



Wholesale Electricity Market Rule Change Proposal Submission Form

RC_2013_09 Incentives to Improve Availability of Scheduled Generators

Submitted by

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Submission – Public Version

1. Please provide your views on the proposal, including any objections or suggested revisions.

A. Summary

Verve Energy considers that the proposal:

is an over-reaction to a current set of circumstances in the Wholesale Electricity Market (WEM) which will lead to additional, unnecessary costs for Market Generators (and therefore end users);

does not take into account the natural, and very strong, incentives to be available in a predominantly bilateral contract market;

does not recognise that availability of a generation facility varies greatly depending on the type of fuel, the design of the facility, how the facility is operated/dispatched, and the stage of its lifecycle that the facility is at; and

when assessed in its entirety, is heavy handed, introduces onerous obligations, is unnecessarily invasive and simply not needed.

Verve Energy considers that the Independent Market Operator (IMO) could achieve the same outcome (i.e. appropriate incentives for availability) by implementing a subset of, and/or modification to, the measures outlined in the Rule Change Proposal. However if the



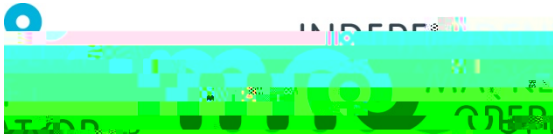
IMO chooses to implement all measures as currently proposed, it will place undue regulatory risk and undue regulatory burden on participants which will simply lead to higher costs for Market Generators, and these higher costs will ultimately be passed onto end users.

Verve Energy notes that the outage rates displayed by some facilities are entirely within the bounds of the current Wholesale Electricity Market Rules (Market Rules) and in part are an outcome of the current excess capacity in the WEM. Further, Verve Energy notes that in approving Planned Outages System Management needs to ensure that there is sufficient margin available to ensure system security can be maintained – as such, if the Facilities had been needed, System Management would simply not have approved the Planned Outages.

On many occasions the IMO has inferred that facilities with high unavailability rates are unreliable. Verve Energy considers that the IMO is mixing the concepts of reliability and availability. At its most simple, availability is about being able to be used/called upon if required, and reliability is the ability to be relied on to provide the good or service when asked. These are quite different concepts and should remain so. Verve Energy notes that no generating facility is reasonably capable of achieving 100 per cent availability and, indeed, the Reserve Capacity Mechanism does not include a premium to achieve that level of performance. Verve Energy notes that the availability of a generation facility varies greatly depending on the type of fuel, the design of the facility, how the facility is operated/dispatched, and the stage of its lifecycle that the facility is at – these are all facts that the IMO needs to be aware of and take into consideration when developing Rule Change Proposals to ensure that no technology type is discriminated against.

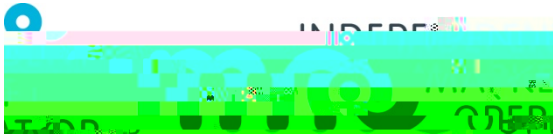
Generators need to undertake a certain amount of Planned Outages in order to be able to provide a reliable service when asked to. These Planned Outages can include A-Class outages (turbine critical path), B-Class outages (boiler critical path) and maintenance outages. In addition to these outages there are a number of “special projects” that may need to be undertaken at various stages of a Facility’s life cycle, these special projects could include replacement of obsolete and unmaintainable equipment, replacement of equipment that has become an unacceptable risk, enhancements of efficiency, enhancements of environmental performance, upgrading control performance to satisfy market performance requirements and life extension projects. More information on each of these outage types is contained later in this submission.

Verve Energy notes that this Rule Change Proposal seeks to incentivise the availability of Scheduled Generators. It is important to note that the IMO is also progressing other work streams which will also incentivise availability, for example the dynamic refunds proposal. The dynamic refunds proposal, combining a refund regime with a rebate regime, will not only incentivise reliability, but also availability. For example capacity performing less reliably will pay more refunds and lose more rebates. Likewise, the rebate mechanism will incentivise reductions in Planned Outages (as Planned Outages can reduce opportunity for rebate). Further, Verve Energy notes that as the refund regime is under review, Verve Energy is unable to fully assess the potential impacts of this Rule Change Proposal. As such, Verve Energy considers that the IMO should combine the dynamic refunds and availability



incentives for Scheduled Generators into one holistic piece of work to allow participants to adequately assess the risk (and likely impact) associated with the proposal.

Verve Energy is concerned that, by introducing a number of proposals to incentivise availability (from different and unaligned workstreams), there may be the perverse impact of



Outage rates, regardless of the availability of total system capacity creates unnecessary regulatory burden;

Should the IMO proceed with performance report proposal Verve Energy considers that the threshold would be more appropriately set at 2191 hours (approximately 13 weeks) in the 12 month period. This would allow for an A Class overhaul during the year as well as a minor provision for any emerging maintenance requirements; and

While clause 4.27.9(b) is expected to be used infrequently, as currently drafted it places undue regulatory risk on participants. As such, the Market Rules should be expanded to include a governance framework to guide the IMO in making decisions under this proposed clause.

The following section outlines Verve Energy detailed views for each of the IMO's proposals.

B. Verve Energy's views

Proposal 1 – improving the practicality and effectiveness of clause 4.11.1(h):

Proposed amendment - Permitting the IMO more flexibility in assigning a quantity of Certified Reserve Capacity (between zero and full allocation) to Scheduled Generators displaying excessive outage rates over 36 months.

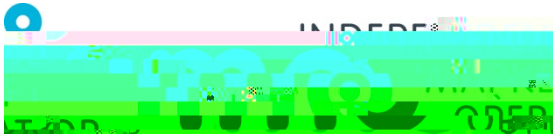
Verve Energy considers that the current Market Rules (allowing the IMO to decide not to assign a quantity of Certified Reserve Capacity if the prescribed thresholds are breached) are appropriate.

Verve Energy does not consider it necessary for the IMO to have the ability to certify a quantity of Certified Reserve Capacity between zero and full allocation. Specifically, Verve Energy considers that applying partial certification for two years hence can not be deemed to be an incentive to maximise availability in real time. Further, Verve Energy considers that, despite specifying the range of factors for the IMO to consider in making this decision, applying such a rule will be largely subjective and difficult to apply appropriately and equitably over time.

If the IMO was trying to solve a problem of excessive partial outages then only allocating partial capacity may be sensible. However, this is not the issue that the IMO is trying to resolve.

Verve Energy suggests that the IMO could consider an alternative proposal whereby once a facility triggers the availability thresholds then the rate paid for capacity slides linearly for Planned Outages and logarithmically for Forced Outages (to discourage unreliability). If this is deemed to be administratively too complex, Verve Energy suggests that if a facility exceeds the prescribed thresholds (having allowed for special long outages for major refurbishments etc) then it loses its capacity payments until the facility is back below the thresholds.

Proposed amendment - Specifying a range of factors for the IMO to consider in making its decision, adding certainty, structure and transparency to the process.



The Market Rules should include the range of factors the IMO will consider in making its decision under clause 4.11.1(h), regardless of whether or not the Market Rules remain as they are currently drafted or are amended to allow the IMO the flexibility to partially certify a facility. Verve Energy agrees that this adds certainty, structure and transparency to the process.

In noting this, Verve Energy considers that, despite specifying the range of factors for the IMO to consider in making a partial certification decision, applying such a rule will be largely subjective and difficult to apply appropriately and equitably over time.

Proposed amendment - Progressively tightening the combined Planned Outage rate and Forced Outage rate thresholds that trigger clause 4.11.1(h), from 30% to 20% over five years, commencing in 2016, with corresponding changes to the Forced Outage rate threshold.

Verve Energy is not against the proposal to reduce the combined Planned Outage rate and Forced Outage rate thresholds that trigger clause 4.11.1(h) per se. However, Verve Energy considers that this proposal could be refined somewhat to allow Market Participants to adjust their behaviour and for that behaviour to be reflected in the corresponding measures. Without allowing time for this to occur, Verve Energy does not see how the IMO will be able to suitably assess the most appropriate rates for the WEM. Verve Energy considers that the IMO's proposal (i.e. the full five year glide path) is too aggressive in the first instance which could lead to perverse market outcomes.

As such, at the very least Verve Energy considers that the proposal should allow for a break point at year two of the glide path (for at least two years) in order for Market Participants to adjust their behaviour and for the IMO to undertake the assessment of the appropriateness of the rates at that time and whether further amendments are needed.

Verve Energy considers that the proposed glide path to year two (Forced Outage Rates of 13% and combined rates at 26%) is appropriate; or if the IMO agrees to incorporate a break point at year two, Verve Energy suggests that the IMO could adopt a slightly more aggressive start to the glide path (i.e. Forced Outage Rates of 12% and combined rates at 25% for year two).

Proposed amendment - Undertaking a review of the outage thresholds in which the IMO must consider the merits of further reducing the outage thresholds.

As noted above, Verve Energy considers that the IMO should undertake a review after year two of the glide path. While the review is being undertaken Verve Energy considers that there should be a break in the glide path.

If the IMO does not agree with Verve Energy's suggestion for a break in the glide path to allow participants to adjust their behaviour, then Verve Energy questions whether this should be a regular review process (i.e. once every five years) with the first review to be completed by 31 December 2018 as opposed to just a single review midway through the proposed glide path.



Proposed amendment - Making the IMO's decisions under clause 4.11.1(h) reviewable.

Verve Energy agrees that the IMO's decisions under clause 4.11.1(h) should be reviewable.

Proposed amendment – If the IMO commissions a consultant to provide an opinion on issues relevant to the IMO's discretion to partially certify a facility then the Market Participant is required to pay the IMO's expenses incurred.

Verve Energy is strongly opposed to this proposal. Verve Energy notes that the IMO considers that the whole market will benefit from the IMO's decision making process under clause 4.11.1(h)¹. As such, the costs for making such decisions should be apportioned appropriately.

Proposal 2: clarify the nature of the Reviewable Decision under clause 4.9.9

Verve Energy supports the IMO's intention to clarify the nature of the Reviewable Decision under clause 4.9.9.

Proposal 3: impose a cap on trading intervals where a generator's RCOQ can be reduced due to planned outages

Proposed amendment – After the Facility reaches a cap, the IMO will no longer be required to reduce the Reserve Capacity Obligation Quantity for that Facility to reflect the amount of capacity unavailable due to Planned Outages.

Verve Energy is against the proposal to impose a cap on the trading intervals where a generator's RCOQ can be reduced due to planned outages. Verve Energy considers that this proposal, as it stands, could be detrimental to the future reliability standards in the South West Interconnected System (SWIS). This is because some Market Generators may need to reduce current levels of maintenance on certain facilities in order to ensure that the proposed cap is not breached. As such, Verve Energy considers that it would be more appropriate for a facility exceeding the prescribed thresholds (having allowed for special long outages for major refurbishments etc) to lose its capacity payments until the facility is back below the thresholds.

While Verve Energy considers that there is a more appropriate alternative, should the IMO proceed with this proposal, then it is important to note that the extent to which the cap will impact various facilities on the SWIS will vary greatly on the type of fuel a facility uses, the design of a facility, how a facility is operated/dispatched, and the stage of its lifecycle that a facility is at. As such, Verve Energy considers that the threshold needs to be set at an appropriate level to cover all these circumstances and to ensure that no technology type is discriminated against.

¹ See the IMO's assessment of the proposal against the Wholesale Market Objectives in its Rule Change Proposal.



Proposed amendment – Impose a cap of 7,800 Trading Intervals (3,900 hours or 23.2 weeks) in any 36 month period (equivalent to an average annual Planned Outage Factor of 14.8 percent).

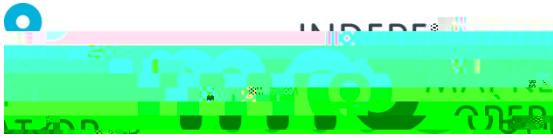
Verve Energy considers that 14.8 percent equivalent annual Planned Outage factor is too low, particularly for coal fired power stations, and something in the range of 17- 20 percent equivalent annual Planned Outage factor (approximately 26.6 to 31.3 weeks over the 36 month period respectively) would be more appropriate². Verve Energy's rationale for this suggestion is presented below.

The proposed cap will potentially restrict a prudent thermal plant operator from undertaking appropriate maintenance to ensure reliability

Verve Energy operates in a competitive market with significant compliance obligations. Verve Energy's asset management philosophy is to achieve an effective balance between its short term operational requirements and the need to maintain the long term performance, availability and reliability of its portfolio of assets. This portfolio approach enables the management of planned outages from a whole of portfolio perspective, within the boundaries of asset specific capacity requirements. Further to this, the primary aim of power plant asset management is to maximise a plant's profitability over its residual life. This objective demands purposeful management of plant risk, condition and availability through optimal and timely maintenance, refurbishment and investment.

Verve Energy employs contemporary operating and maintenance³ practices that focus on reliability, longevity and performance in line with the recommendations of the original equipment manufacturer (OEM) and other industry expert opinion (domestic and international) while utilising the valuable learnings from maintaining such a diverse fleet over many years of operation.

System Management dispatches Verve Energy's portfolio of plant as a dispatch agent under the Market Rules. Verve Energy provides guidance to System Management on how it would like the plant dispatched and, while System Management endeavours to comply with Verve Energy's requests, it has no obligation to do so. System Management's primary concern is to dispatch the fleet, and allow maintenance to it, that is commensurate with achieving and

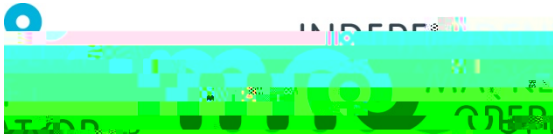


Verve Energy's maintenance, refurbishment and investment program includes Major Outages (A-Class outages (turbine critical path) or B-Class outages (boiler critical path)) and maintenance outages. In addition to these outages there are a number of "special projects" that may need to be undertaken at various stages of a Facility's life cycle, these special projects could include replacement of obsolete and unmaintainable equipment, replacement of equipment that has become an unacceptable risk, enhancements of efficiency, enhancements of environmental performance, upgrading control performance to satisfy



Major outages also have to address the fact that some of the Verve Energy assets have operated for over 200,000 hours and it is critical to undertake work that underpins the asset sustainability and reliability for their projected economic life⁵. Special projects therefore are often also undertaken during the standard major outages and can often become the critical path activity, for example a stator or rotor rewind. Undertaking these special projects means that the duration of a standard major outage would be longer than the eight or 12 weeks duration than for a standard A or B class outage.

It should also be noted that increasing environmental legislative demands could also result in plant upgrades which themselves would almost certainly become the outage critical path



"Fundamental changes to the market design need to be carefully assessed to ensure that any solution does not cause more harm than the problem it is seeking to fix and is commensurate with the size of the problem being addressed"

In its "problem statement" the IMO identified five facilities that it was concerned about with regards to what it deemed to be undertaking excessive Planned Outages. However the IMO has also identified that its proposed solution would capture nine facilities (nearly double the amount of facilities that the IMO identified as having issues). This in itself indicates that the proposed threshold is more heavy handed than required.

Verve Energy considers that the IMO should take a more conservative approach in the first instance, with the opportunity for further reductions of the cap in the future should further reform be needed. This is consistent with the IMO's light handed approach to regulation in other areas of the Market Rules (and upcoming reform⁸).

Proposed amendment - Trading Intervals will not count towards the cap if no adjustment to Reserve Capacity Obligation Quantities was made and the Market Participant was required to pay a Reserve Capacity Deficit Refund in relation to that Trading Interval.

Verve Energy agrees with this aspect of the proposal.

Proposal 4: improvements to the practicality and effectiveness of clause 4.27

Granting the IMO a discretionary power to require a performance report and performance improvement reports from the relevant Market Participant concerning a Scheduled Generator with an excessive planned outage rate, regardless of the availability of total system capacity.

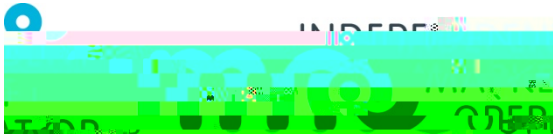
Verve Energy does not agree that this proposal is necessary as it creates unnecessary regulatory burden. Further, Verve Energy considers that the incentives created by the other aspects of the proposal will be sufficient. However, should the IMO proceed with this aspect of the proposal, Verve Energy would like to make the following comments:

Verve Energy has undertaken some high level analysis of historic compliance of Verve Energy thermal facilities against the proposed Performance Report threshold of 1750 hours of Planned Outage per year, based on data from 1980 to 2013. Verve Energy's historical analysis against the proposal has been provided to the IMO on a confidential basis. Notwithstanding the IMO's proposed discretion⁹ regarding with regards to requesting the performance reports, on average Verve Energy's analysis indicates that the IMO's threshold is too low.

Verve Energy considers that the threshold would be more appropriately set at 2191 hours (approximately 13 weeks) in the 12 month period. This would allow for an A Class overhaul

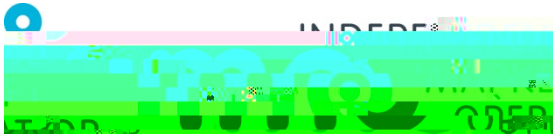
⁸ For example – the proposal to relax the firm fuel requirements.

⁹ Clause 4.27.3A notes that in making a decision under clause 4.27.3A the IMO must assess whether the number of Equivalent Planned Outage Hours was attributable to a specific, infrequent occurrence or an underlying performance deficiency.



during the year (which is typically 12 weeks long) as well as a minor provision for any emerging maintenance requirements. Verve Energy is concerned that setting the level at 1750 hours (approximately 10 weeks) is unnecessarily restricting, and questions whether an A Class overhaul would be deemed to be an “infrequent occurrence” in the context of clause 4.27.3B (given that A Class overhauls are undertaken as part of a maintenance cycle and could be as frequent as every three years¹⁰).

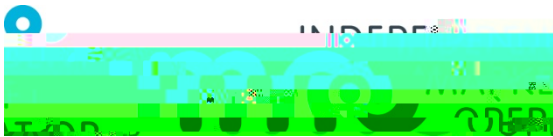
Verve Energy has also provided the IMO with historic compliance of Verve Energy thermal



Additionally, Verve Energy considers that any decision made under clause 4.27.9(b) should be a Reviewable Decision, and as such, requests that the IMO liaise with the Public Utilities Office on this aspect.

C. Verve Energy's comments on the proposed drafting

While Verve Energy does not support the progression of the Rule Change Proposal, Verve Energy has the following specific comments to make in relation to the proposed drafting:



- Add a heading above the table in clause 4.11.1D (similar to clause 4.26.1 which has the heading “Refund Table” above the table). This heading could be Outage Rate Table (or something similar);
- If the above suggestion is agreed with, then add a definition into chapter 11 (similar to the definition of Refund Table); and
- Amend clause 1.4.1(r) as follows (added text): “headings and comments appearing in boxes in these Market Rules (other than the Refund Table in clause 4.26 and the Outage Rate Table in clause 4.11.1D) are for convenience only and do not affect the interpretation of these Market Rules”.

Proposed clauses 4.11.1E and 4.12.10 provide for a one off review of both the outage criteria to apply under clause 4.11.1(h) and the RCOQ Reduced Planned Outage Count, to be completed by 31 December 2018. Verve Energy questions whether this should be a regular review process (i.e. once every five years) with the first review to be completed by 31 December 2018.

Proposed clause 4.12.9 - As outlined above, Verve Energy considers that the cap would be more appropriately set in the range of 26.6 to 31.3 weeks¹⁴ over the 36 months.

Proposed clause 4.12.10 provides for a review of the appropriateness of the limit for the RCOQ Reduced Planned Outage Rate, to be completed by 31 December 2018. Unlike the review of the outage rates to apply under clause 4.11.1(h), undertaken under proposed clause 4.11.1E, the proposed Amending Rules do not specify what the IMO must take into account in when undertaking this review. It would be Verve Energy's preference for the IMO to include additional detail as to what the review would include (similar to clause 4.11.1E). This not only provides consistency in drafting, but also greater certainty for Market Participants.

Proposed clauses 4.27.3A and 4.27.3B – As outlined above, Verve Energy considers that the threshold would be more appropriately set at 2191 hours (approximately 13 weeks) in the 12 month period.

Clause 4.27.5 – subclause (a) provides an explicit timing requirement of 20 Business Days for a participant to provide a report described in clause 4.27.3 or clause 4.27.3A(a). However, subclause (b) does not include an explicit timing requirement for a participant to provide a report described in clause 4.27.3A(b), instead linking it to a time to be specified by the IMO under clause 4.27.3A(b). Verve Energy would prefer that subclause (b) include an explicit timing requirement. This not only provides consistency in drafting, but also greater certainty for Market Participants.

¹⁴ Approximately 17 – 20 percent equivalent annual Planned Outage factor.



Clause 4.27.9(b) permits the IMO to temporarily adjust the cap on the number of Trading Intervals eligible for a reduction of Reserve Capacity Obligation Quantities if the system capacity availability criterion in clause 4.27.9 is met. As outlined above, Verve Energy considers that the Market Rules should be expanded to include a framework as to what the IMO would take into consideration in making such a decision and also what the cap may be adjusted to. Additionally, Verve Energy considers that any decision made under clause 4.27.9(b) should be a Reviewable Decision, and as such, requests that the IMO liaise with the Public Utilities Office on this aspect.

The Equivalent Planned Outage Hours definition currently notes that it will be calculated in accordance with the Power System Operation Procedure. Similarly to our comment for clause 4.11.1 above, Verve Energy considers that the Equivalent Planned Outage Hours calculation methodology should be included in an Appendix of the Market Rules. Verve Energy considers that this will provide greater certainty and rigour in the calculation of Planned Outage and Forced Outage rates, which is vital to support this Rule Change Proposal. If the calculation methodology is to be kept in the Power System Operation Procedure as currently proposed, then Verve Energy considers that the proposed amendments should be developed as soon as practicable to allow participants to consider during the second submission period for this Rule Change Proposal.