

4 November 2025

System Operator
By email: system.operator@transpower.co.nz

Security of Supply Forecasting and Information Policy Review

Meridian appreciates the opportunity to provide feedback on the System Operator's consultation paper 'Security of Supply Forecasting and Information Policy (SOSFIP) Review – Draft amendment proposal' (*Consultation Paper*). Meridian's submission is comprised of this letter and an accompanying expert report by Dr Brent Layton, former Chair of the Electricity Authority.

A critical role of the SOSFIP is to set the trigger at which access to contingent storage is enabled. Contingent storage is an important system resource and can contribute to both the security and affordability of New Zealand's electricity system. Meridian's view is that, ultimately, contingent storage should be treated the same as any other resource, with market participants determining its use based on commercial market signals. This would maximise the benefits to consumers. We therefore endorse the suggestion by Dr Layton for the Electricity Authority to undertake a 'first principles' review of contingent storage access conditions with the aim of achieving a 'fuel agnostic' electricity system, as envisioned by the Government Policy Statement on Electricity (GPS).¹

Meridian is also independently pursuing a temporary removal of contingent storage access conditions on Lake Pūkaki via an application through the Fast Track process. This is similarly intended to ensure the country can receive the full benefit of this resource for the next few years until substantial new renewable energy capacity is added to the system.

Until either Meridian's fast track application is approved or a first principles review is completed, however, the SOSFIP will play an important role in ensuring that the current framework facilitates practical access to contingent storage through setting the Contingent Storage Release Boundaries (CSRB). While any constraints on access can only reduce the benefits available to consumers from this resource, the SOSFIP can at least establish settings which make access to contingent storage more feasible and thereby ensure that consumers are able to receive some of this benefit. The System Operator's proposed

¹ Statement of Government Policy to the Electricity Authority under section 17 of the Electricity Industry Act 2010, October 2024, [link](#).

changes to the SOSFIP, while welcome, will not achieve this. Rather, as we set out in our submission, Meridian considers *at a minimum*:

1. The default Alert CSRB buffer should be amended to 373 GWh between April and September and to 153 GWh between October and March (comprising a 103 GWh adjustment for Waiau operating constraints, a seasonal 220 GWh adjustment for the Tekapo shadow constraint, and the 50 GWh base buffer); and
2. The default Emergency CSRB buffer should be amended to 153 GWh (comprising a 103 GWh adjustment for Waiau operating constraints and the 50 GWh base buffer).

In setting these buffers, Meridian's view is that the System Operator should aim to fully address any potential infeasibility rather than rely on ad hoc discretion to enable contingent storage access. However, to that extent that any discretion remains we recommend this is limited to *bringing forward* access to contingent storage. This will provide greater confidence to market participants (leading to consumers seeing greater benefit from this resource) while still ensuring the System Operator can respond to unforeseen circumstances. We set out further details on these matters below.

A fuel agnostic approach to economic dispatch maximises benefits to consumers

Meridian considers that consumers benefit the most when electricity market participants are free to make choices on fuel use in response to commercial market signals. Such a “decentralised approach” was referred to in the GPS as “the best way to deliver the level of reliability that consumers want at the lowest possible cost”.²

Under New Zealand’s electricity market design, cost-reflective market signals are complemented by regulatory incentives to ensure supply security, including provisions for Official Conservation Campaigns (OCC), customer compensation schemes (CCS) and scarcity pricing.³ Together, these create a strong imperative on participants to prudently utilise available energy resources, including hydro storage.

From a market efficiency perspective, requiring that one fuel type be preserved in favour of another can only result in higher costs for consumers. Previous analysis by Meridian found that there is a \$527 million per annum consumer benefit from increasing access to contingent storage versus the current situation of restricted access.⁴ These benefits arise when hydro reservoir operators have confidence they will be able to access contingent storage when it is needed, allowing them to utilise more water during normal market operations, thereby driving down water values, market offers and ultimately consumer prices. In Meridian’s view, a fuel agnostic approach should be a guiding principle in considering any changes to the operation of New Zealand’s power market, including those proposed as part of the current SOSFIP Review.

² Statement of Government Policy to the Electricity Authority under section 17 of the Electricity Industry Act 2010, October 2024, [link](#).

³ Dr Layton discussed these incentives in further detail on page 11 of his report.

⁴ Meridian submission on Security of Supply Forecasting and Information Policy Review: Issues Paper, March 2025, Appendix B, [link](#).

Contingent storage access rules need to be clear, stable, simple and workable

While a fuel agnostic approach should be the goal to maximise consumer benefits, it is currently the case that existing resource consents tie access to water in the lower reaches of Tekapo, Pūkaki and Hāwea to certain security triggers. Given this, the least distortionary way to enable access to these resources is with clear, stable, simple and workable regulatory settings that provide market participants with certainty, allowing them to make trading and investment decisions with confidence.

As we've previously communicated to the SO and others, Meridian's view is that the current SOSFIP does not provide workable access to contingent storage. In particular, the CSRBs are inadequate, relying on the exercise of System Operator discretion to ensure contingent storage can be accessed. As a result, this resource is effectively disregarded by the market and consumers face an additional \$527 million per annum in electricity costs.⁵

The SOSFIP Review provides an opportunity to address this by adopting a new, permanent buffer that ensures practical access to contingent storage and provides clarity and certainty to market participants.

The System Operator's proposal will not provide sufficient certainty to enable a change in market behaviour

We welcome the System Operator's recognition of the need to make a permanent change to the Alert CSRB buffer. We agree it is necessary to increase the buffer from its current level. However, the change to the buffer, as proposed, will not provide Meridian and others with sufficient certainty that access to contingent storage will be feasible and can be relied upon.

Absent being able to rely on access to contingent storage, market participants such as Meridian are forced to take an unduly conservative approach to offering hydro generation in normal market operations as the consequences of ending up needing access to contingent storage but not having it would be financially dire. This comes at a \$527 million per annum cost without any appreciable benefit in terms of security of supply.

We comment on each of the System Operator's proposed adjustments and our alternative recommendations in turn below.

Waiau adjustment

The System Operator has proposed to increase the default Alert CSRB buffer by 90 GWh to account for operating constraints in Lakes Te Anau and Manapouri. This is less than the 150 GWh adjustment adopted in Winter 2024, which the System Operator has explained is due to the additional operating flexibility arising from changes to the Operating Guidelines for Levels of Lakes Manapouri and Te Anau which were Gazetted in May 2025. As we understand it, the System Operator has determined an adjustment of 90 GWh as this is roughly the median level that the Waiau lakes have operated at when below 103 GWh between 1980 and today.⁶

⁵ The view that contingent storage is inaccessible is reinforced by the fact that it has never been used since local rule changes first enabled access.

⁶ 103 GWh being the lower boundary of the top band of the low range, aggregated across both lakes.

We acknowledge the changes to the Operating Guidelines have afforded some increase in operational flexibility in the Waiau. However, it is not clear on what basis the System Operator has determined that a 90 GWh adjustment is now appropriate. This decision appears largely arbitrary.

Meridian's view is a more durable approach would be to adjust the buffer by 103 GWh, being the storage available at the lower boundary of the top band of the low range. In fact, this should be considered a conservative adjustment as:

- While this would reflect that volume of storage in the Waiau that is *largely* unconstrained by the Operating Guidelines, storage in the top band of the low range is still subject to drawdown limits;
- A total Waiau storage volume of 103 GWh is based on both Lakes Manapouri and Te Anau being at the lower threshold of the upper band of their low ranges simultaneously. In practice, it is inevitable that one lake will be higher than the other. This means that even at 103 GWh, one lake will be operating in the lower bands of the low range and subject to additional associated operating constraints; and
- The Waiau catchment experiences highly volatile inflows, with the lakes able to go from empty to full within a matter of days following extreme events. As a result, managing Manapouri and Te Anau lake levels can be very challenging, making it difficult – and in some cases impossible – to coordinate lake drawdown to meet any contingent storage trigger.

For these reasons, 103 GWh should be considered at the lower end of an appropriate buffer adjustment which is intended to account for Waiau operating constraints.

If historical operating levels are to be used as a reference point for setting the buffer, it is important to recognise that operation of these lakes has changed over the last 45 years. To illustrate this, Meridian has analysed the time spent at various storage levels in Lakes Manapouri and Te Anau by decade. The results of this analysis are shown in Figure 1 below.

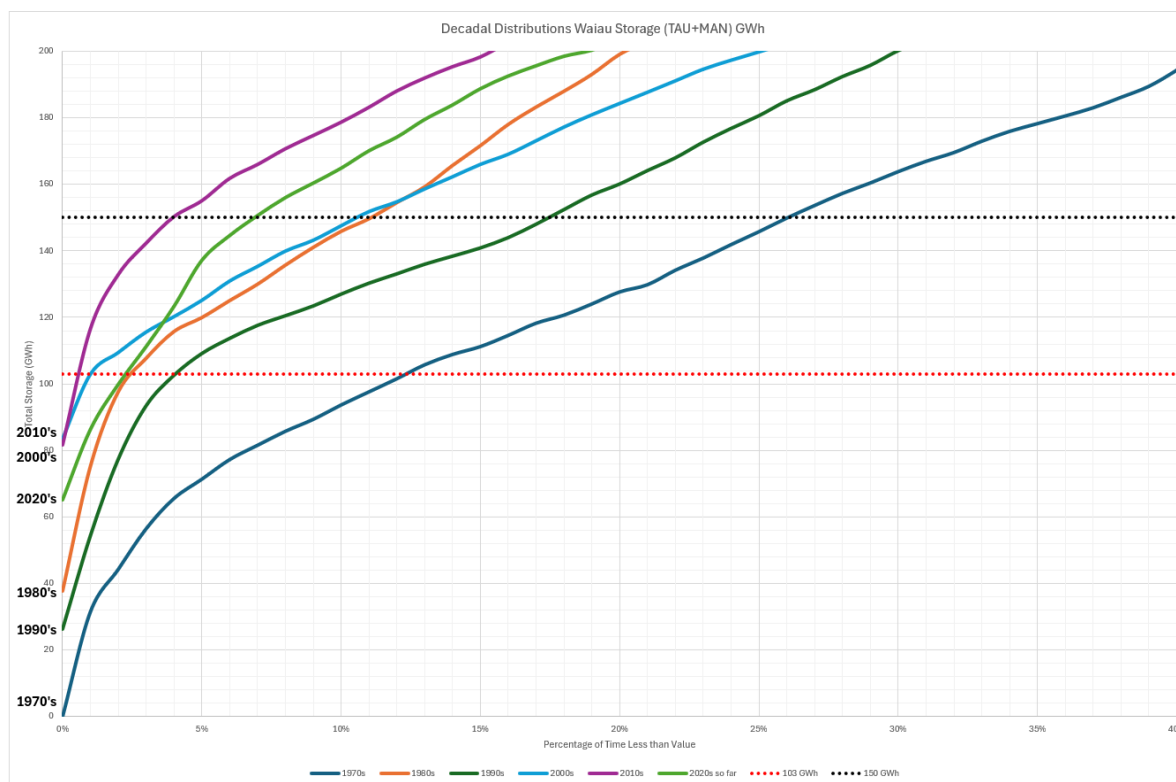


Figure 1: Decadal distributions of Waiau storage

This analysis makes clear that operation of Lakes Manapouri and Te Anau was quite different between the 1970s and 1990s than between the 2000s and 2020s, with the latter period seeing a much more conservative use of low range storage. This is likely driven by a combination of factors including changes in transmission, load, ownership and portfolios, as well as the creation of the electricity market itself.

If the System Operator chooses to use historical operating levels as a basis for determining an adjustment to the Alert CSRB buffer, it should do so on a forward-looking basis, which would mean only drawing on more recent historical usage patterns which are likely to be more reflective of current and future behaviours. Our view is a buffer adjustment of at least 103 GWh would be more reflective of the recent management of the Waiau lakes and ongoing constraints on operations.

Tekapo adjustment

The System Operator has proposed to introduce an adjustment to the Alert CSRB buffer that varies by month to account for the Tekapo shadow constraint. The specific adjustments have been determined by calculating the storage levels that Genesis could draw Lake Tekapo down to in the period from April to September while, in theory, still having reasonable confidence that it will be able to return storage to 220 GWh by 1 October.

However, as illustrated in Figure 22 in the consultation paper (copied below as Figure 2), Genesis has never operated Lake Tekapo at below 220 GWh. This is despite dry years in 2012, 2021 and 2024.

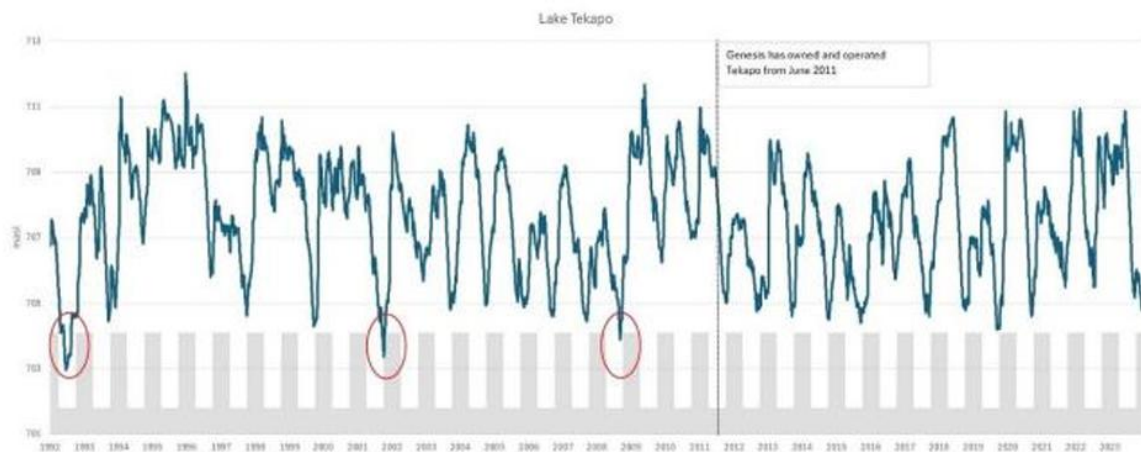


Figure 2: Lake levels at Tekapo since 1992

Genesis’s conservative operation of Lake Tekapo may be partly explained by a general risk aversion aimed at ensuring compliance with its resource consents. However, it is also the case that Genesis, as the owner and operator of the Huntly power station, has commercial incentives to maintain Tekapo lake levels in order to defer wider access to contingent storage and maximise use of its thermal plant as national storage starts to decline. That is, Genesis makes more money during a shortage situation when contingent storage is unavailable as this creates a greater need for generation from Huntly.

Dr Layton similarly identified that the incentives on both Genesis and Contact to access contingent storage could be influenced by their ownership of thermal plants, noting:

“Even if there were no evidence this has happened, a prudent regulator should consider with a critical eye the potential incentives on all parties that may impact its proposals.”⁷

Genesis’s ownership of both the Huntly thermal power plant and its position as operator of Lake Tekapo means in certain situations it will have both the ability and the incentive to operate in such a way that contingent storage remains inaccessible to the wider market. Previous public statements from Genesis suggest they are making a conscious trade-off between the availability of contingent storage and their willingness to maintain fuel stockpiles at Huntly.⁸ These commercial incentives mean the System Operator’s proposed buffer adjustments are likely to be inadequate in accounting for real world behaviour.⁹

The System Operator’s proposal to vary the buffer adjustment by month also adds additional complexity to an already complex framework, making it more difficult for market participants to assess when a contingent storage access boundary might be crossed. This is contrary to the principle that contingent storage access rules should be kept simple.

Based on Genesis’ real-world behaviour and their commercial incentives to hold back access to contingent storage, we consider a fixed 220 GWh adjustment to the Alert CSRB buffer between April and September (as was adopted by the System Operator for Winter

⁷ Review of the Contingent Storage Release Boundaries, Dr Brent Layton, 27 October 2025, p.8

⁸ <https://www.energynews.co.nz/news/electricity/816685/meridian-seeks-unfettered-lake-access-genesis-would-reduce-coal>

⁹ We note that while the trading conduct standard in Part 13.5A of the Electricity Industry Participation Code should in theory discipline such strategic behaviour, in practice it is likely to be very difficult for a regulator, in these circumstances, to confidently assert that this standard has been breached.

2024) is required to account for the Tekapo shadow constraint. Using a fixed buffer adjustment also has the benefit of delivering a simpler contingent storage access regime.

Responding to future consent changes

As noted in the Consultation Paper, there are a number of resource consent processes proposed or underway which might impact on the ability of hydro operators to access contingent storage. The System Operator goes on to suggest that it may be necessary to update the buffer in the future to account for any changes to resource consent conditions or operating limits.

However, Meridian considers that any change to Genesis' resource consent conditions for use of water in Lake Tekapo may not materially alter how they operate that reservoir. This is because their commercial incentives to maximise use of Huntly by deferring access to contingent storage will remain. In addition, the currently proposed amendments to Genesis' consent conditions would still leave them with significant constraints when operating below 220 GWh after 1 October as they would still be required to ensure that the 24-hour rolling lake level does not descend further.¹⁰ This would constrain Genesis to generating to inflows, significantly limiting their flexibility in operating the Tekapo stations. As such, Genesis will continue to be disincentivized to operate below 220 GWh in Lake Tekapo at all times of year, even if their resource consent conditions change as proposed.

Further, Genesis has recently written to Meridian raising a concern that operation of Lake Pūkaki below 518m above mean sea level (amsl) may damage a weir structure below Tekapo B power station. Meridian has commissioned an independent engineering assessment which suggests that, on the contrary, Lake Pūkaki can safely be operated below 518m amsl and that any concerns that Genesis has can be addressed. This evidence has been shared with Genesis but we understand they are not yet convinced. Obviously, to the extent that Genesis remains concerned that operation of Lake Pūkaki below 518m amsl will damage their assets they are likely to take steps to ensure that such operation cannot happen. Given all of the above, Meridian's view is that the System Operator should not assume that changes to Genesis' resource consent conditions at Tekapo will necessarily result in a change to how they operate that lake.

Our overall position on the System Operator's proposed buffer changes

The System Operator has attempted to undertake detailed assessments of the operating constraints in Lake Tekapo and the Waiau and to reflect this in the contingent storage access triggers. The result is relatively small and variable upward adjustments to the Alert CSRB buffer. While Meridian welcomes recognition of the need to increase the buffer, we do not consider these changes will provide the market with sufficient certainty that contingent storage can be accessed when needed.

Contingent storage operators face significant financial consequences if they were to assume that contingent storage will be available and then find out that it is not. As a result, market participants like Meridian require a high degree of confidence that contingent storage will be available before reflecting this in their wholesale market offers. The changes currently proposed by the System Operator do not provide this confidence.

¹⁰ Substantive Fast Track application for replacement resource consents for the Tekapo Power Scheme, Genesis Energy, 25 July 2025, [link](#)

As detailed in our submission on the System Operator's March 2025 Issues Paper, Meridian estimates that the cost to consumers of keeping contingent storage permanently in reserve is \$527 million per annum.¹¹ In addition, there are significant adverse impacts on emissions and hydro spill. In these circumstances, contingent storage effectively becomes an insurance product with a \$500 million per annum premium that will never be called on.

Dr Layton notes in his report the potential impact that better access to contingent storage might have had on events during Winter 2024:

*"Confidence amongst market participants that it was practicable to access contingent hydro storage...would have gone a very long way to alleviating the issues created by the dry year winter in 2024."*¹²

Dr Layton also draws attention to recent analysis by industry experts Energy Link which, like Meridian's analysis, identifies a range of potential benefits from enabling better access to contingent storage, including less hydro spill, lower emissions, and reduced peak prices in winter.¹³ Under the System Operator's current proposals, these benefits will be left on the table. To avoid this, we recommend the additional adjustments set out above are adopted by the System Operator.

Reliance on ad hoc discretion should be minimised

The current SOSFIP sets a default buffer of 50 GWh and includes a simple provision allowing the System Operator to determine a different buffer and make it publicly available. Following the first use of this discretion in Winter 2024, the System Operator developed and published a 'CSRB buffer discretion process' which sets out the timeframes and criteria it will use to determine whether any future change in the buffer is needed.

Such a process seems to establish the System Operator's ability to change the buffer as an operational 'lever' that can be exercised to actively manage access to an important system resource. This approach creates significant uncertainty and, in Meridian's view, is inconsistent with the original intent of this aspect of the security of supply framework.

The buffer was introduced via an Electricity Authority decision in June 2019 which enacted an update to the SOSFIP. As referenced by Dr Layton who was chair of the Authority at that time,¹⁴ the Authority's decision paper noted that "*non-discretionary arrangements* should be in place to enable the access to contingent storage and the starting of an OCC" [emphasis added].¹⁵

Dr Layton also references a joint presentation by the Authority and Transpower announcing the SOSFIP update which notes that "floors and buffers will be transparently documented and *not* subject to regular change" [emphasis in original].¹⁶ Dr Layton goes on to conclude:

¹¹ Meridian submission on Security of Supply Forecasting and Information Policy Review: Issues Paper, March 2025, Appendix B, [link](#).

¹² Review of the Contingent Storage Release Boundaries, Dr Brent Layton, 27 October 2025

¹³ <https://energylink.co.nz/resources/blogs/allowing-hydro-lakes-to-be-lowered-during-dry-spells-does-the-idea-hold-water>

¹⁴ Review of the Contingent Storage Release Boundaries, Dr Brent Layton, 27 October 2025, p.9

¹⁵ Reviews of regulatory settings for official conservation campaigns (OCCs) and the security of supply forecasting and information policy (SOSFIP) - Decision, Electricity Authority, 18 June 2019, [link](#).

¹⁶ Join industry briefing on decisions, Transpower and the Electricity Authority, 4 July 2019, [link](#)

“The Authority, on the face of this evidence, did not contemplate or think that in 2019 it was authorising the System Operator to change buffers at its discretion with or without consultation.”¹⁷

Meridian agrees with Dr Layton that the buffer was not intended to be used as an operational lever. Rather, it was intended to fix an underlying infeasibility arising from the incorporation of contingent storage into the System Operator’s risk modelling. In this sense, the buffer should be viewed more as a “set and forget” value subject to occasional update rather than a means for the System Operator to actively switch on or switch off access to contingent storage whenever it deems it necessary.

In determining a revised buffer, our view is the System Operator’s objective should be to **fully address** any potential infeasibility in the risk management framework in a way that means any need for System Operator discretion is minimised. This would ensure that regulatory settings are workable while simultaneously providing certainty to participants, allowing them to trade with confidence. In order to do so, the buffer should account for all reasons why water may not be used including physical reasons, consenting constraints and commercial incentives.

Dr Layton raised specific concerns that retaining System Operator discretion to amend the buffers is likely inconsistent with wider regulatory and policy objectives:

“The System Operator being able to alter access to contingent hydro storage at its discretion has potentially serious adverse consequences. It is also likely to be inconsistent with the Authority’s statutory objective and produce results contrary to the Government Policy Statement’s expectation that the market should be agnostic in terms of fuel used to generate electricity.”¹⁸

We note that the Electricity Authority, in making a final decision to adopt the SOSFIP as part of the Code, must act in accordance with its objectives under Section 15 of the Electricity Industry Act. It must also, under Section 17 of the same Act, have regard to any Government Policy Statement.

Dr Layton goes on to point out that System Operator discretion can impact not just trading on the wholesale spot market but also, significantly, price discovery and liquidity of hedge markets:

“If prices can be unilaterally changed by the System Operator this creates risks to those trading the market for purposes other than hedging or mandated market making. There is very likely to be a chilling effect on trading in the market by outside parties from Transpower claiming wide discretionary power to alter buffer values. This will be a detriment in efficiency of price discovery and liquidity.”¹⁹

Nevertheless, if the System Operator (and ultimately the Authority) continues to allow for discretion to change the buffers, Meridian’s view is that residual uncertainty would be minimised by specifying explicitly in the SOSFIP that such discretion can only be used to *increase* the buffer.

¹⁷ Review of the Contingent Storage Release Boundaries, Dr Brent Layton, 27 October 2025, p.9

¹⁸ Review of the Contingent Storage Release Boundaries, Dr Brent Layton, 27 October 2025, p.3

¹⁹ Review of the Contingent Storage Release Boundaries, Dr Brent Layton, 27 October 2025, p.10

The CSRB buffer discretion process published by the System Operator makes clear that it currently only intends to use its ability to change the buffer to bring forward access to contingent storage to manage an emerging system risk.²⁰ However, the CSRB buffer discretion process is not a codified part of the risk management framework and can be unilaterally amended by the System Operator at any time.

In contrast, limiting the System Operator through the SOSFIP to only being able to *increase* the buffer would at least provide some assurance that access to contingent storage can only be brought forward and not delayed or revoked, while still allowing the System Operator to respond to any unforeseen security of supply risks that emerge. This would improve certainty for market participants. Meridian considers this could be achieved through a simple change to clause 6.1A(c) of the proposed SOSFIP drafting, as indicated in blue text below:

- (c) the relevant buffer in the following table of 50 GWh unless the **system operator** determines one or more increased ~~different~~ buffers and publishes them ~~it~~: publicly available.

Emergency CSRB buffer

The System Operator is proposing not to make any change to the Emergency CSRB buffer and suggests that consideration of any such change should be undertaken as part of a wider review of the CCS. We disagree. Firstly, we consider that there should be consistency between any change to the Alert CSRB buffer and the Emergency CSRB buffer. This does not necessarily require that identical adjustments be made to both buffers but rather that any operating constraints be treated in a consistent manner when considering what might impact access to the different types of contingent storage.

On this basis, we consider an identical uplift should be made to the Emergency CSRB buffer as to the Alert CSRB buffer with respect to the adjustment to account for Waiau operating constraints. The basis of this adjustment for the Alert CSRB buffer is that the constraints on low range operations in the Waiau are such that it is not possible to drive Lakes Manapouri and Te Anau down towards the bottom of their operating ranges and hold them there in order to allow for the trigger for accessing contingent storage to be met. These constraints exist whether or not access to the first tranche of contingent storage has been triggered. As such there should be consistent treatment of these constraints in any adjustment to the Alert and Emergency CSRB buffers.

The System Operator notes in its consultation paper that it considers Waiau low range storage should be used before the public is requested to voluntarily manage load through an OCC. This is an artificially constructed hierarchy which would treat certain hydro resources differently without any basis in the Code or in resource consents. Such an approach is directly contrary to the GPS' objective of a fuel agnostic sector.

On the Tekapo adjustment, we agree with the System Operator's argument that the Tekapo shadow constraint will likely have been resolved by the time national storage approaches the Emergency CSRB. This is because access to Alert contingent storage will already have been triggered, allowing Genesis to utilise the full range of Lake Tekapo regardless of the time of year. We therefore agree that an adjustment to the Emergency CSRB buffer is not

²⁰ For example, one of the criteria the System Operator uses to make a decision to amend the buffer is that "bringing forward access to contingent storage" can mitigate the identified risk.

required for this reason. However, as we discuss above, Genesis' commercial incentives may also impact the extent to which they are prepared to draw Lake Tekapo down in these circumstances. This remains a matter for the System Operator and the Electricity Authority to consider in making a final decision on adjusting the Emergency CSRB buffer.

Lastly, the System Operator notes in the Consultation Paper that permanent changes that increase the likelihood of an OCC should be considered in conjunction with a review of the CCS to make sure these are providing sufficient incentives to prudently manage hydro storage. Meridian disagrees that these things need to be considered simultaneously. Amending both the Alert and Emergency CSRB buffers is a matter rightfully considered under the SOSFIP Review. Meridian's November 2024 letter to the System Operator included a request to consider changes to both buffers and the System Operator's March 2025 Issues Paper and its subsequent April 2025 Decision Paper both appeared to confirm that a change to the Emergency CSRB buffer was within scope.

As with the Alert CSRB, the SOSFIP should set an Emergency CSRB which provides for a workable and durable regime for contingent storage access. Any implications arising for the appropriateness of current CCS settings can then be considered by the Electricity Authority in light of the changes made.

Meridian's recommended changes to the CSRB buffers

To summarise our recommendations, Meridian considers that *at a minimum*:

1. The default Alert Contingent Storage Release Boundary (CSRB) buffer should be amended to 373 GWh between April and September and to 153 GWh between October and March (comprising a 103 GWh adjustment for Waiau operating constraints, a seasonal 220 GWh adjustment for the Tekapo shadow constraint and the 50 GWh base buffer); and
2. The default Emergency CSRB buffer should be amended to 153 GWh (comprising a 103 GWh adjustment for Waiau operating constraints and the 50 GWh base buffer).

While these changes would give Meridian greater confidence that contingent storage *could* be accessed, this does not mean that contingent storage would be used frequently. As mentioned above, hydro operators would still have strong incentives to prudently manage storage.²¹ Drawing on contingent storage would only occur in situations of persistently low inflows and when the country genuinely requires it.

Previous Meridian modelling demonstrated that, under a scenario of 'eased access' to contingent storage, Lake Pūkaki was only expected to fall below the current controlled storage minimum around 3% of the time.²² This would be entirely consistent with the expected usage of a resource termed 'contingent storage'. It would also ensure that the country is able to benefit from a significant renewable resource which, to date, has never been used and, under current settings, is effectively blocked from supporting New Zealand's efforts to achieve a secure and affordable electricity system.

²¹ These incentives are discussed in further detail by Dr Layton on page 11 of his report.

²² Meridian submission on Security of Supply Forecasting and Information Policy Review: Issues Paper, March 2025, Appendix B, [link](#).

More fundamental changes would deliver greater certainty and additional market benefits

We consider that the adjustments outlined above – to be implemented via the SOSFIP Review – are the minimum changes required to improve certainty for market participants. However, more fundamental changes to the framework for enabling contingent storage access would support greater certainty and consequently realise further consumer benefits in the long term.

Dr Layton drew attention to a number of such options, including:²³

- Access to contingent storage could be at the discretion of the catchment operator;
- Access to contingent storage could be based on a price trigger, such as one tied to the LRMC of a notional gas peaker plant;
- Access to contingent storage could be set at a relatively high level of national hydro storage, such as 1,700 GWh.

Dr Layton suggested, given the importance of this issue to the New Zealand electricity system, that the Electricity Authority should urgently undertake a first principles review of contingent storage access conditions. Meridian agrees with this suggestion.

A first principles review should not assume that contingent storage was a “last resort” but rather test whether a fuel agnostic approach would reduce wholesale prices without any appreciable impact on security of supply. Such a review could indeed be undertaken by the Electricity Authority, as suggested by Dr Layton, or by the Government. Both options would ensure that a broader consumer benefit perspective is adopted.

Relevant to any such review is the fact that Genesis, Mercury, Contact and Meridian have recently entered into contractual arrangements to support the maintenance, operation and fuelling of a Huntly Rankine unit for a 10-year period, including the build-up of physical coal stockpiles. Such market-led arrangements are ultimately most likely to deliver reliability and security at least cost. They also suggest that any remaining restrictions on accessing hydro storage are likely unnecessary and, in fact, costly for consumers. This could also be a matter for a first principles review to consider.

Our responses to the System Operator’s specific consultation questions are attached as Appendix A, including our comments on other proposed changes in the SOSFIP Review.

Dr Layton’s report is attached as Appendix B.

Please contact me if you have any queries regarding this submission. This submission can be published in full.

Nāku noa, nā

Matt Hall

Principal Advisor – Regulatory Affairs and Government Relations

²³ Review of the Contingent Storage Release Boundaries, Dr Brent Layton, 27 October 2025, pp.11-13

Appendix A: Responses to consultation questions

<p>Question 1: Do you support our proposal to amend the SOSFIP?</p>
<p>We support the System Operator undertaking a review of the SOSFIP at this time. Our comments on the System Operator's specific proposals are included in our cover letter and in our responses to the questions below.</p>
<p>Question 2: Are there any other SOSFIP amendment options we should consider? Please explain your preferred option in terms consistent with the Authority's statutory objective in the Electricity Industry Act 2010 and consideration of practicality of the solution to implement it.</p>
<p>Meridian has recently raised with the System Operator that the current approach to deriving the ERCs may underestimate the risk of non-supply.²⁴ Specifically, in determining when a particular inflow sequence will result in shortage, the System Operator uses the difference between starting storage and minimum storage for that sequence without simulating power system operation at very low lake levels. This approach implicitly assumes all controlled storage (including contingent storage) is equally accessible at all lake levels. However, this is not the case for Lakes Manapouri and Te Anau (which are subject to constraints under the Operating Guidelines) or Lake Pūkaki (which begins to encounter hydraulic constraints at low lake levels). As such, the ERCs likely understate the actual level of risk. While such assumptions may sit outside the SOSFIP itself, this may be an opportune time to consider such additional improvements to the System Operator's risk modelling.</p>
<p>Question 3: Do you have any feedback on our Energy Security Outlook and/or Quarterly Security of Supply Outlook communications? This may include suggestions about how we could make them more useful and accessible in future.</p>
<p>No.</p>
<p>Question 4: Do you agree that introducing an additional ERC and SST scenario using contracted fuel information to our Energy Security Outlooks would better support understanding about forward energy risks, and mitigating actions by participants? This scenario would be in addition to continuing to provide the current physical capability scenario. Please provide your reasons.</p>
<p>There is currently limited visibility of contracted thermal fuel information to the market. Winter 2024 demonstrated the significant market stress that can arise from unsignalled thermal fuel disruptions. Meridian therefore supports the System Operator publishing a contracted thermal fuel scenario as part of its Energy Security Outlook. Such a scenario can provide useful information to the market about the current horizon and quantity of thermal fuel contracts.</p> <p>We note that MBIE is currently consulting on a set of proposals for improving gas market disclosures and the transparency of information. Meridian is supportive of these changes. We think that there are good policy reasons for more information to be made public (such as contracted vs uncontracted volumes, especially those relating to electricity generators who use gas). As MBIE will likely soon hold this information, it is</p>

²⁴ As described in section 2.1.3 of [Electricity Risk Curves 101](#).

important that it is incorporated into scenarios used by the System Operator so that maximum benefits from the information collection are realised.

Question 5: How far into the future do you think any contracted fuel information scenario should be modelled? This could be any duration up to the full length of the physical capability scenario, which is up to 24 months. Please explain your rationale.

In Meridian's view, it makes sense to align the timeframes of these scenarios, while acknowledging that there may be limited fuel contracting over a more distant time horizons.

Question 6: Do you agree with our proposal to replace the current worst-case SST with a time-to SST that is progressively less pessimistic into the future? Note the time-to SST will be used to determine the estimated time-to for Alert, OCC and as part of our CSRB buffer discretion process? Please provide reasons for your answer.

In general, we support the proposed adjustments to the worst-case SST which are likely to result in a more realistic (but still conservative) timeframe for reaching Alert or Emergency levels.

In deriving the SSTs, Meridian notes the System Operator should adjust its historical data set for the impacts of climate change, if it has not done this already.

Question 7: Do you agree with the proposal to update the definition of the Watch curve to ensure Watch is always above the Alert curve, and our preference for Option 1? If not, please provide reasons for your answers.

We agree it makes sense to update the calculation of the Watch curve to ensure it is crossed ahead of the Alert curve. We do not have a preference between Option 1 and Option 2.

Question 8: Do you agree with the proposal to have a minimum time under Alert of 4 weeks to reduce the uncertainty? If not, please provide reasons for your answers.

Yes. As the System Operator has described, this will create greater certainty and avoid flip-flopping between Watch and Alert statuses (with flow on impacts to contingent storage access).

Question 9: Do you agree with the proposal to change our ERCs and SSTs tools and analysis to a 3-hour model (rather than the current day-night model)? If not, please provide reasons for your answers.

Yes. While the difference is marginal, this should provide a better assessment of risk overall.

Question 10: Do you agree with the proposal to enhance our NZGB and Energy Security Outlook reporting for greater alignment by extending the NZGB time horizon, adding additional capacity scenarios to NZGB and including capacity risk assessment (using NZGB) to Energy Security Outlooks? If not, please provide reasons for your answers.

Yes. In particular, providing additional NZGB scenarios to reflect capacity constraints on hydro schemes as they approach their lower operating ranges is likely to provide additional insights on the risks of blocking access to contingent storage. We encourage Transpower to undertake this analysis well ahead of a dry year and to make its analysis and results available to stakeholders.
Question 11: Do you agree with the proposal to expand the systems risks for consideration as part of the quarterly scenario assessments? If not, please provide reasons for your answers.
We agree, although the System Operator should make clear in communicating such scenarios that they represent low-likelihood risks.
Question 12: Do you agree with the proposal to update the Alert CSRB buffer for the access to contingent hydro storage? If not, please provide reasons for your answers.
Meridian welcomes the System Operator's proposal to increase the Alert CSRB buffer but does not consider the changes proposed will be sufficient to give the market certainty that contingent storage will be accessible. Further details, including our recommended changes to the buffers, are included in our cover letter.
Question 13: Do you agree with the proposal for the System Operator to retain the CSRB buffer discretion process? If not, please provide reasons for your answers.
No. Meridian considers that in setting the buffers the System Operator should aim to fully address any potential infeasibility, avoiding the need for ad hoc System Operator discretion to enable access to contingent storage. To extent any ability to use discretion remains, it should be limited to bringing forward access to contingent storage. Further details are included in our cover letter.
Question 14: Do you agree with the objectives of the proposed SOSFIP amendment?
Yes, but to be clear we do not consider the System Operator's proposals relating to the CSRB buffers will meet these objectives. To assess the effectiveness of the proposed adjustments to the CSRB buffers, the System Operator could model whether these settings would have enabled use of contingent storage in any of the recent dry sequences.
Question 15: Do you agree it is appropriate to rely on qualitative evaluation of the costs and benefits of the proposed SOSFIP amendment? If not, what information, evidence etc can you provide and/or what methods would you recommend to quantify the costs and benefits?
<p>Meridian considers that the System Operator should seek to quantify the cost and benefits of amending the SOSFIP. The Code requires that the System Operator undertake a quantitative assessment of costs and benefits "if reasonably possible". Meridian's view is that such an assessment is certainly possible in this case.</p> <p>The SOSFIP is an important part of New Zealand's security framework and decisions on the SOSFIP can have wide-ranging impacts. This is most clearly the case for establishing the triggers which enable access to contingent storage. Meridian has previously provided modelling to the System Operator which demonstrates that the consumer benefit of providing better access to contingent storage is in the realm of \$527 million per annum.²⁵ This reflects the order of magnitude of benefits available. We do not</p>

²⁵ Meridian submission to the SOSFIP Review: Issues Paper, 24 March 2025, [link](#)

consider that these benefits will be realised under the System Operator's current proposal. If the System Operator considers a portion of these benefits will be achieved by its proposal, it should seek to quantify this.

Question 16: Do you agree the benefits of the proposed amendment to the SOSFIP can reasonably be expected to outweigh its costs.

It is not possible to say with any confidence that the benefits of the proposal are likely to outweigh the costs as the System Operator has not attempted to quantify these. We consider that the System Operator's proposal is likely to leave substantial benefits unrealised.

Question 17: Do you agree that the proposed amendment complies with section 32(1) of the Act?

No. In particular, we draw attention to Dr Brent Layton's concerns that retaining System Operator discretion to unilaterally change the CSRB buffers is not consistent with promoting the efficient operation of the futures and forward markets and, as a consequence, the electricity industry. This is contrary to Section 32(1)(c) of the Act which requires that the Code (including matters incorporated by reference in the Code) promote the efficient operation of the electricity industry. Further discussion on this is included in our cover letter and in Dr Layton's accompanying report.

Any other comments:

No.

Appendix B: Expert report from Dr Brent Layton