); with the perceived risk of losing capacity income to cover debt service repayments within several hours. Additional concerns include:

5. Penalty exposure should be profiled and achieved more gradually to enable lenders to take remedial action

6. The lack of a 'per-event' cap increases unmanageable risk exposure for parties, especially when on maintenance outages.

7. The risk of incurring penalties is not within the direct control of the provider, primarily through the lack of FM protection, no allowances made for planned maintenance or system-wide gas emergencies

8. Concerns over the development of a liquid secondary market and consequential inability to mitigate risk exposure for events outside of the generator's control; linked to market risk issue and uncertainty over terms, costs and availability/accessibility of hedge products

9. Defining Load Following Obligations on an ex-post basis may impact the liquidity of secondary trading, especially given the risk that the generator is penalised for System Operator's forecasting errors or for the actions/failures of other generators.

10. Performance/dispatch incentives should be left to cash out price signals; CM penalties should focus on administrative penalties, potentially terminating agreements where penalties exceed a given threshold but there would be a direct agreement with lenders giving them step-in rights at a trigger level below this threshold, to give them some time to resolve the problem and protect their investment.

11. Penalty caps should not apply at a portfolio level given concerns over exposing ring-fenced projects to costs outside of their direct control.

12. In summary project finance representation suggests the downside risks may therefore be too large for lenders to allow such projects to enter into CM contracts, even if other support such as a Power Purchase Agreement is in place. Similar concerns have been echoed by the vertically integrated parties.

Options to address issues

13. The consultation combination of a 'low' £1k-3k/MWh penalty rate and 'high' 101-150% penalty cap was proposed in order to provide an appropriate balance between the extent to which independent players are able to secure capital from alternative financial sources at prices that enable competitive entry into the CM and the robustness of the penalty regime to deliver value of money to consumers. It is recognised however that consumer value for money can be impacted by setting a penalty regime which is either too punitive or too lenient on capacity providers.

14. In this context a penalty cap in excess of 100% of annual capacity revenue was therefore proposed to enable capacity payments to be clawed back from underperformers, mitigating the risk of plant overstating its capacity, mitigating gaming risks and facilitating the position for state aid clearance. The low rate/high cap combination was proposed in the expectation that the reformed £6k/MWh cash out proposals would provide robust performance incentives, to the extent that the CM penalties could be focused on reclaiming capacity payments from providers not delivering as per their de-rating factors at times of system stress.

15. Three alternative models were considered but not progressed:

    a) 'low' cap (<100%), but with a 'high' penalty rate (£5k/MWh) was considered to facilitate independent entry but discounted on concerns of gaming risks for existing plant and poor consumer value for money.

    b) 'high' cap (>100%) but with a 'high' penalty rate (£5k/MWh) was discounted on the grounds of presenting barriers to entry for new players and restricted auction liquidity.

c) 'low' cap (<100%) with a 'low' penalty rate (£1k-3k/MWh) was discounted as providing poor value for money for consumers through excessive entry and gaming opportunities.

16. It is proposed to revisit the low rate/high cap combination in conjunction with resolving the following questions:

a) Would capping penalty exposure at a daily or weekly level, rather than on an annual basis, de-risk participation for independent players whilst retaining incentives for secondary trading and delivering consumer value for money?

b) Should the definition of system stress events be expanded to provide more frequent testing periods for capacity providers? If so, would reserve deployment above a price threshold by the System Operator be the most suitable criterion with which to expand the definition? Could the penalty rate be lowered, and to what level, as a consequence of more frequent testing in system stress conditions?

c) Should an allowance for maintenance windows be included in the design proposals? If so, would an auction for maintenance slots administered by the System Operator be the most appropriate solution? Do we have the vires under the Energy Bill for the SO to sell back capacity in periods of low demand?

d) Should the treatment of FM exceptions be expanded from the current scope, which is effectively contingencies covered under section G of the BSC, transmission/ distribution failures (including 'relevant interruptions') and connection delays by the Transmission Licensee or DNO?

e) Should the policy position on applying different penalty rates to providers based on their direct exposure to cash out price signals be maintained? If so, is the distinction between Capacity Market Units (CMUs) types 1 and 2 (penalty rate scaled VoLL-cash out), and 3 and 4 (penalty rate scaled VoLL) the most appropriate way to achieve this?

International comparison – ISO-NE amendment proposals

17. It should be noted that the design of the ISO-NE capacity market, and its availability-based penalty regime, is being revisited to address concerns that the emerging mix of supply resources may be unable to operate when and as needed to maintain the present level of reliability; potentially presenting lessons of relevance for the design of the GB CM. It is proposed that fundamental changes are required to the current approach, whereby capacity revenue is largely insensitive to performance, rather than simply increasing the severity of the existing FCM penalty structure.

18. A pay on performance model is therefore under consideration, which would place strong financial incentives on all capacity suppliers, without exception, to perform during scarcity conditions. Under such an approach capacity suppliers producing during scarcity

conditions would earn a greater share of the missing money than suppliers that are not producing, irrespective of why they were not producing or whether the reasons were within their control or not. This would effectively involve a financial transfer from under-performing resources to over-performing resources during scarcity conditions.

19. Under the current proposals capacity suppliers' liability would not be capped, given concern about the adverse consequences of explicit penalty caps on performance incentives. The reliance on a secondary trading market, and the efficient incentives to trade, is cited as a more effective means of mitigating exposure and ensuring another facility has strong performance incentives to deliver the energy and reserves that the out-of-service facility can no longer provide.

Recommendations/next steps

20. The aforementioned questions will be resolved and policy proposals developed by mid-January to enable recommendations to be made ahead of final policy instructions in February.