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Submissions
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ERGANZ SUBMISSION ON WHOLESALE MARKET ARRANGEMENTS FOR BATTERY ENERGY STORAGE SYSTEMS

The Electricity Retailers' and Generators' Association of New Zealand (ERGANZ) welcomes the opportunity to comment on the Electricity Authority's consultation paper, 'BESS Wholesale market arrangements for battery energy storage systems: Code amendment consultation paper' from May 2026.

ERGANZ is the industry association representing companies that generate and sell electricity to Kiwi households and businesses. Collectively, our members supply almost 90 per cent of New Zealand's electricity. We work for a competitive, fair, and sustainable electricity market that benefits consumers.

Executive summary

ERGANZ's members generate the substantial majority of New Zealand's electricity and own, operate or are developing the substantial majority of the country's utility-scale BESS fleet. This includes Meridian's Ruakaka battery in Northland, Contact's Glenbrook Ohurua battery in South Auckland, which began trading on 1 April 2026, and Genesis's Huntly battery, alongside a substantial pipeline of further grid-connected and hybrid projects. Members therefore have a direct and material interest in these arrangements, both as BESS owners and as operators of the wider generation fleet against which BESSs participate.

ERGANZ supports the Authority acting now to ensure wholesale market arrangements are fit for purpose while the fleet is still small. We agree that the proposals are sensible, pro-competitive improvements rather than fundamental reforms, and that recognising BESSs as single, controllable, bi-directional entities is the right foundation. Our submission supports the overall package, while making a small number of targeted points where we consider the proposal can be improved or where the Authority should commit to further work. Our central message is that one-hour gate closure should be treated as the start, not the settled endpoint, and that gate-closure reform should proceed on a technology-neutral basis.

ERGANZ supports the proposed Code amendment. In particular, members:

- support recognising BESSs as single entities and the overall direction of the package, which we consider will reduce operational and system complexity, lower barriers to entry for new BESSs, and enable participation in current and future ancillary services;
- support requiring BESSs to be dispatchable while consuming (Issue 1), consistent with the treatment of other controllable assets, and welcome the Authority's decision to retain constrained off payments for BESSs while charging (Issue 4), which resolves the inconsistency members raised in the previous round;
- support the single trade form and single energy dispatch, with interruptible load and generation reserve specified separately (Issue 2), and support enabling full BESS participation in multiple frequency keeping (MFK) at the same time as this work;
- support full capacity trading with state-of-charge (SoC) constraints as a low-regrets near-term solution, support the interim solution to deliver benefits during the software build, and welcome the in-principle decision to begin System Operator software design in parallel with this consultation;
- support SoC constraints accounting for round-trip losses, and the flexible fixed and variable loss-factor approach that accommodates different BESS designs and measurement methods.

Members also encourage the Authority to:

- treat one-hour gate closure as an interim position and commit to a firm, time-bound programme to reduce gate closure (with an initial focus on 30 and 15 minutes). This reform should extend to all flexible technologies with short or no storage, notably run-of-river hydro, consistent with technology-neutral and level-playing-field principles. Deferring gate-closure reform indefinitely leaves material efficiency benefits unrealised and risks entrenching a BESS-specific disadvantage;
- firm up the cost estimates before the decision paper. The System Operator's \$1.9m figure is a rough order-of-magnitude estimate with the reserve-offer changes not yet costed, and BESS owner integration costs are acknowledged but not quantified. ERGANZ offers to coordinate member-derived integration cost data to inform the final decision;
- reconsider the proposal to publish BESS SoC telemetry in the daily SPD case files. Publishing real-time SoC risks revealing commercially sensitive trading strategies and positions, which could harm competition. We ask that SoC telemetry be kept confidential to the System Operator, or be subject to appropriate aggregation or delay, consistent with the treatment of other commercially sensitive operational data;
- keep the interim period as short as practicable, hold to the end-2027 date for the full solution, and co-design the new trade forms, dispatch interfaces and transition arrangements with BESS owners, the System Operator and the WITS manager to minimise integration cost and rework.

Submission points

Dispatchability while consuming, and constrained off payments (Issues 1 and 4)

ERGANZ supports requiring BESSs to be dispatchable while consuming. BESSs are highly controllable across their full operating range, and symmetry with the obligations on generators

supports both security of supply and efficient price signals. We consider the 10MW threshold and the option for smaller or indirectly connected stations to provide consumption information in another form agreed with the System Operator is a proportionate way to apply the obligation.

Dispatchability when charging only delivers efficient outcomes if the trading arrangements allow owners to participate without undue conservatism. The value of Issue 1 is therefore closely tied to the Issue 3 reforms and to the retention of constrained off payments. On that point, we welcome the Authority's decision not to remove constrained off payments for BESSs while charging at this stage.

As members have noted previously, requiring BESSs to be dispatchable while removing this compensation would have been inconsistent, and the Authority's reasoning, that BESSs bear a heavier gate-closure burden than most other technologies, is true. We note this issue should be revisited only as part of a broader, technology-neutral review of compensation for flexible plant, and only if and when gate closure is reduced.

Single trade form, single dispatch, and MFK (Issue 2)

ERGANZ supports a single bidirectional trade form, a single energy dispatch, and the retention of separate interruptible load and generation reserve components within a single reserve offer form. Keeping the two reserve components separate is the right outcome: the cost of providing interruptible load can differ from the cost of providing generation reserve, and reflecting that difference preserves efficient dispatch and price signals. We support 10 price bands for both bids and offers, and agree BESS owners should not be required to submit maximum up and down ramp rates, which would not bind a BESS over the dispatch horizon.

We support enabling full BESS participation in MFK at the same time as this work rather than deferring it to the separate MFK enhancements programme. Several members have expressed interest in participating in MFK, and recognising BESSs as single entities is the change that unlocks their full charge and discharge capability for frequency keeping. This is a competition benefit that will become more valuable as frequency-keeping requirements rise with intermittent generation. We ask that the new Forms 10 and 11, and the associated dispatch interfaces, be co-designed with BESS owners to keep integration costs down and avoid rework.

Full capacity trading with state-of-charge constraints, and the interim solution (Issue 3)

ERGANZ supports full capacity trading with SoC constraints as a sensible, low-regrets near-term solution. It allows owners to trade up to their full capability without the conservatism that current arrangements encourage, while giving the System Operator visibility of feasible operation. We also support the interim solution, which lets owners trade their expected capability and revise quantities after gate closure when storage levels change. An interim measure is necessary given the roughly 17-month software build for the full solution, and the proposed guardrails against lazy trading are a reasonable way to keep gate-closure information meaningful. We ask that those guardrails be applied in a way that does not, in practice, reintroduce the conservatism the interim solution is intended to remove.

We support aligning the dispatch-schedule SoC constraint with the forecast-schedule formulation on a half-hour basis, which improves forecast accuracy and the System Operator's ability to assess risk. We note the trade-off the Authority itself identifies: where a BESS clears in only some dispatch schedules within a trading period, a half-hour basis can leave some available energy unused. We accept the half-hour approach for now, but ask the Authority to monitor this as the fleet grows and to remain open to the alternative of basing the dispatch constraint on energy available over the time remaining in the trading period if under-utilisation proves material.

We also encourage the Authority to continue investigating the option of linking bids and offers to storage levels, as an optional enhancement, in parallel with work on reduced gate closure. We accept this would require further System Operator engagement and tool work, and that it should be optional rather than mandatory, but it directly addresses the price dimension of the gate-closure problem that the current package leaves unaddressed.

Gate closure: an interim position and a technology-neutral forward programme

Gate closure is the most important issue in this consultation for members, and it is where our submission asks the most of the Authority. ERGANZ supports aligning gate-closure arrangements across operational states and connection types, which removes confusion and unnecessary cost. Our concern is with the level at which that common gate closure is set and how it is treated going forward.

Members consistently favoured a shorter gate closure in the previous round, and we welcome the Authority's decision to accelerate work on reducing gate closure and to take a more proactive approach. We ask the Authority to go one step further and state explicitly that one-hour gate closure is an interim landing point, not the settled endpoint, supported by a firm, time-bound work programme with an initial focus on 30 and 15 minutes and the use of trials to build System Operator confidence.

The system-security considerations the Authority raises are real, but they reflect the current limits of the System Operator's tools and dispatch approach, which are a constraint to be resolved rather than a permanent feature of the market. Reduced gate closure would better promote the efficient operation of BESSs, and the long-term-benefit objective in section 15 is better served by a clear pathway to it than by an open-ended one-hour rule.

Gate-closure reform should also be technology-neutral. As members noted previously, run-of-river hydro and other plant with short or no storage face the same problem as BESSs. We welcome the Authority's acknowledgement of this and ask that the forward work programme expressly cover all flexible technologies that are materially constrained by gate closure, not BESSs alone. A technology-specific reduction would itself create a distortion of the kind the Authority is trying to avoid.

Equalising gate closure upward to one hour for embedded BESSs is acceptable to members only as part of this committed pathway. On its own, it disadvantages embedded BESSs relative to other embedded generation without a clear timeline to the shorter gate closure that would justify it. We support a legacy clause permitting 30-minute gate closure for embedded BESSs that are already

operating, or for which the owner has reached financial close, before the rule takes effect, so that investment decisions made under the current settings are not retrospectively disadvantaged. This is a minor issue in practice given the small number of embedded BESSs, and we consider the broader question of embedded-generation gate closure is best addressed transparently on its own merits rather than through BESS-specific rules.

Round-trip losses and SoC accuracy

ERGANZ supports SoC constraints accounting for round-trip losses. Our focus is on accurate treatment of what a BESS imports from and injects into the grid at the point of connection; loss accounting matters as the means to make those grid-side quantities correct, not as an operational end in itself.

Losses of around 20 percent materially affect what a BESS can deliver at the grid point of connection, and a constraint that ignores them would produce dispatch instructions owners could not meet. We support the fixed and variable loss-factor approach, which lets owners capture both idle and parasitic load and conversion and transport losses, and accommodates the different measurement data and methods available to different BESSs. We support the Authority's view that it would be premature to define accuracy thresholds while the fleet is small, and ask that any future accuracy standards be developed with industry and supported by clear communication protocols between BESS owners, distributors and the System Operator.

Confidentiality of state-of-charge telemetry

ERGANZ supports providing capped, SoC-constrained bid and offer quantities to the clearing manager and the WITS manager, which are needed for accurate constrained off calculations and for meaningful published aggregates and feedback to traders. We distinguish that capped trade information from the separate proposal to publish each BESS's real-time SoC telemetry in the daily SPD case files.

Publishing real-time SoC telemetry would expose commercially sensitive information about a BESS's available energy and, by extension, its trading strategy and position. As the fleet grows and competition between BESS owners increases, this transparency could blunt the incentive to trade actively and could be used by other participants to anticipate behaviour, to the detriment of competition and ultimately consumers. We ask the Authority to reconsider this aspect of the proposal and to keep SoC telemetry confidential to the System Operator, or alternatively to apply appropriate aggregation or a longer publication delay, consistent with how other commercially sensitive operational data is handled. We would welcome further engagement on a workable approach.

Costs and proportionality

ERGANZ agrees the proposal is net-beneficial overall, and that the physically impossible dispatches observed during the HVDC outages in December 2025 and February 2026 are concrete evidence of the cost of the current arrangements. We are less confident the cost side has yet been robustly estimated. The System Operator's \$1.9m figure is described as a rough order-of-magnitude

estimate, the reserve-offer changes are not yet costed, and BESS owner integration costs are acknowledged as not immaterial but are not quantified.

Consistent with our members' experience that implementation costs are frequently understated at the proposal stage, we ask the Authority to firm up these estimates before the decision paper. BESS owner costs include building new trade forms, per-trading-period storage limits and loss factors, telemetry and dispatch integration, and managing the transition from the interim to the final arrangements. ERGANZ offers to coordinate member-derived integration cost data, and member input on the scale of the conservative-trading inefficiency the proposal would remove, to support a sound cost-benefit assessment. We support implementing the Issue 2 and Issue 3 changes together so that the shared offer-form costs are incurred once.

Implementation, sequencing and engagement

Members support delivering benefits early and welcome the parallel software design decision that would speed implementation if the amendment proceeds. The corollary is that the interim period should be kept as short as practicable: an extended interim period gives the System Operator less visibility than the full solution and prolongs the point at which the price dimension of the gate-closure problem remains unaddressed.

We ask the Authority to hold to the end-2027 date for the full solution, to publish clear milestones, and to ensure the transition from interim to final drafting is seamless so that owners are not required to integrate twice. We would value worked examples to support consistent compliance with the revision rules, and early engagement on form and interface design.

Consultation questions

Questions	Comments
Issue 1: Dispatch requirements for BESS when charging	
Q1. Do you agree with our proposal to require BESSs to be dispatchable while consuming?	Yes. BESSs are highly controllable across their full operating range, so symmetry with generators is appropriate and supports security of supply and efficient price signals. This should be read together with the retention of constrained off payments (Q25) and the Issue 3 reforms: dispatchability when charging delivers efficient outcomes only if trading arrangements let owners participate without undue conservatism.
Q2. Do you have any comments on our proposed Code drafting for issue 1?	We support adapting existing generator obligations to consumption, and consider the 10MW threshold and the information-in-lieu option for smaller or indirectly connected stations are proportionate. We ask that the revocation of existing dispatch-capable load station approvals (clause 13.3A(6)) be managed with adequate notice to avoid any

	compliance gap on transition. Members are reviewing the detailed drafting.
Issue 2: Bid and offer forms for BESS	
Q3. Do you agree with our proposal to have separate offers and dispatch for interruptible load and generation reserve?	Yes. The cost of providing interruptible load can differ from the cost of providing generation reserve, and keeping the two components separate within a single form preserves efficient dispatch and price signals. This reflects the point members raised in the previous round and we welcome its adoption.
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?	<p>Yes. BESS efficient prices depend on SoC and price-path outcomes, so additional offer bands relative to the current five are justified.</p> <p>Under a one-hour gate closure with SoC constraints rather than storage-linked pricing, price-band granularity is one of the few levers owners have to reflect opportunity cost across uncertain outcomes.</p>
Q5. Do you agree that BESS owners should not be required to submit maximum up and down ramp rates?	Yes. BESSs can change output far faster than ramp limits would bind over the 5-minute dispatch horizon, so the requirement would serve no purpose and removing it removes an unnecessary obligation.
Q6. Do you agree with our proposal to address issue 2?	<p>Yes. A single bidirectional trade form, a single energy dispatch, and separate interruptible load and generation reserve components reduce operational and system complexity, lower set-up costs for new BESSs, and enable participation in current and future ancillary services.</p> <p>We support enabling full BESS participation in MFK at the same time as this work, which several members are interested in and which recognising BESSs as single entities is the key change to unlock.</p>
Q7. Do you have any comments on our proposed Code drafting for issue 2?	We support new Forms 10 and 11. We ask that the forms and dispatch interfaces be co-designed with BESS owners, the System Operator and the WITS manager to minimise integration cost and rework.
Issue 3: Gate closure arrangements for BESS	
Q8. Should BESS owners be able to withhold energy if requested to do so in a grid emergency?	Yes. Clarifying the apparent conflict between the reasonable-endavours obligation in Technical Code B and the offer-revision rules is sensible and important. It ensures owners can preserve limited stored energy for later periods in an extended emergency, limiting disruption to consumers' supply. We support the clarification.

Q9. Should BESS bid and offer arrangements be aligned?	Yes. Aligning gate closure and revision rules across operational states and connection types reduces confusion and compliance cost. We support basing the aligned obligations on the offer obligations, given BESSs are controllable assets relied upon like generators. Alignment is separate from the question of the gate-closure level, which we address at Q14.
Q10. Do you think greater clarity is needed around the circumstances which allow trade revisions after gate closure?	Yes. Members have experienced genuine uncertainty under the existing provisions. We support an explicit, exhaustive set of permitted revision conditions in the Code over guidance, which would leave residual legal uncertainty. Clarity should not, however, come at the cost of the flexibility needed to respond to genuine bona fide physical reasons.
Q11. Do you agree the dispatch-schedule SoC constraint should be based on energy availability over a half hour period?	Yes, for now. Aligning the dispatch constraint with the half-hour forecast formulation improves forecast accuracy and the System Operator's ability to assess risk. We note the downside the Authority identifies: where a BESS clears in only some dispatch schedules within a trading period, a half-hour basis can leave some available energy unused. We ask the Authority to monitor this as the fleet grows and to remain open to the time-remaining alternative if under-utilisation proves material.
Q12. Should state of charge constraints account for round trip losses? If not, why not?	Yes. Round-trip losses of around 20 percent materially affect what a BESS can deliver at the grid point of connection. A constraint that ignored them would produce dispatch instructions owners could not meet. We support accounting for losses through the fixed and variable loss-factor approach.
Q13. Do you agree the WITS manager and clearing manager require SoC constrained bid and offer information to perform their functions?	Yes. Capped quantities are needed for the clearing manager to calculate accurate constrained off amounts and for the WITS manager to publish meaningful aggregates and to feed information back to traders. We support sharing this capped trade information.
Issue 3: Final proposal	
Q14. Do you agree with making gate closure arrangements the same between operational states and between grid-connected and embedded BESSs?	We agree the arrangements should be consistent across operational states and connection types. Our position is that the common gate closure should be set on a technology-neutral basis and treated as an interim landing point, not the endpoint. Equalising upward to one hour for embedded BESSs is acceptable only as part of a committed, time-bound programme to reduce gate closure for all flexible technologies. On its own it disadvantages embedded BESSs relative to other

	<p>embedded generation without a clear pathway to the shorter gate closure that would justify it.</p>
<p>Q15. If gate closure were one hour for embedded BESSs, do you consider a legacy clause may be warranted? What details?</p>	<p>Yes. A legacy clause should permit 30-minute gate closure for embedded BESSs that are already operating, or for which the owner has reached financial close, before the rule takes effect, so investment decisions made under current settings are not retrospectively disadvantaged. We suggest the clause sunset on decommissioning or material capacity expansion. This is a minor issue given the small number of embedded BESSs, and we consider the broader question of embedded-generation gate closure is best addressed on its own merits rather than through BESS-specific carve-outs.</p>
<p>Q16. Do you agree with how we propose to incorporate round-trip losses in calculating SoC constraints? If not, is there a better alternative?</p>	<p>Yes. The fixed and variable loss-factor approach, with values provided per trading period, lets owners capture both idle and parasitic load and conversion and transport losses, and accommodates the different measurement data and methods available to different BESSs. We support the Authority's view that defining accuracy thresholds would be premature while the fleet is small, and ask that any future accuracy standards be developed with industry and supported by clear communication protocols.</p>
<p>Q17. Are there any other factors that need to be taken into account in adjusted capacities and limits?</p>	<p>The proposal already captures outages, network constraints and warranty conditions.</p> <p>Members consider sustained throughput limits, MWh capacity and warranty conditions are hard constraints on what a BESS can provide, and ask the Authority to confirm the per-period storage limits and adjusted-capability mechanism can reflect throughput limits that apply over multiple trading periods, not only instantaneous state of charge.</p> <p>We do not propose adding further mandatory factors at this stage and would be glad to provide member input on edge cases.</p>
<p>Q18. Are there any other reasons why a BESS owner should be able to, or need to, revise their trades after gate closure?</p>	<p>The exhaustive set appears comprehensive for the SoC-constrained model, where SoC changes are handled by constraints rather than revisions. We do not identify additional reasons at this stage, but ask the Authority to retain a mechanism to add conditions if operational experience with a maturing fleet reveals gaps.</p>
<p>Q19. Do you agree with our proposal to address issue 3?</p>	<p>Yes. We support full capacity trading with SoC constraints as a low-regrets near-term solution. Our support is for this package as the right near-term step, not as a reason to defer gate-closure reform. We also encourage the Authority to</p>

	continue investigating storage-linked bids and offers as an optional enhancement in parallel.
Q20. Do you have any comments on our proposed Code drafting to address issue 3?	The revision-rules drafting is complex. We ask the Authority to publish worked examples to support consistent compliance, and to co-design the forms and interfaces with owners.
Issue 3: Interim proposal	
Q21. Are there any other factors that need to be taken into account in adjusted capabilities under our interim proposal?	As with Q17, the expected-adjusted-capability formulation, combined with the ability to trade below capability, accommodates members' operational factors.
Q22. Are there any other reasons why a BESS owner should be able to, or need to, revise their trades after gate closure under the interim proposal?	The interim set is appropriate and rightly includes the permission to revise when expected SoC differs from gate closure, which the longer-term model omits because constraints do that job. We do not identify additional reasons, but ask the Authority to ensure the lazy-trading guardrails do not, in practice, force the conservatism the interim solution is meant to remove.
Q23. Do you agree with our interim proposal to address issue 3?	Yes. An interim solution is necessary given the roughly 17-month software build, and the design (expected-capability trading with limited post-gate-closure revisions) is sound. We support it and ask that the interim period be kept as short as practicable.
Q24. Do you have any comments on our proposed Code drafting for the interim proposal?	Interim and final drafting share many clauses. We ask the Authority to ensure the transition from interim to final is seamless so owners are not required to integrate twice. Members are reviewing the detailed drafting and we would be glad to provide consolidated comments.
Issue 4: Constrained off payments	
Q25. Do you agree with the decision not to remove constrained off payments for BESSs while charging at this stage? If not, why not?	Yes. Removing these payments would not level the playing field while BESSs bear a heavier gate-closure burden than most other technologies, and removing them while requiring dispatchability when charging would have been inconsistent. We support retention. The issue should be revisited only as part of a broader, technology-neutral review of compensation for flexible plant, and only if and when gate closure is reduced.
BESS owners' existing obligations	
Q26. Do you consider the proposed Code amendment accurately captures BESS	The approach of retaining existing definitions except where unique arrangements apply, and clarifying the consequences of a BESS no longer being a dispatch-capable load station,

owners' obligations in Parts 13, 14 and 15 of the Code?	dispatchable purchaser or dispatch notification purchaser, appears sound. Members are reviewing the consequential drafting, with particular attention to clearing and settlement (Part 14) and reconciliation (Part 15) interactions to avoid unintended gaps. We would be glad to provide consolidated comments.
Regulatory Statement for the proposed Code amendment	
Q27. Do you agree with the objectives of the proposed amendment? If not, why not?	Yes. Recognising BESSs as single bi-directional entities, balancing efficient operation with system security, and delivering benefits early are appropriate objectives consistent with section 15. We encourage the Authority to recognise explicitly that efficient BESS operation depends on trading arrangements keeping pace, so that the efficiency objective is not under-delivered by an indefinitely retained one-hour gate closure.
Q28. Do you agree the benefits of the proposed amendment outweigh its costs?	Yes, overall, and particularly for Issue 3. The physically impossible dispatches during the December 2025 and February 2026 HVDC outages are concrete evidence of the cost of the current arrangements. We are less confident the cost side has been robustly estimated. The System Operator's \$1.9m figure is rough order-of-magnitude, the reserve-offer changes are not yet costed, and BESS owner integration costs are acknowledged but not quantified. We ask the Authority to firm up these estimates before the decision.
Q29. Can you provide any evidence or further information about potential benefits or costs?	ERGANZ members will include more in their own submissions.
Q30. Do you agree the proposed amendment is preferable to the other options?	Yes, as a near-term step, with one qualification. We consider full capacity trading with SoC constraints and reduced gate closure is the superior end-state on efficiency grounds; the only reason to prefer one hour now is the System Operator's current tool limitations and implementation time. Expressed in terms of the section 15 objective, the long-term benefit of consumers is best served by adopting this package now while committing to reduced gate closure as the next phase, since reduced gate closure would better promote the efficient operation of BESSs once the current tooling constraint is resolved.

Q31. Do you agree the proposed amendment complies with section 32(1) of the Act?	Yes
Code drafting	
Q32. Do you have any comments on the drafting of the proposed amendment?	Our specific drafting points are noted at Q2, Q7, Q15, Q20, Q24 and Q26. Members are completing their own detailed review of the drafting.

Conclusion

ERGANZ supports the proposed Code amendment. It is a sensible, pro-competitive package that recognises BESSs as the single, controllable, bi-directional entities they are, and it will deliver benefits to consumers as the fleet grows to balance an increasingly variable power system. We ask the Authority to treat one-hour gate closure as an interim step on a committed, technology-neutral pathway to shorter gate closure, to reconsider the publication of SoC telemetry, and to firm up the cost estimates before the decision.

ERGANZ thanks the Authority for the opportunity to comment on these proposals and for considering our submission.

If there are any outstanding questions or a need for further follow-up, please let me know.

Yours sincerely,

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