

## **SEM - CPM Medium Term Review Discussion Paper**

Synergen's response to SEM-11-019

## **Executive Summary**

Synergen considers that significant changes should not be made to the SEM Capacity Payment Mechanism (CPM) at this time given the degree of uncertainty regarding the design of the ex-ante and continuous trading aspects of the European Target Model, and the extent to which fundamental changes to the SEM will be required to comply with the design. The nature of the CPM changes within SEM-11-019 can only be considered holistically with other elements of the SEM that are likely to require significant changes in the medium term. This is essential due to the highly regulated nature of the energy market and the requirement that infra-marginal rents plus CPM rewards are compensatory whilst mandated SRMC bidding is in place.

Synergen concurs that all generation (MW) should be treated on the same financial basis whether it is generating or capable of generating in a trading period. Synergen does not favour capacity credits applied on a technology basis (aligned to TSO assessments of available generation at times of forecast peak) applied to ex-ante payments. However, Synergen does believe that consideration should be given to allocating CPM "credits" on a genset specific basis.

Synergen believes that "flexibility" is an issue for the SEM ancillary services (AS) payment system, not CPM and any moves to reward flexibility should be via AS and outside of CPM scope.

Synergen understands that the CPM is intended to provide both a long-term signal and a short-term availability incentive. However, Synergen does not accept that a generator's behaviour is influenced by the ex-post payment stream as generators strive to be available to earn SMP revenues and to comply with their Grid Code and Trading & Settlement Code obligations. The existing non-firm ex-post signal is flawed and it is not a signal generators can react to; the short-term ex-ante signals are better suited to delivering short-term availability. On this basis, the ex-post pot weighting should reduce below 30%.

Synergen does not support the increase in power factors as this increases the lottery effect and is not a valuable long-term signal. The ex-ante power factor should be reduced.

Synergen opposes any targeting of payments (i.e. a guaranteed payment) to some, or some types of, new entrant. This is discriminatory and contrary to SEM principles.

Synergen agrees that penalties should be strengthened, probably based on scaled re-payments back to time of last proven availability. Penalties should be redistributed amongst generators based on their availability at the relevant time.

Synergen does not consider that there should be any change to the existing structure of supplier charges.



#### 1 Introduction

This paper is Synergen's response to the consultation paper "CPM Medium Term Review Work Packages 6 onwards" (SEM-11-019) published by the RAs on 12<sup>th</sup> April 2011. SEM-11-019 draws heavily on the accompanying paper by Pöyry "Capacity Payment Mechanism Medium Term Review" (SEM-11-019a). References in this response are to the SEM-11-019 except where specific reference is made to SEM-11-019a.

Synergen has no objection to this response being published.

SEM-11-019 concentrates on the four Pöyry scenarios (which are useful in highlighting some key options), plus the RAs' / TSOs' "SOCAP" model that was not considered by Pöyry. The Pöyry scenarios do not relate to any particular work stream or issue; rather they consider variants of approaches with respect to the questions of:

- a) the treatment of different generator types within the CPM;
- b) the incentives on generators notably the "flexibility question";
- c) the treatment of some, or all, new entrants compared to existing players;
- d) the timing of payments;
- e) the volatility of any payments; and
- f) the possible alignment of generator payments and supplier charges.

#### This response:

- sets out the broad considerations regarding SEM reform at this time, notably in the context of likely "EU target model";
- considers the issues raised under each work stream;
- comments on the 5 scenarios presented, and discusses alternative approaches;
  and
- addresses the questions raised by the RAs under each work stream (in Appendix A).



#### 2 The context of the consultation and SEM reform

#### 2.1 The Medium Term Review Process

Synergen is concerned at the length of time that the Medium Term Review has taken to so far – indeed the review has been underway for over two years (which is longer than the time the CPM had been in place for at the start of the review). Over that time, the broader context of the SEM within an increasingly integrated European electricity market has changed significantly, with the nature of the target market becoming clearer, and the timescale for its adoption being brought forward. Synergen believes that the extended duration of the Medium Term Review has essentially led to it being overtaken by wider events and market developments.

Synergen is disappointed that the RAs' declined a request from the electricity industry representative organisation NEAI to hold an industry workshop as part of this consultation process. Synergen considers that such a workshop would have allowed for the issues under consideration to be explored and industry questions addressed by the RAs and their consultants. Synergen believes that a public workshop is vital prior the RAs producing a draft decision paper.

Synergen considers that the process of commenting on reforms piecemeal is unsatisfactory. Synergen believes that (a) comments submitted by respondents to date related to the CPM should have been published alongside SEM-11-019, and (b) early indication on RAs' thinking should be published incrementally.

Synergen believes that the inclusion of the SOCAP model within SEM-11-019 lacks transparent rigour. There is no assessment of the SOCAP model in SEM-11-019a, which calls into question the validity of the relative comparison of the models in SEM-11-019. It appears that the SOCAP assessment includes the RAs own considerations and thus, the option assessment mixes (in a non-transparent manner) the subjective analysis of two different parties — Pöyry for the four main options discussed within the paper, and the RAs for the SOCAP model.

## 2.2 The Regional Integration Context

Synergen does not believe that significant changes are required to the CPM element of the SEM at this time. This is not to say that the SEM generally would not benefit from significant evolution (at a minimum) nor that Synergen believes that the SEM itself is the most appropriate wholesale design now, or in the foreseeable future. Changes to the CPM should be evaluated in the context of overall efficient rewards to the generation portfolio in a design that is able to meet the requirements of the emerging target market. This is especially important, as there are serious questions as to the ability of SEM to remain in a form that maintains key elements of its design in light of EU target model. It is of concern that the paper does not examine the implications for any changes in the CPM given the high profile of the EU regional integration initiative.

<sup>&</sup>lt;sup>1</sup> SEM-11-019 Table 7.1 Page 47.



In this context, it would be inappropriate for the RAs to decide that the only practical changes are those that do not require major T&SC changes and particularly software developments. In short, the RAs may decide that, on a pragmatic basis, change should be limited to amending parameters. Such adjustments may serve only to change the distribution of payments without providing effective incentives to meet the main objectives of the CPM. Such parameter changes (i.e. changes to increasingly ex-post arrangements or increasing the power factor that are two of the options examined in the paper) would not provide any effective signal for generators to be available in addition to the incentives that presently exist within the commercial and regulatory arrangements. The "lottery effect" of any such parameter changes would discriminate against non-portfolio players.

Synergen's suggestions regarding the CPM in this response are made against this backdrop. Synergen's comments thus address changes that it considers to be progressive IF changes are made to the CPM outside of any root and branch reappraisal of the SEM design and the options for future wholesale market design. This may require that some central elements of the CPM design be revisited.



## 3 Analysis issues

Synergen has material concerns with the analysis provided within SEM-11-019 and SEM-11-019a.

- There are inconsistent categories between Table 26 (flexibility payments in 2008) and Table 27 (flexibility payments in 2020) and the comparison in Figure 36. Pöyry advised² that SEM-11-019a is based on Pöyry's analysis of 2008 and RedPoint's modelling of 2020. Pöyry advised that RedPoint had separately modelled 2020 for the RAs using an different set of technologies compared to Pöyry's assessment of 2008; however this usual analytical approach was not clearly documented in either SEM-11-019 or SEM-11-019a.
- Material errors exist in the summary of the Pöyry analysis and its conclusions with SEM-11-019. The text in the bullets at the top of page 22 (Section 4.1.1 SEM-11-019) is inconsistent with the text in the Pöyry report (Section 7.1.1.1 and Table 27 on pages 82 & 83). SEM-11-019 indicates that CCGTs make significant gains whereas the Table 27 has the gain at only 2% for CCGTs in 2020 whereas the gain for OCGTs is 49%.
- SEM-11-019 (Page 6 Section 2) refers to options to "reduce the level of volatility" and presents Figure 2.2 (Page 7) to show ACPS over time. However, SEM-11-019 does not provide:
  - o any assessment / metric to demonstrate ACPS volatility; and
  - any threshold for acceptable volatility i.e. the point above which the RAs would consider the volatility of ACPS to be unacceptable.
- As SEM-11-019a was published in April 2011, it is unclear why the analysis is focused on a single year 2008, and why Pöyry's analysis didn't also consider CPM information from 2009 and 2010, which should have been available to it at the time of the report's production.

<sup>&</sup>lt;sup>2</sup> Email from David Omon, Pöyry dated 25<sup>th</sup> May 2011.



#### 4 Comments on Introduction Section

Synergen has the following brief observations on the introduction section to SEM-11-019.

In this section the RAs remind the reader of the requirement to avoid "double payment" to generators<sup>3</sup>. Whilst this is a historic term used by the RAs - indeed is part of the objectives set out in SEM-053-05 - Synergen continues to believe that this terminology is not neutral, and it would be far more reasonable for the objective to be "to correctly reward generators" – thus balancing the risks of under and over reward in an equitable manner.

SEM-11-019 sets out the criteria for the CPM<sup>4</sup> and then stresses that the SEMC is keen for the CPM "to reward in relation to its performance". Synergen considers that this amounts to a new objective, as it is not analogous to the previously stated objectives — notably it is considerably broader than "encouraging short-term availability where required". Synergen believes that the objective is reasonable (in the context of the CPM) although it is unclear how it feeds into the assessment criteria utilised in Section 7 of SEM-11-019 — although it is notable that the assessment criteria adopted for the five options presented are not the stated objectives of the CPM.

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<sup>&</sup>lt;sup>3</sup> SEM-11-019 Section 2, bottom of Page 4.

<sup>&</sup>lt;sup>4</sup> SEM-11-019 Section 2, top of Page 5 (as previously stated in SEM-53-05).



## 5 Work Package 6 – Treatment of different generator types

This option considers whether a weighting factor (capacity credit) to different types of generator based on their "contribution to capacity in the long term and their ability to respond to demand at times of low capacity margin on the system". The RAs have made it clear<sup>5</sup> that this is not an issue of flexibility, as plant that is generating and plant that is available to generate should be treated as making an equal contribution to the capacity required to meet demand within the CPM. However, such an approach would consider the likely availability of different types of generation at times of anticipated higher demands and assess its probabilistic contribution to meeting such demand:

- as the pot is fixed (at least annually) this option (capacity credits) serves to redistribute CPM monies to conventional generators, as the capacity credit of intermittent wind generation would be significantly lower than that of conventional plant;
- it would require a ex-ante weighting (and the ex-ante pot to be relatively flat);
  and
- ex-post payments would be technology neutral based on who was actually available at (relative) periods of tighter margin within the month.

#### Consideration of issues

The RAs note that the level of CPM payments to intermittent generators raises concerns about the revenue adequacy for conventional plant because their share of a fixed CPM pot is reduced as increased levels of wind come onto the system. This, in combination with the low probabilistic level of wind availability at times of assumed system peak in the winter, gives rise to the question of technology based adjustments in the distribution of CPM payments. One of the RAs' proposals is targeting payments to plant that is likely to be available at times of peak within the exante CPM payments by adjusting payments by generation technology type. Synergen accepts the principle of applying some form of weighting to generation based on its probabilistic availability, but believes that to undertake this on a technology basis is fundamentally discriminatory and does not efficiently target rewards.

Synergen believes that a non-discriminatory, and more equitable solution aimed at achieving the same objectives should be developed and given detailed consideration by the RAs. This is more complex that the Capacity Credit approach set out by the RAs / Pöyry, as it is plant specific. However, it would apply a strong ex-ante signal to all generators to improve their availability levels, as proven availability would drive ex-ante CPM reward levels.

Instead of the capacity Credit approach set out by the RAs, Synergen proposes a Capacity Credit on a genset basis not solely on a technology basis. This

<sup>&</sup>lt;sup>5</sup> Synergen conversation with NIAUR personnel.



explicitly recognises that not only is intermittent generation not guaranteed to be available, but (to a far lesser extent) the same applies to all gensets. However, it would reflect the long term (proven) availability of gensets and their individual probabilistic likelihood of availability. Simply, the more available a genset was over time, the greater its capacity value would be. To deliver the desired stability, proven availability could be assessed over a rolling three-year period – essentially a plant specific metric that both determines the plant's contribution to available generation capacity over time and then rewards are allocated from the available revenues. This aligns the contribution to adequacy (which drives the availability elements of ACPS) with the basis of genset capacity rewards on a dynamic basis.

Synergen considers that this approach is consistent with the stated SEMC position "...that the market should reward all generators ......equitably for the contribution to adequacy". Synergen supports this position as "adequacy" corresponds to installed MW that can, on a forward-looking projection, be expected to be available. The RAs note that the issue for the CPM is to provide a mechanism that delivers both long-term generation adequacy, and generator availability at times of low margin. This implies a longer term, more stable, reward that reflects a contribution to adequacy, and a shorter term, availability reward. The question then becomes over what timescale the shorter-term reward should be targeted – an issue more picked up in work packages 8 and 9. Synergen believes that the longer-term signal can thus be plant weighted, whilst the shorter-term signal (i.e. the ex-post component) should not be as it should reflect what was available, not what the probability that it would have been available.

Synergen rejects the capacity credit approach set out in SEM-11-019 as it is unduly discriminatory – payments would not be based on actual proven availability but on the basis of a generators class of technology. Synergen requests that the RAs consider the alternative set out above, where payments are targeted on a genset basis, calculated as a function of long-term proven availability.



## **6 Work Package 8 – Incentives for generators**

This section considers three key areas:

- 1. the "flexibility" question and the relationship between AS and the CPM;
- 2. penalty mechanisms; and
- 3. CPM incentives for new entrants essentially the discriminatory treatment of plant of similar performance/technology based solely on their timing of market entry.

This section specifically addresses the RAs' observation that incentives, within the CPM, requires the "right signals", and that this should include an exit signal to plant that is inefficient or underperforming compared to its competitors<sup>6</sup>. Synergen concurs with this view, but does not believe that arrangements that are targeted to specific players solely by reference to their date of market entry is a robust approach to meet such an objective.

#### 6.1 AS and the CPM

In principle Synergen believes that the CPM should incentivise long-term plant availability, and provide equitable rewards for such generation being available when required. The main emphasis of the CPM should be on delivering this objective in an environment where incentives to improve availability generally, and at times of peak in particular, are appropriately structured. Synergen thus concurs with the RAs' observation that observation that "the responsibility for the **type** of operational generation required to maintain system security and reliability might be better dealt with in the remit of ancillary service payments<sup>7</sup>".

Whilst achieving operational flexibility may require an increase in Ancillary Service costs, it would be wholly wrong to explicitly deduct such cost from the CPM revenues to generators. Thus, Synergen believes that the SEM should continue to draw a clear line between the purpose of the CPM and of Ancillary Services.

Synergen notes that SEM-11-019 Section 4.1.1 at the top of page 22 states CCGTs are significantly better off under the flexibility scenario. This is incorrect and is inconsistent with SEM-11-019a Fig 36 on p83, which indicates that benefits accrue to OCGTs.

Synergen does not support the "flexibility" option set out in SEM-11-019.

<sup>&</sup>lt;sup>6</sup> SEM-11-019 Section 4 - page 20

<sup>&</sup>lt;sup>7</sup> SEM-11-019 Section 4.1 – page 20



#### 6.2 Penalties

The question of penalties is complex, as it requires that a balance be struck between ensuring that generators should not be penalised unless they are demonstrably incapable of provided capacity when required (i.e. the hurdle should be quite high) whilst making such penalties manageable to generators.

SEM-11-019 suggests the following options:

- the TSO determines based on a traffic light system of warnings;
- a points system to set any penalty these points accumulate over time;
- penalising each failure via availability testing; and
- penalise each failure to dispatch when required.

Synergen opposes any TSO latitude, so "penalties" would need to be strictly within the T&SC. It also considers that a "points" system provides insufficient incentive on non-performing generators to be available when required. Synergen accepts the rationale for both availability testing, and the application of some penalties for nonperforming plant. However, as set out, the RAs' Capacity Declaration Penalties (CDP) option is not a fair and balanced way in which to achieve this. In particular, whilst Synergen agrees with the principle proposed, its application (notably in footnote 25) is overly punitive. Within the CPM, a failure to ramp up in line with technical offer data, is not analogous to a failure to provide capacity. It should also be accepted that a failure to start is, on occasion, an operational reality for generators. Such failures are already penalised by loss of energy revenue and by TSO penalties, adding a CPM penalty would be double payment, if not triple, by generators which hardly seems fair. The intent of penalties should thus be to remove some historic payments from generators that were, in practice, demonstrably unable to provide the services that they had been paid for. Synergen would expect such penalties to be infrequent in their application.

To start from an "in principle" basis Synergen considers that historic CPM payments should be recovered from generators if, when called on to generate, they are unable to do so. This could extend back to when they were last able to demonstrate proven availability — essentially the last time that the genset generated. In practice, however, such a principle needs considerable checks and balances, not least because the date when the plant became "unavailable" is not necessarily the day after its last proven availability. Assuming the present CPM arrangements:

- Synergen considers that penalties cannot outweigh revenues but should be material.
- Synergen recognises that, for infrequently operating generators assumed to be peaking conventional plant, there could be a considerable lag between starts - consequently the risks of such a policy may be considered to be too high if applied absolutely.



- Synergen notes that peaking plant would have a probabilistic chance of not starting (as would other conventional plant); thus before any "penalty" (i.e. recovery of historic payments) there should be several opportunities for the unit to attempt to start. These should be within a defined period (for example 48 hrs) and the number of attempts should potentially be capped. The intent should be to apply strong rebate based penalties to those generators which are demonstrably unable to provide generation to the system over several attempts over a given time period. The intention should not be to remove historic payments from an infrequently run genset because it fails to start on one occasion.
- Within this context, the RAs should carry out some research and consult the industry on the limit to how far back such rebates would be applied.
- Such arrangements would need to be supported by more pro-active availability testing by SOs – particularly for generation that is not running regularly at or close to peak availability to e.g. annual testing?

Alternatively, if an approach along the lines of Synergen's suggested genset specific capacity factors (as set out in Section 5 of this response) were to be adopted, then penalties would be more forward looking in nature – a period of unavailability would be set at zero, and this would feed through into that gensets availability measure. Under this approach all generators are subject to a rolling ex-post availability calculation that determines a factor applied to their ex-ante capacity payments

Regarding the use of any monies recovered from non-performing generators, Synergen considers the money recovered through penalties should be paid to generators that were available in the period for which the penalty applies – essentially to set payments to each genset at the level that would have pertained if the unavailable genset had been declared unavailable. This is entirely consistent with the fixed pot nature of the CPM; in essence the under performing generator has taken more than its "fair share" from the CPM thus depriving other generators' of their just rewards. This cannot be done with complete accuracy, as it is probably too complex, and / or costly, to re-run the ex-post calculations over any penalty period, so Synergen proposes that monies are re-cycled to generators pro-rata to their exante payments.

Synergen rejects the CDP as set out by the RAs', although it would support the further application of penalties to generators that are demonstrably unable to prove their availability – subject to appropriate "reasonableness" provisions to allow generators to prove their availability. A one-off failure to start is not proof of historic un-availability and doesn't reflect future inability to generate.

## **6.3 Targeted CPM payments to new entrants**

The Pöyry "new entrant scenario" would (for some period of, say, five years) guarantee that BNE price that pertained at the time of commissioning for either (a) all new entrants, or (b) conventional generators. Essentially this guarantees a fixed payment to the new entrant with the residual ACPS being shared between remaining generators. It is not clear if any fixed payment would be mandatory, or optional.



The view in the consultation paper is that CPM payments targeted to new entrants would (with limited new entry) be beneficial for such new entrants, as it would reduce the risks of CPM volatility, and thus their cost of capital. The RAs recognise the possibility that this option would give rise to pressures to increase the size of the ACPS pot to "grandfather minimum payments to existing generators".

Synergen believes that the "new entrant" scenario is wholly inappropriate for the reasons set out below.

- The arrangement would be discriminatory and in our view amount to "undue discrimination". This consideration alone should rule this option out.
- The arrangements would amount to a one-way bet for new entrants if the guaranteed payment were to be optional.
- Conversely, securing payments to existing players could just add to total costs, and there is no demonstrated benefit (even qualitatively) put forward for such an approach.
- There would be a significant risk that such proposals would create revenue adequacy issues to existing generators if there were no similar "grandfathered" arrangement for incumbent generators.
- If residual ACPS is insufficient existing generator revenues would be prejudiced leading to inefficient exit, as plant would have no alternative revenue source due to the BCoP SRMC restrictions.
- SRMC bidding plus CPM payments only leads to overall efficient rewards if the CPM is (a) sufficient, and (b) fairly distributed. The residual ACPS available to existing (non new entrant) generators could be neither.

Synergen does not support any targeting of CPM payments to new entrants.



# 7 Work Package 9 – Timing and distribution of CPM payments

#### 7.1 Ex-ante / Ex-post Split

The RAs are considering an increased emphasis on ex-post payments as a means to "...provide a short-term signal in the event of capacity shortages..." and "... only the ex-post element can provide the close to real-time signals needed when capacity is in short supply due to, for example, a major unplanned outage of a large power station". Synergen does not believe that ex-post payments do, in practice, provide such a signal, and within a fixed "pot" approach such signals flawed, as the ex-post signal is non-firm during the month and thus an unreliable and ineffective signal. The uncertainty is highest at the start of each month and decreases through each month.

Synergen does not believe, nor accept that there is any substantive evidence to show that generators respond to the ex-post signal currently provided by the CPM. There is no evidence in SEM-11-019 or SEM-11-019a that demonstrates a "cause and effect" between availability and the nature and level of the ex-post signal, nor is there any attempt to even provide one. Correlations of margin against ex-post payments (or the lack of them) are demonstrably not evidence that a more ex-post signal does increase availability at times of peak – indeed Synergen considers that the very nature of the relative shifting ex-post signal actually serves to remove such incentives in real time.

Synergen believes that the CPM needs to primarily provide a long-term reliable capacity signal and this can only be via the ex-ante pot. Thus, any shift towards expost payments within the existing ACPS / monthly pot framework will serve only to increase the lottery effect of the CPM without providing a meaningful signal to generators regarding availability.

Synergen has the following comments on the option of increasing the ex-post component of the CPM within the present framework.

- The generators collectively have discussed this and DO NOT believe the expost payment alters their decisions re availability. Synergen does believe that the signal has changed generators availability decisions over short periods. Further, Synergen is not aware of any evidence that the ex-post mechanism has changed availability decisions. To move to a more ex-post weighting would require that the RAs / TSOs demonstrate that the signal has worked in the past, or would drive behaviour in the future as the view of the generators that the signal is supposed to incentivise, is that it is not an effective driver of behaviour;
- The Grid Code and T&SC already provide for plant to be bid in as available where it is physically available.
- When margin is tight, SMP should be high, thus:



- commercial arrangements such as CfDs provide a very strong incentive for any hedged generator to be available when CfD strike price < SMP (or at least anticipated SMP); and</li>
- o un-hedged volumes will be potentially paid at SMP;
- Increasing ex-post payments would reduce stability increasing the "availability" element at the expense of long-term capacity.
- Ex-post payments disproportionately benefit portfolio players and as such are a barrier to entry.
- A significant weighting of the CPM pots to ex-post payments is inconsistent with the central planning / control of outages. If ex-post payments were to increase there would need to be a higher degree of devolved decision making by generators on the timing of outages to allow them to respond to any envisaged "signal"; notwithstanding that a generator once on outage cannot respond. If the intention is to create a signal, then generators have to be able to respond to it, otherwise significant commercial risk would be controlled by the TSOs.
- A significant weighting of the CPM pots to ex-post payments would increase the lottery effect of payments to all parties other than those with a significant portfolio of plant

Synergen does not support an increase in the weighting of the ex-post CPM pot.

## 7.2 Flattening Power Factors

The consultation paper discusses the issues associated with increasing the Flattening Power Factor (FPF). The impact of this would be to increase the spikiness of the CPM. This could be either:

- 1. higher factor (say an increase from 0.35 to 0.5 for ex-ante and ex-post pots); or
- 2. one value for the ex-ante payment, and a higher value for the ex-post pot.

The distinction here would be whether the intention is to provide a short-term (or short and medium term) incentive to be available at times of tightest margin.

Ex-ante CPM signals are valuable, and provide, in Synergen's view, the most bankable element of the CPM mechanism. As with any ex-ante allocation, the payments may not provide the best correlation with tight margin. This does not indicate the ex-ante allocation is flawed. Increasing the power factor for ex-ante payments would, however, give rise to greater divergences between tight margin and ex-ante payments – notably as periods of tightest margin may not occur at the times of peak demand, but could arise as a consequence of co-incidental forced outages of generation. This would be perverse – indeed there are strong arguments in favour of decreasing the ex-ante power factor. Synergen considers that increasing the flattening power factor would significantly increase the "lottery" element of generators' payments, both ex-ante and ex-post. This effect would be particularly



pronounced if combined with an increased ex-post pot weighting. In summary Synergen would reject any increase in the FPF and would rather that a lower figure is utilised.

There is, in principle, some merit in applying separate power factors ex-ante and ex-post. However, Synergen rejects the increase of ex-ante or ex-post power factors, and believes that there may be merit in investigating a reduction in the ex-ante power factor.

## 7.3 Alternative approaches to the distribution and timing of capacity payments

SEM-11-019 sets two alternative approaches and seeks comments on:

- 50 / 50 a specific scenario of a 50:50 ex-ante / ex-post split with a higher, 0.5 power factor on a common basis; and
- 100% ex-post with floors the TSOs' / RAs' SOCAP model.

Synergen rejects the "50 / 50" scenario as Synergen considers the ex-post element and FPF should reduce, not increase, as discussed above.

Synergen rejects the TSOs' / RAs' SOCAP model. There is no description or assessment of the SOCAP model in SEM-11-019a, which calls into question the validity of the relative comparison<sup>8</sup> of the models in SEM-11-019. It appears that the SOCAP model includes the RAs' own assessment of the model and thus, the option assessment mixes (in a non-transparent manner) the subjective analysis of two different parties. Synergen considers that the SOCAP model would give undue influence to the TSOs over the allocation of CPM rewards, and introduce a conflict of interest with respect to the TSOs' scheduling of planned outages.

Synergen has considered the Microsoft Excel Workbook provided by the RAs and it seems that there could be an over-allocation of monies in earlier months (Jan / Feb / Mar) that may leave insufficient rewards for the other winter months (Oct / Nov / Dec) regardless of the tightness of margin in the later months. Furthermore, the SOCAP model would give significant discretion to the TSOs regarding the allocation of CPM rewards; which would increase the risk profile of the SEM as the lottery effect would be enhanced.

Synergen rejects both the 50:50 ex-ante / ex-post split and the SOCAP model.

<sup>&</sup>lt;sup>8</sup> SEM-11-019 Table 7.1 Page 47.



## 8 Work Package 10 – Impact on suppliers

Work Package 10 considers aligning supplier payments with generator payments. The RAs take the view that the CPM is sufficiently mature to make this feasible.

Synergen considers that there would be merit in such an approach if it met one of the following two outcomes:

- the price signal to the supplier would encourage demand side response; and / or
- it would provide a basis for CfD hedges to be struck against SMP + CPM instead of SMP.

Synergen does not believe that either of these objectives would be realised through aligning supplier charges with generator payments.

As noted earlier, Synergen believes the ex-post component within the current framework does not provide a meaningful signal that generators can respond to in the short term. On this basis it can see no compelling reason why suppliers would (via contracts with end customers) react to such a signal. The ex-post profile would create risks to suppliers resulting from customer demand profiles, and this risk would increase significantly if the ex-post allocation increased, and / or the power factors increased. In short, the existing ex-post signal does not work for generators, and it will not deliver any benefits to suppliers or their customers – as risks increase to suppliers, these costs (with a risk premium) can be expected to be passed onto customers.

Such risks could be mitigated if generators and suppliers hedged against SMP+CPM. There are two barriers to this. First, even if the charging / payment structure is aligned, there would still be underlying volume differences between charges and payments. This prohibits hedging. Notwithstanding this issue, generators will be inclined to hedge manageable risks. Ex-post CPM may be regarded as too volatile (especially if it becomes a larger proportion of the CPM and more spikey) and generators are likely to either decline to offer hedges against the CPM element, or attached significant risk premiums to hedge prices to reflect the volatility and risks that they face.

On this basis, there appears to be no demonstrated benefit in aligning generator payments and supplier charges at this stage.

Synergen believes that the existing charging structure of the CPM to Suppliers should be retained.



## 9 RAs / Pöyry Assessment of Options

The assessment of options set out in Section 7 of SEM-11-019 includes Pöyry's assessment of the four scenarios that discussed in SEM-11-019a. The Pöyry report is comprehensive, and contains both useful analysis, and discussion of the issues under consideration. Whilst the scenario approach does not fully map onto the four workstreams, it is a useful way of considering the complex issues that fall within the workstreams – which largely concentrate on the distribution of CPM payments to generators, broadly with the objective of re-targeting some of the monies paid for capacity. The outcome of such re-distributions would, for some options, reduce the monies paid to intermittent wind generation (the "capacity credit" option and increasing the ex-post weighting). Other options would re-allocate payments based on meeting broader objectives, notably reducing the cost of capital for new entrants (the new entrant scenario) and rewarding flexibility.

Whilst Synergen broadly agrees with the implications of the options set out, it believes that the assessment criteria adopted suffer from not being aligned with the RAs stated objectives of the CPM – although clearly there is crossover in some aspects. However, Synergen's assessment of the stated options against the assessment criteria adopted would be fundamentally different to that of Pöyry. This applies in key areas such as "fairness"; "efficient signals for long-term investment" and delivering "capacity adequacy". This inherently reflects the subjective nature of such qualitative assessments.

Further, there is no description or assessment of the SOCAP model in SEM-11-019a, which calls into question the validity of the relative comparison<sup>9</sup> of the models in SEM-11-019. It appears that the SOCAP assessment is by the RAs and thus the assessment within SEM-11-019 mixes (in a non-transparent manner) the subjective analysis of two different parties. There needs to be more transparency / explanation by the RAs / Pöyry given that the SOCAP model appears to be the RAs' preferred scenario (i.e. most green rows) within the assessment presented in Table 7.1 of SEM-11-019.

<sup>&</sup>lt;sup>9</sup> SEM-11-019 Table 7.1 Page 47.



## **Appendix A Response to Questions within SEM-11-019**

This appendix contains short responses to the questions set out in SEM-11-019.

**Consultation Point 1.** 

3.1.1.a - Should the RAs look more closely at a Capacity Credit scenario for the payment of different generation types?

The RAs should rule out options that are unduly discriminatory. In principle Synergen supports a stronger alignment of CPM revenues and proven performance. As set out in this response it believes that such payments can be (a) more targeted (b) produce stronger performance incentives, and (c) avoid discrimination on a generation technology basis. Our approach is set out in response to consultation point 5, below.

Consultation Point 2. 3.1.1b - Is a Capacity credit methodology appropriate for the CPM?

Not in the form proposed – see answer to Consultation point 1, above.

Consultation Point 3. 3.1.2.a - Does the current mechanism fairly reward wind or does it need to be revised?

The existing mechanism appears to over-reward wind (and potentially other plant with poor proven availability) although as noted Synergen does not see this issue of aligning rewards with long term proven availability as a wind vs. thermal plant issue. Inherently, the fixed pot nature of the CPM (leaving aside questions over the pot size) means the over-reward of one party equates to the under-reward of another. In the context of the BCoP, then conventional generators can be systematically under-rewarded – and are prevented from recovering efficient costs via energy bids if the CPM is not (a) adequate in total, and (b) appropriately targeted. As it stands, energy bidding is highly controlled, and the CPM is not, in Synergen's view, compensatory. If SRMC bidding is retained, there is thus a strong case to consider the rewards to some required generation plant to avoid inefficient market exit.

Consultation Point 4. 3.1.2.b - Should there be a separate stream of capacity payments for wind?

No – Synergen believes that there are preferable ways to target payments – see answer to Consultation Point 5, below.

Consultation Point 5. 3.1.2.c - The RAs welcome alternative

suggestions for allocating capacity payments

between generator types.

As set out in the main body of our response, Synergen considers that a long-term assessment of proven availability should be used.



Consultation Point 6. 3.1.3.a - Should interconnector users'

payments and charges be treated differently than under the current methodology in the

CPM?

Synergen believes that the existing approach is appropriate.

Consultation Point 7. 3.1.3.b - The RAs welcome alternative

suggestions for allocating capacity payments

between ICs / IC users.

N/A

Consultation Point 8. 3.1.4 - Should energy limited and pumped

hydro storage units be treated differently to the current methodology in the CPM?

Such units' availability is a function of the TSO's decisions in dispatch to utilise the available water for pumping. As the asset owner's ability to influence its availability profile is limited, special arrangements will continue to be required for Pumped Storage Units under the existing or any revised CPM arrangements – including under the proposed approach set out by Synergen. It should be noted that Pumped Storage Units provide a valuable service to the SEM as shown by the current outage and should be rewards accordingly, which does not appear to be the case at present.

Consultation Point 9. 4.1.2 - The CPM and the AS revenue payment

streams have two separate objectives and it is

the RAs view that these should remain separate. Should the CPM offer payments for

Flexibility?

No. Synergen concurs with the RAs' view in this regard.

Consultation Point 10. 4.2.4.a - Do respondents agree with the SEM

Committee, that an appropriate mechanism for penalising generators for not providing capacity when they have declared that they would, would increase the incentive to encourage the availability of generators when

actually needed?

Yes, and as noted, there are a range of ex-ante variants of capacity credit option as well as ex-post arrangements that may be retrospective in nature.

Consultation Point 11. 4.2.4.b - Do respondents believe the CDP

arrangement as described would fit the SEM

CPM design?

It would be compatible with the design, although as noted, the CDP as set out does not, in Synergen's view, strike the appropriate balance between incentive and penalties. See the main body of Synergen's response for detailed comments.



Consultation Point 12. 4.2.4.c - What should an appeals process involve / include?

The T&SC already provides for a query / dispute / appeal regime and thus no additional mechanisms are needed.

Consultation Point 13. 4.2.4.d - How should the proceeds from penalties be distributed?

Penalties should be distributed to other generators based on ex-ante payments made during the period that any rebate / penalty applies.

Consultation Point 14. 4.3.a - Should New Entrants be treated differently to incumbents in the CPM?

No. Synergen considers that this would be unduly discriminatory. Synergen does not believe that such an approach would meet the objectives of the SEM.

Consultation Point 15. 4.3.b - The RAs welcome comments on the feasibility of introducing a new entrant

guarantee.

Synergen considers that a new entrant guarantee is technically feasible (i.e. possible) but highly undesirable given the distortions it would create.

Consultation Point 16. 5.2.a The RAs welcome comment on: Should

the design of the distribution allocations be

changed?

Within the existing framework the design of the distributions allocations should not be changed other than some adjustment to address the "days in the month" issue – which is a known and accepted limitation of the existing mechanism.

Consultation Point 17. 5.2.b The RAs welcome comment on: The weighting of the 3 components.

The existing weighting should not be maintained – the ex-ante elements should be increased and therefore the ex-post element reduced.

Consultation Point 18. 5.2.c The RAs welcome comment on: Should the current values be maintained?

The existing weighting should not be maintained – the ex-ante elements should be increased and therefore the ex-post element reduced.

Consultation Point 19. 5.2.d The RAs welcome comment on: New ideas on the distribution allocation.

Synergen considers that the proportion of ex-ante distribution should increase. This is discussed in the main body of Synergen's response.



Consultation Point 20. 5.3.a Should a FPF be applied within the CPM?

Yes, and it should be lower than 0.35.

Consultation Point 21. 5.3.b Should the current value be maintained

or changed?

The existing FPF should be lowered, in particular for the ex-ante payments.

Consultation Point 22. 5.3.c If the mechanism moves to a heavier

weighed ex-post payment will the FPF be as

effective?

N/A

Consultation Point 23. 5.4.2.3.a - The RAs welcome comments on the

feasibility of introducing a SOCAP Model.

Whilst it would be technically possible to introduce the SOCAP model; it does not deliver any advantage over the existing mechanism and should be rejected. Synergen would consider the SOCAP model to be a significant change to the CPM, and considers that it would incur costs (both direct and in terms of the cost of capital resulting from the increased regulatory and financial risks) without delivering any demonstrated benefits. Thus Synergen does not consider the SOCAP model to be a feasible solution.

Consultation Point 24. 5.4.2.3.b - The RAs also welcome comment on:

The concept that the TSOs would 'push money around' and signal need for capacity within-

vear.

Synergen believes that this is undesirable – see comment to consultation point 23, above.

Consultation Point 25. 5.4.2.3.c - The RAs also welcome comment on:

The value to the system of more explicitly incentivising capacity providers to make sure they will be available when the system will

genuinely need them most.

Synergen understands from the wording of this question "...when the system will need them most" this is a forward-looking incentive. Synergen considers that this would be best achieved through applying a genset specific capacity credit – which would reward plant based on its contribution to system adequacy.



Consultation Point 26.

5.4.2.3.d - The RAs also welcome comment on: Whether a Floor; set high enough; is a sound tool for delivering revenue stability and lowering the cost of capital, and if not why not.

A high floor delivers a similar outcome to the existing ex-ante payment but with the downside of additional regulatory risks and financial uncertainty resulting from the concept that the TSOs could "push money around".

**Consultation Point 27.** 

5.4.2.3.e - The RAs also welcome comment on: The implications for Cash Flow and Credit for participants and operators.

Synergen believes that there could be cash flow and credit risk issues between generators; the extent / materiality of these issues would depend on the detailed implementation of the SOCAP model. This is a further reason to reject the SOCAP model.

**Consultation Point 28.** 

5.4.2.3.f - The RAs also welcome comment on: The RAs welcome alternative suggestions for allocating an effective distribution and timing payments system.

Synergen considers that payments should be more weighted towards the ex-ante pots with a lower FPF.

Consultation Point 29.

6 - The RAs welcome comments from respondents / suppliers on options for shaping supplier Capacity Charges, in the context of the existing design and in the context of the other Capacity Payment proposals in this document.

Synergen does not believe that there are any demonstrated benefits to aligning supplier costs to generator payments.