Brookfield



Brookfield Renewable Ireland

Response to

I-SEM Capacity Remuneration Mechanism Detailed Design Consultation Paper

Submission Date: 17th August 2015

Introduction to Brookfield Renewable

Brookfield Renewable Ireland Limited (Brookfield Renewable) is a wholly-owned subsidiary of Brookfield Renewable Energy Partners, one of the largest publicly traded, pure-play renewable power platforms in the world. Our global portfolio consists of approximately 7,000 MW of installed capacity, primarily hydroelectric and wind power generation which is diversified across 14 power markets in 6 countries including the United States, Canada and Brazil, Ireland and Northern Ireland. Our power operating platform employs over 1,500 people globally, including full operating, development, construction oversight, and wholesale power marketing capabilities.

Brookfield Renewable completed the acquisition of the wind generation assets of Bord Gáis Éireann in June 2014 which included 320 MW of wind capacity across 17 wind projects in 8 counties in Ireland and Northern Ireland. Since then, Brookfield Renewable has brought 144 MW of wind generation to commercial operation and now have an operating portfolio of 464 MW across the island. Additionally, Brookfield Renewable plans to expand its portfolio and has an extensive development pipeline of approximately 200 MW of wind across Ireland and Northern Ireland, including a 100MW tidal generation project off the coast of Northern Ireland and nearly 50MW of onshore wind projects approaching construction.

Brookfield Renewable welcome the opportunity to respond to the consultation paper on the detailed design of the capacity remuneration mechanism proposed for I-SEM. The reliability option is a significant shift from the current capacity payment mechanism which has been successful in delivering all-island generation adequacy. Wind generation will account for 40% of this market by 2020 representing a significant contribution to the all island generation adequacy and security of supply and this must be recognised in the design of the I-SEM capacity mechanism.



Brookfield Renewable Energy Partners - Global Footprint

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Summary of Our Position

Brookfield supports the decision to implement a capacity remuneration mechanism that aims to "deliver long term generation adequacy in the all-island market"¹. We believe that a capacity mechanism is needed to send appropriate investment signals and to help provide the investment certainty required in an industry with large up-front capital outlays to deliver investment in energy infrastructure are recovered over a lengthy operational lifetime.

Brookfield Renewable is supportive of the market integration of wind but reiterates that any erosion of the commercial position (i.e. net revenues) of existing wind generators amounts to retrospective changes that would be extremely damaging to Ireland's attractiveness for investment. In this regard and recognising that it is an issue also to be considered with the Department, it is important to ensure that there are parallel discussions on how the REFIT support regime will interact in the future I-SEM to ensure that net revenues for existing wind generators are maintained.

Ireland has ambitious EU renewable energy targets, requiring significant decarbonisation of the allisland energy market. Historically, onshore wind energy has facilitated a large portion of this decarbonisation and in our view its position as the most cost-effective low carbon generation technology should ensure that it will continue into the future beyond 2020 as it meets and exceeds 40% of the market. As it will represent a substantial portion of the all-island market, wind generation is an integral part of its long term generation adequacy and must be central in all decisions that relate to the future of the energy market including the design of the I-SEM Capacity Mechanism.

Wind's capacity contribution must continue to be recognised. The System Operator's All-island Generation Capacity Statement identifies wind as a valuable source of generation capacity². Wind is allocated a capacity credit that *conservatively* estimates the proportion of its nameplate capacity that it *reliably* contributes to all-island generation. This factor takes account of its intermittency and the marginal effect of increasing amounts of wind relative to demand. In short, this is the proportion of wind's capacity that is deemed suitable for inclusion towards the generation adequacy of the all-island energy market. At a minimum, wind should be eligible to participate in the capacity mechanism proposed for I-SEM to the level recognised by the System Operator, who is legislatively responsible for delivering a secure and reliable supply of electricity to consumers across the island of Ireland.

All wind generation should eligible to participate in the capacity mechanism. It's capacity contribution is rewarded in the current SEM and recognised annually in the All-island Generation Capacity Statements. It would be both contradictory and deliberately discriminatory to exclude wind whilst remunerating all other forms of capacity. This would be wholly inappropriate and would not be a technologically neutral solution to addressing long term generation adequacy, as required by EU State Aid Guidelines.

Non-firm generators should be eligible to participate in the capacity mechanism. The non-firm status of a generator is not linked to a generators ability to generate energy at times of system stress. Instead, every effort should be made to incentivise the TSO to ensure that the network is available for all generators to contribute capacity in times of scarcity and ensure that they are not restricted from participating in the energy market.

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¹ I-SEM SEM Committee Decision on High Level Design: Section 5.2 - Requirement for Explicit CRM in the I-SEM).

² All-Island Generation Capacity Statement 2015-2024: *Section 3 –Electricity Generation*

We believe that supported wind, i.e. ROI and NI generation in receipt of renewable supports, should be eligible to participate in the capacity mechanism. In ROI, wind is supported through the REFIT support that ensures eligible generators receive the REFIT floor price through make whole payments if market revenues are below the floor price. As capacity payments are accounted for in this reconciliation it would not result in a double subsidy for wind in the same manner that REFIT wind generators currently receive capacity payments in SEM. Instead, their exclusion would pass the cost of capacity of wind to the consumer through the PSO levy. It is inappropriate to levy this charge to the consumer while providing no additional benefit. Brookfield feel that it is more economically efficient for wind's capacity credit to be paid from the same pot that all other capacity payments are made.

There are no make whole payments or floor price in the NIRO support mechanism. Capacity payments are an additional revenue stream which form part of the expected revenues upon which investment decisions are made. Wind generators have a legitimate expectation that they will continue to have access to this revenue stream . Excluding wind from participating in this revenue stream would amount to a *retrospective change* which would be very damaging to the regulatory and investor certainty in I-SEM which is competing with other markets to attract investment.

Unsupported wind must also be credited for its contribution towards capacity in the CRM. These generators also provide a valuable source of capacity and contribute towards the security of supply and long term generation adequacy of the all-island energy market.

It is essential that wind be allowed to participate through an aggregator which has no maximum size. There is no rationale for limiting the size to which a renewable aggregator can participate nor is there a market benefit to such a limitation.

In its application, **the I-SEM Reliability Option (RO) should be load following.** This allows RO bidders to accurately assess the risks that their obligation bears. If scarcity happens at half of peak demand and the full difference payments were called, the counterparty would receive twice value of the payments that it would have to pay to suppliers. They should not profit from this measure.

Wind energy should not be subject to performance incentives. Performance incentives by name are designed to incentivise plant to be available at times of system stress. Winds performance is not dependent on any factors which can be improved by incentives. Because of this, we believe that any performance incentive applied to wind is a technology specific penalty. The de-rating of wind to its capacity contribution already mitigates the risk of underperformance. The diversification effects of large numbers of turbines also ensures that unforeseen outages affect only tiny fractions of name plate capacity making the risk of failure of plant significantly less severe for the grid than traditional generation technologies.

Brookfield support the use of the Day Ahead Market for the market reference price against which the RO is called. Using the day ahead market as a reference price is the only one of the options provided that best meets the objectives set out in the consultation, i.e. promotes the wider liquidity objectives, optimises interconnector flows and addresses market power controls adequately. We believe that the flexibility and capacity to address an unforeseen stress event will be incentivised through the balancing market. Furthermore, we believe that it is inappropriate to ask generators through the capacity mechanism to provide consumers with a hedge against the price impact of unforeseen events such as other generator outages. This would be the case if the balancing market is included as the market reference price in any form.

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Brookfield believes that cost reflective bidding should be retained in I-SEM and market monitoring should continue to enforce it. We believe that it is needed to ensure that participants do not withhold capacity from the day ahead market and drive prices upwards in the balancing market.

We use the remainder of this response to address specific details of the consultation.

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Comments on the Capacity Remuneration Mechanism Detailed Design for I-SEM Consultation

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2.1. Capacity Requirement: Security Standard

A 3 hour LOLE security standard is preferred.

Brookfield disagrees with the RA's decision to keep the 8 hour LOLE standard as the new security standard. At present the 8 hour LOLE is an arbitrary standard as it is **only** used to calculate the *annual pot size* (\in) i.e. the remuneration given to all participating capacity. From this pot there is no limit to the capacity that can participate. The effect of more capacity participating is that the pot gets diluted for everyone else. The result of using this methodology is that SEM operates to a much higher security standard than the arbitrary value used to calculate the pot size. This is evident from looking at the frequency of grid code alerts to the system; one level 1 alert in 2012, none since.

In contrast, the RO methodology proposed will reward a specific *quantity of capacity* who compete and win at auction. The quantity procured will be set by the LOLE security standard. The effect of this change will be that those capacity providers who do not win at auction will lose the capacity payment revenue stream which they did not have to qualify for up to now. It is acknowledged that this does provide exit signals which are one of the objectives of the RO CRM.

Brookfield would like to express concern over the terminology the RAs have chosen. By stating that they are 'not minded to change' the existing security standard suggests that the amount of capacity on the system will remain constant as we transition to I-SEM. However, it is inappropriate to compare the security standards used in the two methodologies. It should be recognised and explicitly stated that the effect of 'keeping' this security standard will actually result in a reduction in the amount of capacity remunerated. Effectively, the RA's are proposing a significant reduction in the capacity remunerated with this new mechanism. It is concerning that there has been no comprehensive analysis performed on how this will affect out of merit generators or on the potential impacts of disorderly exits that may result.

Brookfield acknowledge that the regulators have calculated the difference in costs between the 8 and 3 hour standards and present this to be cost prohibitive. However, given the lumpy and constrained nature of this small island market there is a danger that the auction will result in too little capacity being remunerated to maintain an 8 hour LOLE. The cost of remedying this scenario ex-post could far outweigh the difference between the 8 and 3 hour standards.

It is Brookfield's position that the I-SEM security standard should reflect the markets that it is currently and has planned to couple with in the future, that Irelands high tech economy demands a reliable secure electricity system and at the very least we should *maintain* the island's high security standard, not reduce it. For these reasons we support *keeping* a high security standard such as 3 hours LOLE.

2.2. Capacity Requirement: Accounting for plant unreliability in determining the security standard

The de-rated requirement is the preferred option for determining the capacity requirement

Brookfield support the RAs minded to position to use the de-rated requirement to calculate the capacity requirement of the system.

2.3. Capacity Requirement: Accounting for demand forecast uncertainty

The worst case scenario is the preferred approach to account for demand forecast uncertainty.

Brookfield feel that the worst case scenario should be chosen as the approach to mitigate demand forecast uncertainty. It is prudent to take a conservative approach considering the scale of change proposed for the capacity mechanism. Further, we believe that the calculation method proposed for the optimal scenario lacks transparency.

2.4. Capacity Requirement: Location

A single zone capacity market is the preferred option.

Brookfield support the RAs minded to position with regard to locational constraints. The single zone is consistent with all-island SEM arrangements and does not present the complexities that are inherent in the other options which could delay the implementation of I-SEM nor impact on generators previous decisions on where to locate.

We would like to highlight that the all island electricity market was introduced to deliver benefits to electricity consumers north and south of the border and the North-South interconnector is a vital piece of energy infrastructure required to deliver this objective. Brookfield supports and encourage every effort to deliver this essential piece of infrastructure which is needed to help deliver generation adequacy and cost efficiencies to consumers across the all-island market.

3.1. Product Design: Strike Price Indexation

A floating strike price approach is the preferred option.

A floating strike price ensures that the strike price is appropriately aligned with the reference market. It also ensures that when fuel prices change unexpectedly that generators are not exposed to a basis risk.

3.2. Product Design: Strike Price Reference Unit

A hypothetical plant as a reference unit is the preferred option.

Brookfield believe that using the Best New Entrant (BNE) to represent scarcity in the system is not realistic and will result in blunt exit signals which do not in our view meet the objective of the capacity mechanism to deliver long term generation adequacy. In our view the BNE approach does not recognise the lumpy and cyclical nature of investment in electricity generation which the capacity mechanism seeks to address. Instead, using a hypothetical plant that reflects the costs of the marginal unit in I-SEM at times of scarcity is a more appropriate, conservative approach.

3.3. Product Design: Grandfathering

Grandfathering the preferred option.

For long term auctions the reference unit should be grandfathered. This will provide the investor certainty required in order to secure finance for long term investments. However, we would like to highlight that it is difficult to comment on elements such as this individually as other elements of the

design have an impact on their suitability. For example if the hypothetical plant is used as the strike price reference unit as suggested above then a new entrant will always be more efficient and always remain in the merit order.

3.4. Product Design: Scarcity Pricing

A RO market without scarcity pricing is the preferred option

The inclusion of scarcity pricing cannot be considered at this juncture without details of its application. Without understanding exactly how and when scarcity is called, which market it will be applied to or the administrative set points it is not possible to comment on how it will function within the capacity remuneration mechanism or the consequences that its introduction may have on participants behaviour in other markets. In the interests of avoiding damaging unintended consequences we feel that scarcity pricing should not be implemented as a result of this consultation and should be consulted on separately in the Energy Trading Arrangements work stream.

3.5. Product Design: Market Reference Price

The day ahead market is the preferred reference price.

Brookfield support the use of the Day Ahead Market as the market reference price against which the RO is called. Using the day ahead market as a reference price is the only one of the options provided that best meets the objectives set out in the consultation, i.e. promotes the wider liquidity objectives, optimises interconnector flows and addresses market power controls adequately.

Day ahead prices will reflect system stress except for cases of unforeseen outages whose prices will be reflected in the balancing market. We believe that the flexibility and capacity to address an unforeseen stress event should be incentivised through the balancing market. Furthermore, we believe that it is inappropriate to ask generators through the capacity mechanism to provide consumers with a hedge against the price impact of unforeseen events such as other generator outages. Asking market participants to factor the risk of near real-time unforeseen outages of other market participants into the cost of their bids by using the balancing market for all or part of the market reference price is inappropriate. This risk premium will also rise for smaller generation units which in our view is discriminatory.

One of the counter arguments to using the day ahead market for the market reference price is that system stress is not visible in the day ahead market and because of that consumers need to be hedged against high prices in the balancing market. Brookfield believes that cost reflective bidding should be retained in I-SEM as this will ensure that balancing costs at times of system stress are reflective of the actual costs of balancing the system thereby mitigating the need to provide an additional hedge beyond the day ahead market price for consumers. We believe that rules and monitoring are needed to ensure that participants do not withhold capacity from the day ahead market and drive prices upwards in the balancing market.

The day ahead market should be chosen for the market reference price for the reliability option as we believe that it best meets the objectives of EUPHEMIA scheduling, interconnector optimisation, provision of day ahead liquidity and addresses market power concerns regarding the possibility of reserving generation. The day ahead market is also likely to be the market that long term contracts and PPAs are written against and its selection presents no basis risk for participants with such options.

3.6. Product Design: Load Following

A load following RO is the preferred option.

Brookfield agree that RO difference payments should be load following. This allows participants to accurately hedge against foreseeable demand spikes and does not penalise participants disproportionally when system stress occurs for reasons other than peak demand. Brookfield feel that the difference payments should be proportionate to the capacity required to meet the demand.

If RO's are not load following, then the counter party will receive difference payments for energy which they will not have to pay to suppliers. For example if a scarcity event happened at 70% of the RO volume sold when the RO was not load following, generators would pay difference payments for 100% of their RO obligation. This would result in difference payments (equal to 30% of RO obligation) being earned by the counterparty after paying suppliers for energy purchased. Brookfield see no reason why the counterparty should earn money in this scenario. Participants bids would have to increase proportionally as the risk premium is adjusted to account for this overpayment, meaning that the capacity mechanism will cost more with no way of passing revenues earned back to the market. This is inappropriate.

The load following approach is consistent with the design of the UK capacity market. which states that: "Load following obligations are appropriate to ensure generators have incentives to operate efficiently in the market, and are proportionate to the harm caused to consumers by any lost load. If every participant risked being penalised for their full raw capacity obligation whenever there was system stress, the Capacity Market would create signals for plant to run warm even when it is economically inefficient for them to do so – increasing both emissions and consumer bills."

3.7. Product Design: Additional Performance Incentives

Wind cannot be subject to performance incentives.

The performance incentives proposed seek to incentivise plant to be available at times of system stress and scarcity events. The benefits of fixed RO payments throughout the year include allowing conventional generation plant to bolster their assets and conduct their maintenance schedules such that they are available at times of system stress. The same is not true of wind. Wind cannot be incentivised to show up at times of scarcity. For this reason any performance incentive applied to wind cannot be called an incentive; it is an explicit penalty. Because of this, applying the same mechanism to wind amounts to a technology specific penalty.

It has been proposed in the consultation that participants in the capacity mechanism will be de-rated to reflect their actual contribution to generation adequacy. Subjecting wind to de-rating already recognises wind's risk of underperformance. Additional performance incentives amount to additional penalties for wind generators.

The diversification effects of large numbers of turbines also ensures that unforeseen outages affect only small fractions of name plate capacity making the risk of failure of plant significantly less severe for the grid than would be the case for traditional generation technologies. Therefore, the proposed performance incentives would only apply to wind's intermittency and would not incentivise better performance from wind generators. On the other hand, conventional generation whose individual generating units account for much larger proportions of electricity supply pose a much bigger threat to

Wind generators are strategic pieces of energy infrastructure that are allowing Ireland to meet its RES targets, facilitate decarbonisation of electricity and help to mitigate the damage that the carbon intensive traditional thermal generation plants cause to the atmosphere. Their significance in relation to addressing these concerns should not be forgotten. This is especially true of unsupported generation whose continued participation must be encouraged in light of national objectives.

Given Brookfield's position – that a performance 'incentive' cannot be applied to wind – we feel that it would be inappropriate to comment on the structure of caps, floors, form, triggers and other elements that could only rationally apply to generators who are able to tailor their behaviour to take advantage of the performance incentive.

3.8. Product Design: Performance Incentives during pre-commissioning

Strict performance incentives during pre-commissioning are encouraged.

Strict performance incentives should be applied to all generation that wins at auction for long term capacity contracts in future delivery years. Every effort should be made to ensure that the winners of such auctions deliver capacity as promised and do not deliberately 'bed-block' other projects from delivering capacity. The GB CfD and capacity market guidelines provide good examples of milestones and commitments can be enforced to ensure that speculative bids cannot distort the auctions and that participants cannot 'game' the system. This element of the RO design should receive more detailed consultation.

4.1. Eligibility: Supported Plant

All supported plant must be eligible to participate.

All supported generation should be eligible for participation in the capacity auction. Historically, generation was supported in order to encourage investment in strategic infrastructure and in place of a carbon tax that would otherwise incentivise low carbon technologies market entry. As a result, wind has seen significant investment, to the extent that by 2020 it will account for 40% of the electricity market fulfilling RES and the decarbonisation agendas that RES supports were designed for.

As already mentioned in this response, wind's contribution to capacity as a technology class is recognised by the System Operator's All-island Generation Capacity Statement. In the Statement wind is a assigned a capacity credit which takes account of both intermittency and the marginal contribution of increasing amounts of wind generation proportional to system demand. This administratively set credit that values the contribution of wind is provided by the System Operators who are legislatively responsible for delivering a secure and reliable supply of electricity to consumers across the island of Ireland.

We believe this recognition of wind generation's contribution to generation adequacy should continue to be reflected in the RO capacity mechanism and all wind generation should be eligible to participate in the capacity auction. Any other outcome is in our view discriminatory to wind, and would not be a technologically neutral way of procuring generation adequacy. It would also contradict the historical inclusion of wind generation in the All-Island Generation Capacity Statements and in the SEM capacity payment mechanism. Supported and unsupported wind generators should both be recognised for their contribution to generation adequacy and treated appropriately within any capacity remuneration mechanism.

This capacity remuneration mechanism has been designed to ensure long term generation adequacy as a key objective. Having reviewed EU state aid guidelines, Brookfield believe that a CRM that includes wind will comply as a technologically neutral mechanism. Concerns over increasing levels of intermittent generation on a small island system are dealt with explicitly through the capacity mechanism by the de-rating of wind to reflect its actual contribution to capacity.

In the Republic of Ireland, REFIT payments are paid to ensure that recipients are guaranteed the REFIT floor price after energy and capacity payments have been made. Thus, no double subsidy occurs through wind's inclusion in the capacity mechanism which is compliant with state aid guidelines. However, removing supported plant from the capacity remuneration scheme would increase the PSO levy to consumers. This cost would be borne by consumers in light of the fact that they receive no extra benefit for the cost. This is economically inefficient and inappropriate. All capacity payments should be made from the same pot.

There are no make whole payments in the NIRO support mechanism In Northern Ireland. Supported plant receive capacity payments in addition to the energy payments and renewable obligation payments received in the market. Thus, it is an additional revenue stream which generators have had a legitimate expectation to continue to receive. Any change to this would amount to a *retrospective change* which would erode revenue streams that supported the decision to invest in these windfarms.

4.2. Eligibility: Unsupported Plant

All unsupported plant must be eligible to participate.

Unsupported wind relies on revenues from both the energy and capacity markets and may be exposed to additional balancing costs under I-SEM arrangements. These generators must continue to be eligible for the capacity mechanism according to their recognised capacity credit, assigned by the System Operator in determining the generation adequacy of the all-island system. Unsupported or merchant generators, as balance responsible parties in I-SEM, will continue to contribute to security of supply in addition to helping to achieve other renewable, decarbonisation and societal objectives for which they should be incentivised to remain in the market.

4.3. Eligibility: Non-Firm Generation

All non-firm generation must be eligible to participate.

Generators with a non-firm connection must be allowed to participate in the capacity auction. Brookfield believe that the firmness of a generators grid connection does not limit its ability to provide capacity or generate electricity at times of system stress. We believe that the provision of capacity should be considered separately from the efficiency of the network to facilitate that capacity.

We believe instead of penalising non-firm generators by excluding from the capacity mechanism, that they should be allowed to participate and provide capacity for the benefit of consumers and the TSO/DSO should be incentivised to ensure the availability of the network in times of system scarcity. Further, it highlights the need for grid reinforcements to be delivered as soon as possible so that a

generators firmness doesn't impede its ability to provide benefits to consumers both in terms of providing capacity and reducing wholesale prices.

4.4. Eligibility: DSUs and storage

DSUs and storage should be able to participate.

Brookfield recognise the contribution that demand side and storage units make to grid security and support the inclusion of any technologies which can increase the amount of renewables that can be accommodated on the grid.

4.5. Eligibility: De-Rating

Plant specific, historic, marginal approaches to de-rating is the preferred combination of options.

Brookfield supports a plant specific de-rating factor, which rewards more efficient plant whose performance has resulted in fewer outages and hence offers greater contribution to security of supply. This will also provide incentive for plants to use reliability option payments to increase the performance of their plant so that their historical de-rating improves for future delivery years.

Older plants, that have no costs to recover, can bid a comparatively low price to their technology counterparts who still need to recover costs. No recognition of the historical reliability of inefficient plant could incentivise these plants to stay in the market beyond their useful life which would represent a failure to deliver a competitive, efficient RO capacity mechanism. De-rating based on historical availability is one way of ensuring that unreliable plant have appropriate exit signals. Without this de-rating, participants will also have to hedge the risk of these plant causing system stress proportional to their unreliability.

Brookfield support a historic approach to de-rating. Units subject to a historical de-rating will be participating in annual auctions. If their performance increases over time this will be reflected in their historical performance de-rating after the fact or should be accounted for in their bid and can be dealt with on an annual basis rather than relying on projections. Projections may be appropriate for new and refurbished plant. Brookfield feel that a marginal de-rating approach offers more system security than an average de-rating.

4.6. Eligibility: Grandfathering

Existing plant should have their de-rating factors grandfathered.

De-rating factors should be grandfathered for wind participating in the RO auction. Administratively set de-rating factors should not be recalculated each year with the addition of more wind to the system, unforeseen by the participant. Grandfathering of de-rating factors will help to provide investor certainty. Any risk to the marginal contribution of a participants unit subsequent to the addition of extra wind can be managed by the unit themselves. The marginal effect to a unit is likely to change very slowly.

4.7. Eligibility: Physically backed

All auction participants should be physically backed.

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Brookfield have no strong view on what the requirements should be to prove that there is physical backing for bids to the auction. However, in the event that participants submit historical data to support de-rating this should be sufficient evidence of their ability to generate to their bid amount with a clause that no performance reducing alterations have been made or are planned for the delivery year. This will not be true for the new entrants but they are not physically backed and are subject to different milestones and preconditions to ensure that they are physically backed by the start of the agreed delivery years.

For DSUs bid through an aggregator there may be a requirement for additional evidence of physical backing. Brookfield have no strong view on what information a participant should submit to prove the existence of the capacity that their bid represents.

4.8. Eligibility: Aggregators

There should be no maximum size of unit that can bid into RO auction via aggregator

Renewables should be allowed to aggregate units to compete in the RO auction to account for the geographical variations in the natural resource that they are reliant on to generate electricity. There should be no maximum size that an aggregator of renewables can bid into the auction. There is no rational reason for disallowing units of a certain size to aggregate other than market power. Market power should be dealt with in the market power work stream. There could be provisions made here to specifically account for generators for whom aggregation is a requirement like wind, DSUs and storage units.

4.9. Eligibility: Minimum Size

There should be no minimum size with which a unit can participate in the auction

There should be no minimum size with which a unit can participate in the RO auction. Creating a minimum size anticipates that there will be an aggregator to meet individual generators needs to aggregate all de-minimus generation. This might not be the case. All generation units should participate on an equal footing.