

30 June 2026

Electricity Authority
PO Box 10041
Wellington 6143

Via email: OperationsConsult@ea.govt.nz

To whom it may concern,

Re: Consultation Paper— [Wholesale market arrangements for battery energy storage systems](#)

NewPower Energy Services Ltd (NewPower) appreciates the opportunity to make this submission on the Electricity Authority's consultation on wholesale market arrangements for battery energy storage systems.

NewPower, the holding company for Infratec NZ Limited (Infratec) and NewPower Energy Limited (NEL), are subsidiaries of WEL Networks Limited, New Zealand's sixth largest Distributor. Infratec, an Engineering, Procurement and Construction (EPC) company, is delivering low-carbon utility-scale solar and battery solutions at a time of unprecedented growth in New Zealand. Infratec developed and commissioned Rotohiko, NZ's first utility scale 35 MWh battery energy storage system (BESS) facility at Huntly, connected to WEL Networks' distribution assets.

By way of context for this submission, NEL is the owner, operator and trader of generation assets including the Rotohiko BESS, which operates within both Network and Grid compliance modes, and so can offer a range of network, transmission, and energy market services within NZEM's wholesale market dispatch compliance rules. This BESS is already contracted to the System Operator as an ancillary service agent for instantaneous reserves.

Infratec has also constructed and commissioned approximately 202MW of utility-scale solar farms connected to distribution networks across New Zealand for both NEL and customers, with an additional 30MW currently under construction.

Key points in our submission

In summary:

1. NewPower welcomes the Authority looking at market changes to better utilise BESS.

Dispatch Requirements for BESS when charging

2. NewPower is comfortable with larger BESS being required to be dispatched when charging. NewPower's Rotohiko BESS utilises dispatch for charging already.

Bids and Offer Forms for BESS

3. NewPower agrees with the Authorities proposal to make a single offer and bid form for BESS.
 - a. While this will incur some cost to NewPower to modify its trading system, we believe that the benefit for the traders and better access to frequency keeping market makes it worthwhile.
4. NewPower agrees with Contact's point that generation reserves and interruptible load pricing should be kept separate for BESS.
 - a. These two types of reserves have different implications for BESS, as should be able to be priced differently to reflect this.

5. NewPower agrees the number of offer bands should be increased to 10 bands to match the number of bands in a bid.
 - a. As BESS is price exposed for both charging and discharging it is crucial to have volume weighted price certainty.

Gate Closure Arrangements for BESS

6. NewPower is opposed to increasing gate closure for embedded BESS. We do not agree with the Authority's statement that shorter gate for embedded BESS compared to grid connected BESS will "*create inefficient incentives for BESS owners to connect to distribution networks instead of the grid*".
 - a. There is no evidence that shorter gate closure has led to disproportionate investment in embedded BESS. The vast majority of BESS that has been built is grid connected.
 - b. Also embedded BESS with a capacity under 10 MW will have no gate closure.
 - c. NewPower is unsure why only embedded BESS should have gate closure aligned with grid connected generation. It is not fair for embedded BESS to have a disadvantage to other forms of embedded generation.
 - d. NewPower would like to **highlight** that the Authority is proposing to increase gate closure for embedded BESS **prior to the full implantation of the SoC constraint change**. NewPower's view is that the interim changes proposed, do not fully enable BESS to offer and bid non conservatively. So, the proposed initial code change will make it far more restrictive to embedded BESS with no real benefit.
 - e. In NewPower's view if the Authority does decide to reduce gate closure for embedded BESS there must be a legacy clause. The market goal posts should not be changed after FID if the Authority wants to provide generator investors with confidence.
7. NewPower believes that gate closure should be reduced for all BESS to allow for more accurate pricing based on most up to date forecasts as possible.

Final Proposal – State of Charge Limitations

8. NewPower has provided it's view on proposed gate closure changes above.
9. NewPower is supportive of implementing state of charge constraint functionality in the market to enable BESS to offer maximum capacity and not trade conservatively.

Interim proposal

10. NewPower likes the idea of having an interim solution while the market changes can be made for the state of charge constraints.
11. In NewPower's view the interim proposal doesn't achieve the Authority's objective of allowing BESS to trade non-conservatively. See NewPower's answers to Q21 and Q22 for more details.
12. NewPower suggests that the Authority revises the interim proposal to enable BESS to trade non-conservatively in the interim.

NewPower welcomes discussion with the Authority on any points raised in our submission and is happy to provide further clarification or information.

Yours Sincerely,



David Barnett

CEO

NewPower Energy Services Ltd

Appendix 1: NewPower's response to the consultation questions

Question	Comments
<i>Issue 1: Dispatch requirements for BESS when charging</i>	
Q1. Do you agree with our proposal to require BESSs to be dispatchable while consuming?	<p>Yes, NewPower agrees with the proposal for BESS to be dispatchable while consuming.</p> <p>NewPower's Rotohiko BESS already utilises dispatchable demand 100% of the time for charging of the BESS.</p>
Q2. Do you have any comments on our proposed Code drafting for issue 1?	NewPower has no comments.
<i>Issue 2: bids and offer forms for BESS</i>	
Q3. Do you agree with our proposal to have separate offers and dispatch for interruptible load and generation reserve?	Yes. NewPower's agrees with Contact's concern around conflating pricing of interruptible load and generation reserve pricing. BESS should be able to price these separately. NewPower's trading system for Rotohiko BESS is set up to offer these reserve products separately already.
Q4. Do you agree with our proposal that BESS owners have 10 price bands for their bids and 10 price bands for their offers. If not, how many price bands do you think they should have?	NewPower agrees with BESS having 10 price bands for both offers and bids.

Q5. Do you agree with our proposal that BESS owners not be required to submit maximum up and down ramp rates?	NewPower agrees maximum ramp rates should be required to be submitted. If there are scenarios where ramp rates are needed to be managed these can be managed at the site controller.
Q6. Do you agree with our proposal to address issue 2?	Yes, NewPower agrees with the proposal. It does mean that NewPower will need to modify its trading system but considers the benefits to outweigh the costs. NewPower agrees with this code change being delayed till after the System Operator has made market changes to allow for BESS to participate in properly in MFK market (Dec 2027).
Q7. Do you have any comments on our proposed Code drafting for issue 2?	NewPower has no comments on the drafting
<i>Issue 3: gate closure arrangements for BESS</i>	
Q8. Should BESS owners be able to withhold energy if requested to do so in a grid emergency?	NewPower agrees that BESS should be able to withhold energy if requested to do but at the BESS owners' discretion.
Q9. Should BESS bid and offer arrangements be aligned?	NewPower believes that bid and offer gate closure arrangements should align and that gate closure for BESS should be 30 minutes for all BESS.
Q10. Do you think greater clarity is needed around the circumstances which allow trade revisions after gate closure?	Yes. NewPower believes that BESS operators should be able to revise their offers if their capacity does generally change from what is responsibly expected based on market forecasts. NewPower believes the proposed code changes achieve this.
Q11. Do you agree that, to align with forecast schedules, the SoC constraint that applies in the dispatch schedule should be based on energy availability over a half hour period? If not, do you think it should be based on energy	In NewPower's view this is a balance between utilising BESS more effectively (i.e. benefit to consumers) verses security of supply. In NewPower's view with BESS total capacity being relatively low the Authority should base the SoC constraint on 5-minute period and look to

availability over a 5 minute period, or the energy availability over the time remaining before the end of the trading period?	<p>review this in later BESS related changes when BESS total capacity is likely to increase.</p> <p>NewPower has expressed to the Electricity Authority on numerous occasions that 5-minute settlement / 5-minute trading periods would be beneficial.</p>
Q12. Should state of charge constraints account for round trip losses? If not, why not?	NewPower agrees round trip losses should be considered for state of charge constraints.
Q13. Do you agree that the WITS manager and clearing manager require SoC constrained bid and offer information to perform their functions?	NewPower refers to the Authority to make this call.
<i>Issue 3: final proposal</i>	
Q14. Do you agree with our proposal to make gate closure arrangements the same between operational states and between grid-connected and embedded BESSs?	<p>NewPower agrees that gate closure arrangements should be consistent between operational states.</p> <p>NewPower believes that BESS should have shorter gate closure for both embedded and grid connected BESS. BESS are price exposed for both charging and discharging, having the ability to price offers and bids with as close to real-time information as possible is crucial.</p>

	<p>If the Authority was to increase gate closure for embedded BESS, NewPower will have to make extensive trading system changes. This also changes the market goal posts after existing BESS have been commissioned.</p> <p>NewPower would like to highlight that it operates the only utility scale embedded BESS that is dispatchable. Most of the BESS being built currently is grid connected, so the advantage of being an embedded BESS with shorter gate closure isn't driving any disproportional investment in embedded BESS.</p> <p>NewPower sees that this change will give embedded BESS under 10 MW the biggest benefit and also for distributed virtual power plants. These plants will be able to operate BESS with no gate closure.</p>
<p>Q15. If we decided to make gate closure one hour for embedded BESSs, do you consider a legacy clause may be warranted? If so, what do you consider the details of that clause should be?</p>	<p>Yes, NewPower considers a legacy clause for embedded BESS essential if the Authority decides to increase gate closure times for embedded BESS. The reason for this is that the business case for this existing embedded BESS was based on gate closure arrangements before the proposed change. NewPower believes that the Authority should not significantly shift the market goal posts if it wants to maintain generator investor confidence.</p> <p>Further to the above changes to NewPower's trading system for the Rotohiko BESS for the proposed new gate closure time for embedded BESS would impact many areas of NewPower's existing trading system logic. Updating, testing, and productionising the required changes for</p>

	this proposal would not somewhat significant (in terms of cost and time).
Q16. Do you agree with how we propose to incorporate round-trip losses in calculating state of charge constraints? If not, is there a better alternative to ensure state of charge constraint accuracy?	<p>NewPower believes that the proposed SoC constraint calculations are fit for purpose as a first cut and can be refined in future if required.</p> <p>From NewPower's experience the 'variable_loss_factor' and the 'fixed_losses' parameters are somewhat dynamic variables, but do not vary too wildly. But average approximations should be sufficient for the accuracy required.</p>
Q17. Are there any other factors that need to be taken into account in adjusted capacities and limits?	NewPower believes the proposed calculations and factors should be sufficient.
Q18. Are there are any other reasons why a BESS owner should be able to, or need to, revise their trades after gate closure? If so, what?	Not that NewPower can think of.
Q19. Do you agree with our proposal to address issue 3?	<p>Partially, NewPower agrees that implementing state of charge constraints will enable BESS to offer full capacity into market.</p> <p>NewPower does not agree with the proposed changes to gate closure for BESS for reasons specified in answer to Q14.</p>
Q20. Do you have any comments on our proposed Code drafting to address issue 3?	NewPower has no comments. The code drafting appears to achieve enabling BESS to offer and bid full capability without being conservative.
<i>Issue 3: Interim proposal</i>	

Q21. Are there any other factors that need to be taken into account in adjusted capabilities under our interim proposal?	<p>If the Authority wants an interim solution to enable less conservative offering from BESS it should allow BESS operators to manage the SoC constraints themselves. Noting this will result in Bonafide offers for the periods in gate closure but typically won't be for the current period.</p> <p>To achieve this the adjusted capability must extend to more than just warranty and grid emergencies. It must allow for adjusted capability due to dispatch in the current trading period. NewPower notes this will lead to bonafide offers, but NewPower would argue the benefits outweigh the costs.</p>
Q22. Are there any other reasons why a BESS owner should be able to, or need to, revise their trades after gate closure under our interim proposal? If so, what are these reasons?	As detailed in the question above the adjusted capacity should allow for what happens in dispatch to allow for maximum offers in the next trading period in gate closure.
Q23. Do you agree with our interim proposal to address issue 3?	NewPower agrees with the sentiment of having an interim solution but thinks the proposed interim solution doesn't achieve what the Authority is intending to do.
Q24. Do you have any comments on our proposed Code drafting for our interim proposal to address issue 3?	Yes, NewPower believes the interim solution code drafting should be revised to reflect NewPower's answer to Q21.
<i>Issue 4: constrained off payments</i>	
Q25. Do you agree with the Authority's decision not to propose removing constrained off payments for BESSs while charging at this stage? If not, why not?	Yes. Constrained payments are for providing price surety to participants. BESS require as much price surety as possible for charge and discharge.
<i>BESS owners' existing obligations</i>	

Q26. Do you consider our proposed Code amendment accurately captures BESS owners' obligations in Parts 13, 14, and 15 of the Code?	NewPower hasn't completed a full legal-style review of the code changes. We leave it to the Authority to ensure that the code changes in other sections of this consultation don't have unintended knock-on affects.
<i>Regulatory Statement for the proposed Code amendment</i>	
Q27. Do you agree with the objectives of the proposed amendment? If not, why not?	Yes, NewPower agrees that regulation barriers for BESS need to be removed. We believe that BESS can provide plenty of benefits to the market and recognise this must be balanced with system security.
Q28. Do you agree the benefits of the proposed amendment outweigh its costs?	<p>NewPower agrees that the benefits outweigh the costs for most of the changes.</p> <p>The only change NewPower doesn't believe that the benefits outweigh the costs is the increase of gate closure period for embedded BESS. This is for reasons specified in NewPower's answer to Q14.</p>
Q29. Can you provide any evidence or further information about potential benefits or costs?	In NewPower's view the costs and benefits for this proposal are not trivial to calculate. NewPower notes that the Authority has done some great commercial analysis previously on allowing BESS to offer / bid non conservatively. This could be used for the cost and benefit analysis.
Q30. Do you agree the proposed amendment is preferable to the other options? If you disagree, please explain your preferred option in terms consistent with the Authority's statutory objective in section 15 of the Act.	NewPower partially agrees, but notes that the interim solution proposed won't have much impact at all. NewPower believes the interim solution should be modified as per NewPower's answer to Q21.

Q31. Do you agree the Authority’s proposed amendment complies with section 32(1) of the Act?	No comment. This is for the Authority to determine.
<i>Code drafting</i>	
Q32. Do you have any comments on the drafting of the proposed amendment?	<p>NewPower believes that gate closure for embedded BESS offers and bid should align (both be one trading period). See proposed drafting below.</p> <p>“the trading period to which the offer or reserve offer relates, and gate closure period, in relation to a trading period for which a generator or ancillary service agent has submitted an offer or reserve offer, or for which a dispatchable load purchaser or battery energy storage system owner has submitted a nominated dispatch bid means—</p> <p>(a) the trading period to which the offer, or reserve offer, or nominated dispatch bid relates, and the trading period immediately preceding that trading period for—</p> <p>(i) an embedded generator (except for a battery energy storage system owner):</p> <p>(ii) an ancillary service agent that is also an embedded generator (except for a battery energy storage system owner):”</p>