

Request For Information Responses

Issue 92 'Reserve Scarcity Price Review'



This Request for Information (RFI) was issued on 14 April 2021, with responses invited by 19 May 2021.

RFI Respondents

| Respondent | No. of Parties/Non-Parties Represented | Role(s) Represented |
|-----------------------------|--|---|
| Sembcorp Energy UK | 1 | Generator, Supplier |
| Uniper UK | 1 | Generator, Non-Physical Trader, Interconnector User, ECVNA, MVRNA |
| RWE Supply and Trading GmbH | 1 | Generator, Supplier, Non-Physical Trader |
| Limejump Ltd | 1 | Supplier |
| National Grid | 1 | System Operator |

Question 1a: What are the benefits of Reserve Scarcity Pricing as a whole, including cashout, and how do you make use of the information?

Responses

| Respondent | Rationale |
|-----------------------------|---|
| Sembcorp Energy UK | Confidential |
| Uniper UK | We understand the original rationale for Reserve Scarcity Pricing which was to overcome previous limitations in reflecting the cost of reserve products in periods in which they were used, more specifically when allocating the availability payments to those periods to ensure that costs were not understated. This was a particular concern as often utilisation costs might have been suppressed or averaged over a relatively long period of time, such as a season, and weren't able to respond to market conditions to reflect the level of margin available. |
| RWE Supply and Trading GmbH | <p>STOR utilisation prices do not correctly represent the cost to STOR providers to deliver electricity to the market in a given settlement period. This is because STOR availability payments, including those in adjacent settlement periods when a provider has not been called upon, are not included in the cashout calculation even though they are used to cover some of the cost of delivering this electricity. It is therefore reasonable to correct the price of these balancing actions upwards to better reflect the market value of electricity using an appropriate mechanism such as the RSP.</p> <p>The amount of capacity procured in the Capacity Market is based on a reliability standard of 3 hours average LoLE per annum over the long term. It is therefore to be expected that during some years there may be very few or zero hours where the RSP sets the cashout price. We believe the expectation and valuation of revenues that low merit plant earn during these occasions of scarcity are meaningful and material, and that they contribute towards reducing Capacity Market clearing prices.</p> <p>Scarcity pricing is widely recognised as one of the most economically efficient market mechanisms delivering benefits to consumers.</p> |
| Limejump Ltd | When STOR utilisation prices were set before day ahead, the RSP more accurately reflected the real time cost of balancing leading to more reflective cash out prices. That said, before January 2021 cashout prices were only greater than £1,000 on 11 occasions. Then, between 6-8 January 2021 when weather was very cold and low wind, there were 7 occurrences of cash out prices greater than £1,000. |
| National Grid | N/A |

Question 1b: What are the drawbacks of Reserve Scarcity Pricing as a whole, including cashout that limit your use of this information?

Responses

A summary of the specific responses on the draft redlining can be found at the end of this document.

| Respondent | Rationale |
|-----------------------------|---|
| Sembcorp Energy UK | Confidential |
| Uniper UK | We agree that it is appropriate to review the ongoing relevance of the Reserve Scarcity Pricing mechanism in light of changing market circumstances such as day ahead procurement of reserve and the introduction of new balancing services products. The concerns around limitations posed by the previous relatively long term procurement of STOR and the effect on utilisation prices have been reduced significantly by new procurement rules. Scarcity should continue to be reflected in the market price, but this should no longer just be constrained to specific STOR windows. A mechanism based on the actual costs incurred should be explored as an alternative to reflecting the value of reserve, but if this is not practical then perhaps something reflecting the level of margin on the system in all periods should be considered. |
| RWE Supply and Trading GmbH | We do not believe there are any drawbacks of Reserve Scarcity Pricing. |
| Limejump Ltd | There are several drawbacks with the current RSP including: <ul style="list-style-type: none">• There is no mechanism for the market to understand when STOR will be called to trigger RSP.• It is only triggered during a STOR availability window.• It can drive sub optimal behaviour. This winter we saw assets move from the BM to non-BM in order to NIV chase when high imbalance prices were more likely compared to the BM Offer prices. |
| National Grid | N/A |

Question 2: Does the current Reserve Scarcity Price mechanism influence your trading strategy or your participation in the electricity market and how?

Summary

| Yes | No | No Comment | Other |
|-----|----|------------|-------|
| 3 | 0 | 1 | 1 |

Responses

| Respondent | Response | Rationale |
|-----------------------------|------------|--|
| Sembcorp Energy UK | Other | Confidential |
| Uniper UK | Yes | We do not wish to disclose how we specifically use particular parameters within our trading strategy, but anything which influences the level of cashout prices will influence parties' operations in the electricity market. Expected imbalance prices will affect how parties operate in the timeframes running before gate closure, which will in turn affect investment decisions. It is important that the signals provided through cashout, including those which reflect system margin levels, are as accurate as possible to provide the correct incentives. |
| RWE Supply and Trading GmbH | Yes | The Reserve Price Scarcity mechanism reduces the dampening of cashout prices which feed into the wholesale market. Therefore, wholesale market prices tend to more accurately represent fundamental market behaviours which are used to model and forecast forward market prices and make commercial strategic decisions, including informing Capacity Market bid prices. |
| Limejump Ltd | Yes | Within Day we monitor the Loss of Load Probability (LoLP) and de-rated margin (DRM) to gauge whether we believe STOR actions will be triggered in the STOR window. We make sure we are not short if we expect the RSP to be used. As noted in our answer to question 1b we have seen some assets move to non-BM to capitalise on possibly higher cashout prices in preference to participating in the BM. |
| National Grid | No Comment | N/A |

Question 3a: What are the benefits of the De-Rated Margin and Loss of Load Probability calculations and how do you use the information?

Responses

| Respondent | Rationale |
|-----------------------------|--|
| Sembcorp Energy UK | Confidential |
| Uniper UK | Confidential |
| RWE Supply and Trading GmbH | The Reserve Price Scarcity mechanism reduces the dampening of cashout prices which feed into the wholesale market. Therefore, wholesale market prices tend to more accurately represent fundamental market behaviours which are used to model and forecast forward market prices and make commercial strategic decisions, including informing Capacity Market bid prices. |
| Limejump Ltd | We monitor the DRM and LoLP calculations within day when they are more accurate. Like the other energy notices, the EMN and CMN, they provide signals to the market to increase generation or reduce demand when margins are tight. We also produce an internal DRM which we believe is more accurate. We recommend a review of the margin notices to potentially rationalise the DRM with the EMN. We note that Elexon report that an EMN was called in all cases where the cashout prices out-turned greater than £1000. |
| National Grid | N/A |

Question 3b: What are the drawbacks of the De-Rated Margin and Loss of Load Probability calculations that limit your use of this information?

Responses

| Respondent | Rationale |
|-----------------------------|--|
| Sembcorp Energy UK | Confidential |
| Uniper UK | It is important to the market that these parameters are calculated as accurately as possible to ensure that the level of margin on the system is understood. Even without a RSP, some form of measure of system margin will be required. |
| RWE Supply and Trading GmbH | We do not believe there are any drawbacks of the De-Rated Margin and Loss of Load Probability calculations. |
| Limejump Ltd | Most importantly they need to be easy to calculate and understand. |
| National Grid | N/A |

Question 4: Do the current De-Rated Margin and Loss of Load Probability forecasts influence your trading strategy or your participation in the electricity market and how?

Summary

| Yes | No | No Comment | Other |
|-----|----|------------|-------|
| 2 | 0 | 1 | 2 |

Responses

| Respondent | Response | Rationale |
|-----------------------------|------------|---|
| Sembcorp Energy UK | Other | Confidential. |
| Uniper UK | Other | We do not wish to disclose how we specifically use particular parameters within our trading strategy, but it is to be expected that parties will consider information on the potential level tightness of the market, particularly given the potential impact it presently has on cashout prices. |
| RWE Supply and Trading GmbH | Yes | When the LoLP forecast is high, we would aim to maximise our stations' potential availability so that we have the maximum amount of electricity technically available to sell if commercially viable. |
| Limejump Ltd | Yes | Please see our answer to question 2. |
| National Grid | No Comment | N/A |

Question 5: Considering the move to day ahead procurement of STOR on 1 April 2021 and all the new information that National Grid ESO will be publishing in relation to this new market (buy curves, number of bids, number of units, auction details – volumes offered/secured, prices offered / cleared etc.), do you think a Reserve Scarcity Price mechanism will still be beneficial?

Summary

| Yes | No | Neutral/No Comment | Other |
|-----|----|--------------------|-------|
| 2 | 0 | 1 | 2 |

Responses

| Respondent | Response | Rationale |
|-----------------------------|------------|--|
| Sembcorp Energy UK | Other | Confidential. |
| Uniper UK | Other | It is possible that a new calculation, based more fully on costs incurred, may be more suitable to reflect changing market mechanisms. However, more work needs to be completed to understand whether this is possible, or whether a different approach to calculating the existing RSP is more appropriate. |
| RWE Supply and Trading GmbH | Yes | The fundamental reason for revising the utilisation price of STOR balancing actions upwards to RSP to more accurately reflect market fundamentals as described in our response to Question 1a still remains. |
| Limejump Ltd | Yes | We do not think that the existing RSP mechanism will be beneficial now that STOR has moved to day-ahead availability pricing and within day utilisation pricing. STOR pricing will therefore be reflective of real time market prices. We support the introduction of a new RSP mechanism. |
| National Grid | No Comment | N/A |

Question 6: How can the current processes be improved?

Responses

| Respondent | Response |
|-----------------------------|---|
| Sembcorp Energy UK | Confidential |
| Uniper UK | We do not have any specific suggestions at this stage. |
| RWE Supply and Trading GmbH | We believe earlier publication of RSP forecasts would be useful for market participants. More notice of potential system tightness may enable us to increase generation availability further. We believe it would be appropriate to review the inclusion of other reserve products that are used for energy balancing at times of scarcity. |
| Limejump Ltd | It should no longer be pegged to STOR availability windows. The replacement RSP should reward visible assets in the BM rather than those in non-BM. Please see our recommendations in our answer to question 8. |
| National Grid | No Comment |

Question 7: Is there other related information that you would like to see published as well or instead of the existing Reserve Scarcity Price-related information?

Summary

| Yes | No | Neutral/No Comment | Other |
|-----|----|--------------------|-------|
| 2 | 1 | 1 | 1 |

Responses

| Respondent | Response | Rationale |
|-----------------------------|------------|--|
| Sembcorp Energy UK | Other | Confidential |
| Uniper UK | No | Nothing at the moment in this context. |
| RWE Supply and Trading GmbH | Yes | We believe more transparency of the data used to make the RSP forecast would be useful for market participants to make their own assessment of the Loss of Load Probability. |
| Limejump Ltd | Yes | For any new RSP it must be clear when it will be triggered. |
| National Grid | No Comment | N/A |

Question 8: Is there an alternative or additional process or mechanism that you would prefer to see adopted instead of, or as well as the existing Reserve Scarcity Price mechanism one?

Responses

| Respondent | Rationale |
|-----------------------------|--|
| Sembcorp Energy UK | Confidential |
| Uniper UK | As we mention above, there may be more appropriate mechanisms, but there needs to be more assessment of options before we are able to comment. |
| RWE Supply and Trading GmbH | If the RSP Mechanism is removed from the Balancing and Settlement Code, it may need to be replaced with an alternative appropriate mechanism which represents the full cost of STOR balancing actions, including taking appropriate STOR availability payments into account. |
| Limejump Ltd | <p>We believe a replacement RSP mechanism is needed which will require further consideration. Two possible replacements could be:</p> <p>1) When the DRM is tight, then all activity taken in the BM to respond to this should be priced at the scarcity price so that BM participants are appropriately rewarded and there is no incentive to take a non-BM route.</p> <p>2) Instead of using a £6k RSP it may be more market reflective to use the highest BM Offer in a Settlement Period when calculating the cashout price.</p> |
| National Grid | No Comment. |

Question 9: Do you have any further comments?

Summary

| Yes | No |
|-----|----|
| 2 | 3 |

Responses

| Respondent | Response | Comments |
|-----------------------------|----------|--|
| Sembcorp Energy UK | No | N/A |
| Uniper UK | No | N/A |
| RWE Supply and Trading GmbH | Yes | <p>The Reserve Price Scarcity Mechanism was noted by the EU Commission in their determination on state aid for the GB Capacity Market in 2019 as being part of the cashout reform that had followed Ofgem's Electricity Balancing Significant Code Review. Cashout reform was one of the measures taken by the UK to address generation adequacy problems and was a major contributing factor towards the reinstatement of the GB Capacity Market (published at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C:2019:109:FULL&from=EN). The EU commission noted that sharper cash-out prices have the potential to reduce the cost of procuring capacity through the Capacity Market and this is consistent with the Guidelines on State aid for environmental protection and energy 2014-2020 which require that state aid should be limited to the minimum necessary.</p> <p>In the longer term, it essential to ensure that all aspects of the balancing market, including RSP, are consistent with an economically efficient transition to net-zero.</p> |
| Limejump Ltd | No | N/A |
| National Grid | Yes | <p>1. National Grid ESO's current view on the Reserve Scarcity Price Mechanism and the link to cash out prices is that changes in the balancing market over the last 5 years since it was introduced have led to a reduction in the accuracy and effectiveness of the signal, which is evidenced by how rarely there has been any impact on prices in recent years and other changes such as the new Day Ahead STOR market. However, we recognise that there is still value to the industry in publishing a</p> |

| Respondent | Response | Comments |
|------------|----------|--|
| | | <p>forecast margin at different lead times from day ahead to gate closure.</p> <p>2. From last winter's experience and feedback from industry, where possible we are looking to make our margin signals more consistent. We are looking at different options informed by industry feedback which could include improving and/or combining the DRM and CMN margin calculations into a single calculation, and updating the methodologies to reflect known issues and changes since the two calculations were introduced 5-6 years ago.</p> <p>3. We expect to retain the EMN signal as a separate manually derived margin view that can incorporate engineering judgement and experience from the control room, to complement the DRM and CMN processes which are automated and based on market submitted data, latest forecasts and fixed formulae, thresholds or trigger levels.</p> <p>4. We note that an important conclusion from the ENTSO-e investigation into the Texas incident was the potentially significant impact of scarcity pricing on suppliers or consumers in situations of long-lasting extreme events. Very high prices are a necessary signal for investment (particularly in an energy-only market context) and for elastic demand, but can be destructive if they are sustained for many consecutive hours. However, it is not guaranteed that extreme prices such as those occurring due to a scarcity pricing mechanism translate into robust long-term investment signals ensuring resource adequacy. It is noted that the Australian market applies limitations on the duration of "unlimited" prices in Australia to avoid extreme market disruptions in such cases.</p> |

