21 July 2026

Electricity Markets Policy
Building, Resources and Markets
Ministry of Business, Innovation and Employment
PO Box 1473
Wellington 6140
New Zealand
By email: electricitymarkets@mbie.govt.nz

Consultation submission: Proposed reliability obligation to manage dry-year risk

Todd Corporation (Todd) appreciates the opportunity to comment on the consultation paper *A Proposed Reliability Obligation to Manage Dry-Year Risk*.

Todd supports the Government's objective of strengthening winter and dry-year security of supply and agrees that a well-designed reliability obligation can contribute meaningfully to that goal. Our submission provides detailed responses to each consultation question. This cover letter summarises Todd's key points and recommended refinements to ensure the regime is workable, proportionate, and beneficial for consumers.

Todd supports improving New Zealand's dry-year resilience and agrees that a long-term reliability obligation can help address the **free-rider problem** associated with dry-year firming. However, the regime must be carefully designed to deliver real reliability at efficient cost. In Todd's view, this means being consistent with widely accepted good economic principles.

1 Avoiding cliff-edge thresholds and adopting graduated obligations

Todd recommends avoiding hard thresholds, such as the proposed 500 GWh purchaser threshold or 2,500 GWh generator threshold, because they create cliff-edge effects and distort incentives. We recommend a **graduated obligation structure**, where compliance requirements scale progressively with participant size.

Graduated obligations are more equitable and better aligned with the relative systemic impact of different participants.

2 Obligations should be based on net positions, not gross purchases

Todd recommends allocating obligations based on each party's **net wholesale position**: gross wholesale purchases minus firm generation and contracted firm supply. This ensures:

- obligations reflect actual contribution to system risk;
- parties that have significant levels of non-firm generation do not gain bargaining advantages;
- incentives to invest in firming capacity are preserved; and
- parties are not penalised for capacity they already hold or have contracted.

A net-position approach is more equitable and avoids perverse incentives.

3 Eligible cover must be backed by physical assets

Todd supports limiting qualifying cover to arrangements backed by **physical generation or demand-response assets**. Financial instruments (e.g., vanilla CFDs, ASX futures) should only qualify if they can be shown to be backed by Market Participants that are also subject to the net exposure obligations. This is necessary to maintain the integrity of the obligation and ensure contracted cover is genuinely reliable.

4 Compliance should be principles-based, evidence-driven, and grounded in reasonableness

Compliance assessments should apply normal standards of credibility and reliability, supported by established legal principles. Todd recommends:

- a reasonableness-based approach to firmness;
- recognition of uncontrollable events (force majeure, transport disruption, upstream failure);
- requirements for parties to take all reasonable mitigation steps; and
- avoidance of strict liability, which would create excessive costs and unrealistic expectations.

This approach balances reliability with practicality and fairness.

5 Integration with existing Code mechanisms (scarcity pricing and conservation campaigns)

Todd considers it essential that the proposed regime is consistent with **Part 9** of the **Code**, including scarcity pricing and public conservation and compensation schemes. These tools already provide an incentive for retailers to manage supply–demand imbalances.

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If the intent is for the new reliability obligation to supersede these mechanisms, MBIE should consider **reviewing these provisions** to avoid conflicting incentives.

6 Penalties must be proportionate and avoid cumulative, disproportionate impacts

Penalties should be calibrated to reflect actual or potential harm without distorting market behaviour. Todd notes that participants may face multiple layers of financial exposure including:

- long-term obligation penalties;
- short-term obligation penalties; and
- scarcity pricing and customer compensation payments.

The regime should include a mechanism to **scale or moderate penalties** where overlapping obligations arise from the same underlying event or where parties have taken reasonable steps to mitigate risk.

7 Short-term obligation: rely on existing Code mechanisms instead

Todd does not support introducing a new short-term obligation. The existing scarcity pricing and conservation/compensation frameworks already provide a targeted and effective backstop. Introducing an additional short-term obligation risks duplication, complexity, and inconsistent incentives.

8 Implementation should be structured, tested, and simulation-based

Given the tight timeframes proposed for short-term responses, Todd recommends:

- structured templates for notifications and evidence;
- annual or biannual simulation exercises; and
- clear procedural guidance for all participants.

This will ensure the regime functions effectively when activated.

9 Conclusion

Todd supports the intent of the proposed reliability obligation and agrees that New Zealand needs strong, practical tools to address the **free-rider problem** in respect of dry-year risks.

The regime will be most effective if it is proportionate, evidence-based, and well-integrated with existing market arrangements. A graduated obligation structure, tied to net exposures across all Market Participants, proportionate compliance settings, and coherent integration with scarcity pricing and conservation schemes will help deliver a

robust and cost-effective framework that benefits consumers and supports New Zealand's electrification goals.

We appreciate the opportunity to provide feedback and would welcome further engagement as MBIE refines the proposal.

Yours sincerely,

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MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

Consultation submission form

The Ministry of Business, Innovation and Employment (MBIE) would like your feedback on:

A proposed reliability obligation to manage dry-year risk.

Please provide your feedback by **5pm, 21 July 2026**

When completing this submission form, please provide comments and supporting explanations for your reasoning where relevant. Your feedback provides valuable information and informs decisions about the proposals.

We appreciate your time and effort taken to respond to this consultation.

Instructions

To make a submission you will need to:

1. Fill out your name, email address, phone number and organisation. If you are representing an organisation, please provide a brief description of your organisation and its aims, and ensure you have the authority to represent its views.
2. Fill out your responses to the discussion document questions. Where possible, please provide us with evidence to support your views. Examples can include references to independent research or facts and figures.
3. If your submission has any confidential information:
    i. Please state this in the email accompanying your submission, and set out clearly which parts you consider should be withheld and the grounds under the Official Information Act 1982 (Official Information Act) that you believe apply. MBIE will take such declarations into account and will consult with submitters when responding to requests under the Official Information Act.
    ii. Indicate this on the front of your submission (e.g. the first page header may state "In Confidence"). Any confidential information should be clearly marked within the text of your submission (preferably as Microsoft Word comments).
    iii. Note that submissions are subject to the Official Information Act and may, therefore, be released in part or full. The Privacy Act 1993 also applies.
4. Submit your feedback:
    i. By email to *electricitymarkets@mbie.govt.nz*
    ii. By mailing your submission to:

    Electricity Markets Policy
    Building, Resources and Markets
    Ministry of Business, Innovation and Employment
    PO Box 1473, Wellington 6140
    New Zealand

Submitter information

MBIE would appreciate if you would provide some information about yourself. If you choose to provide information in the section below, it will be used to help MBIE understand how different sectors view the proposals and options for requiring and achieving minimum onshore fuel stockholding. Any information you provide will be stored securely.

Your name, email address, phone number and organisation

Name:	Privacy of natural persons
Email address:	
Phone number:	
Organisation:	Todd

☒ The Privacy Act 1993 applies to submissions. Please tick the box if you do **not** wish your name or other personal information to be included in any information about submissions that MBIE may publish.

☐ MBIE may upload submissions and potentially a summary of submissions to its website, www.mbie.govt.nz. If you do **not** want your submission or a summary of your submission to be placed on either of these websites, please tick the box and type an explanation below:

I do not want my submission placed on MBIE's website because... [insert reasoning here]

Please check if your submission contains confidential information

☐ I would like my submission (or identifiable parts of my submission) to be kept confidential, and **have stated** my reasons and ground under section 9 of the Official Information Act that I believe apply, for consideration by MBIE.

Questions for the consultation

Q1. Do you agree with the analysis in this chapter of why New Zealand does not currently have sufficient dry-year firming? If not, where do you disagree?

☐ Yes ☒ Yes, with changes ☐ No

Please explain your views.

1.1 Overall position

Todd agrees with much of MBIE's analysis of why New Zealand does not currently have sufficient dry-year firming. Historically, the electricity system benefited from a significant share of low-cost thermal generation, which helped balance the system at materially lower cost than is now emerging, and which is unlikely to return. That reflected plentiful supplies of relatively low-cost natural gas and coal, without the additional emissions costs that apply today.

Todd's submission reflects its interests as a New Zealand energy participant, including through Todd Energy and Nova Energy.

Todd supports improving dry-year resilience and accepts that a long-term reliability obligation can help address the free-rider problem. The regime should be designed to deliver real reliability at efficient cost, without arbitrary thresholds, duplicative obligations or disproportionate penalties. The strongest design would be graduated, net-position based, physically backed, evidence-driven and integrated with existing Code mechanisms.

1.2 Changing market conditions

The ongoing depletion of domestic natural gas reserves, together with the imposition of carbon emissions costs, means firming the electricity system is becoming more expensive. Higher firming costs have supported substantial investment in renewable generation. However, because of political and regulatory risk, investment in dispatchable firming plant is not occurring alongside renewable investment at levels sufficient to provide long-term security of supply.

While investment in grid-scale battery capacity is occurring, batteries will not be sufficient to meet the deep storage requirements that thermal fuels can provide. Those requirements are particularly important for managing infrequent but highly impactful dry years.

1.3 Investment barriers

The consultation paper identifies a number of factors that make investment in dry-year firming plant difficult, including:

- the tenor gap;
- fuel uncertainty;
- difficulty obtaining debt financing;
- portfolio asymmetry; and
- regulatory and political uncertainty.

1.4 Security of supply as a common good

Todd also notes the comments made by John Small, Chair of the Commerce Commission, at the 2026 Downstream Conference, where he described security of supply as a "public good". Semantics aside, Todd considers "common good" may be a more accurate description of the problem dry-year risk creates in a network industry such as electricity.

The security-of-supply element of the electricity system is:

a. common to all users of the electricity system, with users difficult to exclude from accessing it; and
b. rivalrous, in that it can be depleted or exhausted.

1.5 Free-rider problem and regulatory response

This creates a free-rider problem: consumers may avoid paying directly for security of supply while continuing to benefit from it. As a result, security of supply may be under-produced, overused, or degraded.

Todd considers this is occurring in New Zealand. Reduced gas supply, higher fuel costs, and ageing or retiring plant are creating a need for new investment, yet current market mechanisms do not adequately reward that investment because parties have a natural incentive to free-ride.

If security of supply is properly understood as a public or common good, that supports regulatory settings designed to overcome the free-rider problem and ensure New Zealanders have appropriate access to secure and reliable electricity.

Overall, Todd supports the intent of the proposed reliability obligation. The regime will be most effective if it delivers real reliability at efficient cost through a framework that is proportionate, physically backed, evidence-driven and well- integrated with existing Code mechanisms.

Q2. What do you consider to be the principal remaining barriers to investment in additional dry-year firming following the recent reforms to improve fuel adequacy (Government procurement of an LNG importation facility)?

Please explain your views.

The principal remaining barriers include uncertainty around the timing, delivery and durability of any LNG import solution, including the policy and regulatory settings required to support investment confidence.

An LNG terminal would provide material benefits. In particular, it would support the continued operation of existing gas-fired generation plant, including Genesis' 400 MW CCGT at Huntly, for many years. It would also allow that capacity to be supplemented by new peaking facilities as required.

Todd notes that recent reports from Sapere and Concept Consulting identify diesel, LPG and biomass as alternative fuels for thermal dry-year firming. Those fuels are significantly more expensive than LNG and would still require substantial capital investment in plant, storage and transport logistics. As a result, they are likely to impose higher costs on consumers than LNG, which can make greater use of existing infrastructure and has a broader use case than electricity system firming alone.

The ability to import LNG would help underwrite significant growth in the use of electricity from renewable generation as it would reduce the risks to those both industries currently reliant on electricity and potential new users. As such, an LNG facility would support New Zealand's transition to greater use of renewable electricity across the transport and industrial sectors. It would also enable those sectors that do not currently have credible alternatives to natural gas to continue operating in New Zealand, while contributing positively to the economy through the goods and services they provide and the employment they support, often in regional areas.

Q3. Do you agree that, despite the recent reforms to improve fuel adequacy, information, roles and tools, further measures are still needed to strengthen incentives to invest in dry-year firming? If not, please explain why not?

☒ Yes, I agree ☐ I agree in part ☐ No, I don't agree

Please explain your views.

In Todd's view, a modified regulatory regime is required to address the free-rider issue associated with dry-year firming. This is particularly important in a market that is becoming increasingly renewable and that actively disincentivises investment in the thermal generation facilities that have historically provided firming, and for which there are few, if any, credible alternatives.

The consultation paper accurately identifies the issues facing suppliers seeking to provide security of supply on a commercial basis, including the tenor gap, revenue uncertainty, financing constraints, investment timing and fuel availability.

The need for further measures is supported by events such as the short-term peak demand capacity shortfall in August 2021 and the energy shortage situation that emerged in 2024. Both events resulted from a combination of overlapping and independent factors rather than a single cause. While this suggests the market has generally performed well, these rare but significant events have highlighted the system's exposure to dry-year and peak-demand risks.

The level of concern expressed by Government, regulators and consumers also shows that there is a low tolerance for electricity supply disruption. At the same time, there is limited appetite for high wholesale market prices to be the primary driver of investment in firming capacity.

If the market is expected to provide a higher level of security of supply, consumers will ultimately need to pay for that security. Regulatory settings should therefore be designed to overcome the natural incentive for parties to free-ride and to ensure appropriate investment in dry-year firming.

Q4. Do you agree that there is value in building new measures on existing regulatory architecture, rather than creating an entirely new regime from first principles? Why or why not?

☒ Yes, I agree ☐ No, I don't agree

Please explain your views.

Todd prefers building on existing regulatory architecture as opposed to creating a new regime from first principles. Market participants have significant infrastructure investment under their care and continue to make new and substantial additional investments. Any material changes to the structure and architecture of the sector risks stalling investment while they assess the impacts on their business. Incremental change to existing market structure and rules is preferred.

Long-term Obligation

Q5. Do you agree that a long-term obligation should be introduced to strengthen incentives to secure sufficient dependable winter cover in advance where a forecast winter energy adequacy shortfall is identified? If not, why not?

☒ Yes, I agree ☐ No, I don't agree

Please explain your views.

Todd agrees that a long-term obligation should be introduced. As explained in response to Questions 1 and 3, current market settings do not adequately address the free-rider problem associated with dry-year firming, particularly in a system with increasing reliance on intermittent renewable generation.

A long-term obligation would provide clearer incentives for parties to secure dependable winter cover in advance, rather than relying on the market or Government to resolve a shortfall once it

has emerged. The regime should, however, be designed carefully so that obligations are proportionate, commercially workable, and targeted to the identified adequacy risk.

Q6. Do you agree that the long-term obligation should be placed on large wholesale purchasers rather than on, say, generators or the market more broadly? If not, which parties should hold the obligation, and why?

☒ Yes, I agree ☐ No, I don't agree

Please explain your views.

The consultation paper provides a clear and well-supported rationale for placing the long-term obligation on all wholesale purchasers, subject to a de-minimis size where their exposure would not have a significant impact on overall system security. As MBIE notes, wholesale purchasers are the parties that *"assemble the portfolio of supply and contractual arrangements on which consumers rely"* and are therefore best positioned to secure dependable winter cover ahead of time . They also have the strongest commercial incentive to forecast future demand accurately and procure least-cost energy and firming services in a competitive market.

By contrast, placing the obligation solely on generators would be unworkable and risk distorting market incentives. The consultation paper acknowledges that while a generator-focused obligation may appear attractive, it raises significant issues, including coordination challenges, potential disincentives for demand-side solutions, and misalignment with how risk is actually managed in the wholesale market . Without a corresponding obligation on purchasers, such a model would likely lead to reduced competition (especially from new entrant generators), higher consumer prices and reduced reliability.

Although the obligation could theoretically be placed on end-use consumers, doing so would be administratively complex, costly, and inconsistent with existing contracting and risk-management practices. The only other feasible alternative would be for the Government or regulator to directly procure dry-year firming—similar to the Whirinaki reserve energy scheme[1] established in response to the 2001 and 2003 dry-year shortages. This approach is far more interventionist and would shift both cost and operational responsibility onto taxpayers.

Placing the obligation on wholesale market purchasers is therefore the most logical and efficient option. These parties already manage exposure to wholesale market conditions, already procure supply on behalf of consumers, and are best placed to respond to a forecast winter energy shortfall in a timely and commercially disciplined manner.

Q7. Do you agree that a de minimis threshold should apply to limit the obligation to wholesale purchasers with a material winter load? If so, is the 500 GWh threshold appropriate, and should it be measured by reference to aggregate load over the winter period?

☐ Yes, I agree ☐ I agree in part ☒ No, I don't agree

Please explain your views.

A de minimis threshold is necessary to ensure the obligation applies only to wholesale purchasers with a material winter load. However, a fixed 500 GWh threshold creates a significant cliff-edge. A purchaser marginally above the threshold would face full compliance obligations, while a slightly smaller retailer would face none. At the same time, the largest gentailers are materially larger and better resourced. This creates inequity in both directions: mid-sized retailers are too large to be exempt but too small to absorb obligations in the same way as the largest incumbents.

[1] The 150MW diesel fired Whirinaki power plant was commissioned in 2004 and was sold in 2011 to Contact Energy who continue to operate the plant.

To avoid this cliff-edge, Todd recommends a **graduated obligation** that scales with winter demand. This approach better reflects the continuum of retailer size, avoids disproportionate impacts on parties near the threshold, and maintains competitive neutrality.

A further issue arises where a small retailer grows rapidly and crosses the threshold during the three-year warning period. This scenario should be explicitly addressed. Because the watch-period status will be publicly known, any retailer expanding during this period should do so with the clear expectation that they will cross the threshold and must begin procuring firming supply or developing generation to meet their growing customer demand. This mitigates free-rider risks and ensures responsible growth

Alternative	Design	Benefits	Potential limitations
Graduated obligation solution	Obligations scale progressively with winter demand. Example: 0–500GWh exempt; 500–1,000GWh partial (33%); 1,000–1,500GWh intermediate (67%); 1,500GWh+ full.	Reduces cliff-edge effects; reflects relative systemic impact; avoids treating participants at the margin like the major gentailers; preserves growth incentives.	More complex to administer and may require calibration of bands and percentages with changes in market size.

Under this model, compliance requirements are clearly defined for each band. A purchaser with 500–1,000 GWh of winter demand would be required to procure at least 33% of the full obligation, while a purchaser with 1,000–1,500 GWh would be required to procure at least 67%.

It is also important to note that participants - whether exempt, partially obligated, or fully obligated - remain exposed to high spot prices and, if they are retailers, to customer compensation payments under Section 9 of the Code if a shortfall occurs. These existing incentives ensure that even exempt or partially obligated parties are incentivised to manage their wholesale exposure responsibly.

Q8. Do you agree with the proposed staged approach under which a warning notification would be issued five years out, a binding obligation would be issued three years out and compliance would be assessed one year out? If not, what timing or trigger approach would be preferable?

☐ Yes, I agree ☒ I agree in part ☐ No, I don't agree

Please explain your views.

The staged approach provides useful forward signals, but several aspects of the proposed timing reduce its practical effectiveness.

a) The one-year-out compliance assessment does not allow meaningful corrective action. Although the assessment is ex-ante, a one-year horizon is insufficient for any substantial response beyond demand-side measures or ensuring existing capacity is available. It is not feasible to bring new firming capacity to market within that timeframe. If the purpose of the framework is to enable corrective action, the one-year assessment does not achieve that outcome.

b) The purpose of the test needs to be clarified. It is unclear whether the intention is for parties to take corrective action once a test is failed, or whether the framework is primarily designed to

create incentives for timely investment and impose consequences if parties do not act early enough. These are materially different objectives, and the timing of assessments should reflect the intended purpose.

Todd also notes that other regulatory tools already exist to manage supply–demand stress, including Section 9 customer compensation schemes and official conservation campaigns. These mechanisms will continue to operate alongside the reliability obligation and will be central to managing any actual shortfall.

Preferred refinement: assess compliance during the relevant winter period

Consideration should be given to conducting the final obligation assessment **during the relevant winter period**, rather than one year in advance. This approach would:

- avoid penalising parties when no actual supply shortfall occurs
- ensure penalties apply only when a real deficit materialises
- align consequences with actual system conditions rather than forecasts
- recognise that parties already face strong financial incentives during stress events (high spot prices, customer compensation payments, and other Code-based obligations)

This reflects the reality that the value of the proposed framework lies in the **incentives to invest early** to avoid penalties, rather than in attempting to correct a shortfall after the fact.

Q9. Do you agree that any identified adequacy shortfall should be allocated among obligated wholesale purchasers by reference to their shares of expected winter demand? If not, what allocation approach would be preferable?

☐ Yes, I agree ☒ I agree in part ☐ No, I don't agree ☐ Not sure/no preference

Please explain your views.

Allocating any adequacy shortfall solely on the basis of gross expected winter demand does not adequately reflect equity considerations and risks creating distortions between obligated parties with materially different wholesale market positions.

Paragraph 77 of the consultation paper acknowledges potential inequity where obligated parties effectively pick up obligations associated with retailers below the 500 GWh threshold. However, it does not address inequities **between obligated parties themselves**, particularly where their supply portfolios differ significantly.

For example, a purchaser with little or no hydro generation and a relatively large net wholesale purchase position may be disproportionately affected compared with a participant whose portfolio includes substantial hydro generation. In such a case, a party that has not contributed to a supply deficit could nonetheless be required to procure additional firming supply, secure demand response, or face penalties. This outcome is not equitable.

Basing obligations on **gross wholesale market purchases** also distorts bargaining dynamics. Parties that invest in firming generation would be treated the same as those that do not, weakening incentives to invest in firm capacity. It may also create a perverse incentive for participants seeking firming arrangements to delay negotiations with parties that hold firming capacity, knowing that penalties or obligations may compel those parties to procure additional cover even where the participants seeking firming services have contributed more materially to the underlying adequacy risk.

Preferred allocation method: net wholesale position

A more equitable and efficient approach is to allocate obligations based on each party's **net position** - that is:

Net wholesale position = gross wholesale market purchases **minus** firm generation capacity **minus** contracted firm supply.

This method:

- aligns obligations with each participant's actual contribution to system risk
- avoids penalising parties whose portfolios do not drive the adequacy shortfall
- preserves incentives to invest in firming generation or secure long-term contracts
- reduces the potential for strategic behaviour by parties with hydro-dominated portfolios

Allocating obligations on a net basis ensures that parties are responsible only for the portion of winter demand they must meet through the wholesale market, rather than being penalised for capacity they already hold or have contracted.

For renewable generation that is inherently subject to variability such (hydro, wind and solar), the level or assessed quantity of firm generation should be determined by reference to a specified confidence level or risk standard – e.g. 1/50 years together with the effects of any negative or positive correlations between them.

Q10. What forms of cover should be eligible to meet the long-term obligation?

Please explain your views.

Eligible forms of cover should be limited to arrangements that are demonstrably backed by **physical assets** - either generation or demand response - that can reliably perform during a winter energy shortfall. The consultation paper is clear that, regardless of whether a party holds physical generation or contractual entitlements, the underlying asset must be *maintained, reliable, and sufficiently fuelled* to perform its intended role. This principle is essential to ensuring that the obligation delivers genuine system adequacy rather than nominal or purely financial cover.

Each obligated party must have sufficient confidence in its arrangements leading up to any assessment. The appropriateness of those arrangements should be tested at the point of assessment, and subject to investigation where there are reasonable grounds to believe the cover cannot be relied upon. It is important that natural justice is preserved: any party alleged to be in breach must have the opportunity to respond, and the Rulings Panel process - with rights of appeal to the courts - provides an appropriate framework for this.

Eligible cover should therefore be restricted to **physical or physically-referenced arrangements**, including:

- **Physical generation** owned or controlled by the purchaser
- **Contracted physical generation** from specific assets capable of producing electricity
- **Demand response arrangements** where specific loads can be reliably curtailed when required

By contrast, cover should **not** include purely financial instruments that do not reference specific physical assets. Financial derivatives in general - including vanilla CFDs, ASX futures, options, swaps and similar instruments—refer to notional quantities and may be speculative in nature. They should qualify only where the seller of those obligations can demonstrate that the relevant notional quantity is backed by appropriately firm physical assets or demand response capable of performing during a winter shortfall. Without that physical backing, such instruments do not provide assurance that real supply or demand response will be available and therefore should not qualify.

Restricting eligibility to physical or physically-referenced arrangements ensures that the obligation delivers real, dependable winter cover and maintains the integrity of the reliability framework.

Q11. How should the compliance framework be designed? In particular, what evidential standard should apply, and how should the regime address more difficult issues such as hydro treatment, attribution, portfolio treatment, shared arrangements and double counting?

Please explain your views.

A robust compliance framework must be able to operate effectively across a wide range of potential shortfall scenarios. Dry-year or winter-adequacy concerns can arise from many different and unpredictable circumstances, so the framework should prioritise **effectiveness, flexibility, and fairness** rather than attempting to prescribe overly rigid metrics in advance.

The evidential standard should be grounded in a clear, fact-based assessment. Decision-makers must be able to consider the full factual context of any emerging shortfall, including system conditions, asset performance, contractual arrangements, and the behaviour of relevant parties. The framework should allow the regulator to investigate whether cover arrangements are genuinely reliable and whether parties have acted reasonably, while ensuring that participants have the opportunity to respond to any concerns. Preserving natural justice is essential, and the existing Rulings Panel process - with rights of appeal - provides an appropriate mechanism.

Complex issues such as hydro treatment, attribution, portfolio treatment, shared arrangements and double counting should be addressed through principles-based guidance rather than rigid formulae. These matters are inherently fact-specific. For example:

- Hydro storage and inflows vary materially year-to-year, so any assessment must consider actual hydrological conditions and the extent to which a participant's portfolio contributed to the shortfall.
- Shared ownership or shared contractual arrangements require careful attribution to ensure obligations are allocated fairly and without duplication.
- Portfolio-level assessments must recognise the interaction between generation, contracted supply, and demand response within a participant's overall position.

These issues form part of the broader factual matrix that decision-makers must evaluate when determining whether a shortfall exists, who is responsible, what mitigating actions were available, and what level of culpability - if any - should apply.

A principles-based compliance framework, supported by clear procedural safeguards and the ability to consider the full factual context, will provide the flexibility needed to manage real-world adequacy challenges while ensuring fairness and maintaining confidence in the regime.

Q12. Should the regime deal with arrangements that appear compliant in advance but later fail because of counterparty failure, project delay, force majeure or similar events? If so, how?

☒ Yes, I agree ☐ I agree in part ☐ No, I don't agree ☐ Not sure/no preference

Please explain your views.

The regime must be able to address situations where arrangements that were compliant ex-ante later fail due to events outside a party's control. This is essential to ensuring fairness and maintaining confidence in the reliability obligation framework.

The principle should be that **physical and contracted arrangements are treated consistently**. If a party relying on its own physical plant can demonstrate that a failure was genuinely outside its control, then parties relying on contracted access to physical capacity should have access to the same protections.

Physical plant: evidential requirements

A party relying on **physical generation** should be able to avoid non-compliance where it can demonstrate that:

- the event causing the reduction in capacity was **outside its control**, and not the result of prior actions or inaction
- it took **all reasonable steps** to mitigate the issue and restore capacity in a timely manner

This ensures that unavoidable failures—such as genuine force majeure—do not result in disproportionate penalties.

Contracted arrangements: evidential requirements

A party relying on **contracted physical capacity** should similarly be able to avoid non-compliance where it can demonstrate that:

- it did **not contribute** to the shortfall
- it held **contractual rights** requiring the counterparty to take all necessary steps to restore capacity
- it **exercised those rights reasonably and diligently**

Contractual rights must be sufficiently robust to ensure reliability. Just as physical plant must be well-maintained and properly fuelled, contractual arrangements must be capable of delivering real physical performance when required.

Judgement and reasonableness

Some matters—particularly what constitutes "reasonable steps" or adequate exercise of contractual rights—will inevitably require judgement. The compliance framework should allow the regulator and the Rulings Panel to consider the full factual context, while preserving natural justice and ensuring parties have the opportunity to respond.

Avoiding absolute obligations

Todd's view is that **absolute obligations should be avoided**. Imposing strict liability for any failure, regardless of cause, would likely lead to unintended consequences, including excessive risk premiums, over-contracting, and ultimately higher costs for consumers. A balanced approach that distinguishes between controllable and uncontrollable events is more efficient and equitable.

Q13. Should penalties for non-compliance be designed and calibrated to tilt investments to comply without overly encouraging inefficient over-procurement? Please explain your reasoning.

☐ Yes, I agree ☐ I agree in part ☐ No, I don't agree ☒ Not sure/no preference

Please explain your views.

Penalties for non-compliance should be **balanced, proportionate, and aligned with actual or potential harm**. The purpose of the penalty regime should be to reinforce compliance and

support timely investment, but not to distort market behaviour or create incentives for inefficient over-procurement.

If penalties are **too punitive**, they risk driving behaviour that is counterproductive to the long-term interests of consumers and the market. Excessively high penalties could:

- discourage competition by disproportionately affecting smaller or mid-sized retailers
- lead to unnecessary or inefficient over-procurement of firming cover
- increase costs for consumers through higher risk premiums and contracting costs

Conversely, if penalties are **too weak**, the reliability obligation may have little practical impact. Insufficient deterrence could:

- reduce incentives to invest in firming capacity
- undermine the reliability objective of the regime
- slow the pace of electrification by increasing the risk of supply shortfalls

A well-calibrated penalty framework should therefore sit between these extremes. It should encourage prudent investment and compliance, while avoiding distortions that raise consumer costs or reduce competitive pressure. The focus should be on **proportionality**, **predictability**, and **maintaining efficient market incentives**, rather than on tilting investment behaviour in a way that could lead to unintended consequences.

Q14. What other design features, transitional arrangements, or implementation issues should be considered to ensure that the long-term obligation is workable, proportionate, cost-effective, and beneficial for consumers?

Please explain your views.

Todd considers it important that the long-term reliability obligation operates **coherently with existing regulatory mechanisms** in the Code. In particular, Part 9 of the Code provides for **public conservation campaigns** and **customer compensation schemes** as tools to manage supply shortages that occur. These mechanisms impose minimum spot prices and require retailers to compensate customers under either the default scheme or an Authority-approved alternative. Although these provisions have never been used since their introduction in 2010, they nonetheless create meaningful incentives for participants to manage security-of-supply risks.

The proposed reliability obligation should therefore be designed to **work in concert** with these existing scarcity and conservation arrangements. If the intent is for the new regime to supersede these mechanisms, then consideration should be given to **removing or replacing** the existing provisions to avoid duplication, confusion, or conflicting incentives.

Ensuring proportionality across regimes

Given the existence of the scarcity and conservation frameworks, careful attention should be paid to the **proportionality of financial impacts** across the different layers of the security-of-supply regime. It would be logical for there to be a **clear and coherent relationship** between:

- the financial consequences under the **long-term reliability obligation**,
- any penalties or requirements under a **short-term reliability obligation**, and
- the financial impacts of **scarcity pricing and customer compensation** if demand management is ultimately required.

A structured escalation—where obligations and consequences increase as conditions worsen—would help ensure that incentives remain aligned, predictable, and proportionate. This would also

support cost-effectiveness for consumers by avoiding overlapping or inconsistent penalty structures.

Overall design considerations

To be workable and beneficial for consumers, the regime should:

- integrate smoothly with existing Code mechanisms
- avoid duplicative or conflicting incentives
- ensure proportionality across all security-of-supply tools
- maintain clarity for market participants
- minimise unnecessary compliance costs
- support efficient investment and competition

A coherent, layered framework -where long-term obligations, short-term obligations, and scarcity/conservation measures operate in a coordinated manner - will provide the strongest foundation for a reliable, cost-effective, and consumer-focused security-of-supply regime.

Short-term Obligation

Q15. Do you support the introduction of a short-term obligation as a targeted backstop where a near-term winter reliability risk emerges despite the operation of the long-term obligation?

☐ Yes, I agree ☒ No, I don't agree

Please explain your views.

While there is some rationale for a short-term obligation, Todd considers that the existing mechanisms in **Section 9 of the Code** already provide a comprehensive and effective framework for managing near-term reliability risks. These include:

- **Scarcity pricing**
- **Public conservation campaigns**
- **Customer compensation schemes**

These tools are specifically designed to manage supply-demand stress in real time and to create strong incentives for participants to maintain adequate security-of-supply arrangements. Although these provisions have not been used since their introduction, they remain a robust backstop that can be activated if a near-term deficit emerges.

Introducing a new short-term obligation risks **duplication, complexity, and overlapping incentives**. It may also create uncertainty for participants about how the different regimes interact and could lead to inconsistent or disproportionate financial consequences.

Todd's view is that the Authority should **rely on the existing Section 9 mechanisms** rather than introduce a new short-term obligation. If the long-term obligation is well-designed and effective, Section 9 provides an appropriate and targeted backstop for managing any residual near-term reliability risks.

Q16. Do you agree that the short-term obligation should apply to large generators whose contribution to annual energy supply exceeds a defined *de minimis* threshold? We welcome views on whether 2,500GWh of expected annual generation is the appropriate threshold.

☐ Yes, I agree ☐ I agree in part ☒ No, I don't agree

Please explain your views.

For the same reasons outlined in relation to the long-term obligation, Todd does not support a hard cliff-edge threshold such as 2,500 GWh of expected annual generation. A single fixed threshold creates disproportionate impacts for participants who sit just above or below the line and does not reflect the continuous nature of generator size or contribution to annual supply.

A more equitable and efficient approach is a **graduated obligation**, where compliance requirements increase progressively with annual supply. This avoids treating mid-sized generators as if they were major gentailers, preserves incentives for growth, and reduces the risk of distortions arising from arbitrary boundary effects.

Preferred alternative design: Graduated obligation

Alternative	Design	Benefits	Potential limitations
Graduated obligation	Obligations scale progressively with annual supply. Example: 0–500GWh exempt; 500–1,500GWh partial (33%); 1,500–2,500GWh intermediate (67%); 2,500GWh+ full.	Reduces cliff-edge effects; reflects relative systemic impact; avoids treating small participants like a major gentailer; preserves growth incentives.	More complex to administer and may require calibration of bands and percentages.

Under this model, compliance requirements are clearly defined for each band. A generator producing:

- **500–1,500 GWh** annually would be required to meet **33%** of the full obligation
- **1,500–2,500 GWh** annually would be required to meet **67%** of the full obligation

This structure ensures proportionality and avoids imposing full obligations on participants whose scale and resource base differ materially from the largest incumbents.

Interaction with existing incentives

As with the long-term obligation, exposure to these compliance costs would sit alongside:

- potential costs under the long-term reliability obligation
- exposure to high wholesale spot prices during stress events
- payments under **customer compensation schemes** in Section 9 of the Code if shortfall scenarios occur

These existing mechanisms already create strong incentives for market participants to manage supply risks responsibly. A graduated obligation complements these incentives without introducing unnecessary distortions or excessive compliance burdens.

Q17. Do you consider the proposed trigger – projected hydro storage crossing the Watch Curve within 90 days if it declines at an assumed rate of 18GWh/day – is appropriate? If not, what alternative trigger should be considered?

☒ Yes, I agree ☐ I agree in part ☐ No, I don't agree

The analysis supporting the proposed trigger appears reasonable and proportionate. Using projected hydro storage relative to the Watch Curve, combined with a 90-day horizon and an assumed decline rate of 18 GWh/day, provides a clear, objective, and operationally meaningful indicator of emerging short-term reliability risk. This approach is consistent with established hydrological modelling practices and offers a practical balance between early warning and avoiding unnecessary activation of short-term measures.

Q18. Do you agree with the proposed monitoring period, notification process, three-week response window, and approach to switching off the obligation if conditions improve? If not, what alternative process would be preferable?

☒ Yes, I agree ☐ No, I don't agree

Please explain your views.

Todd agrees in principle with the proposed timeframes. However, for the process to operate effectively under real-world conditions, it will need to be **highly structured, standardised, and regularly tested**.

A short-term reliability obligation will only function as intended if all parties can provide, receive, and assess information quickly and accurately. To support this, Todd recommends:

- developing **structured templates** for notifications, responses, and evidence requirements
- conducting **annual or biannual simulation exercises** to test the process end-to-end
- ensuring that all participants understand the expectations and can act within the tight timeframes

Regular simulation will help ensure that, when a genuine supply shortfall risk emerges, the process can be executed efficiently and without confusion.

Commercial dynamics under tight timeframes

Todd also notes that the compressed timeframes may create **commercial pressure** that could increase costs for consumers. When obligations must be met within weeks, fuel suppliers or demand-response providers may find themselves in a strong bargaining position, with incentives to hold out during negotiations.

Recent wholesale and fuel contracting experience in New Zealand demonstrates that these arrangements can be complex and time-consuming, particularly under stressed market conditions. Compressing these negotiations into a three-week window could materially shift bargaining dynamics.

That said, this pressure may also have a **positive incentive effect**: obligated parties will be encouraged to act early, secure arrangements well in advance, and avoid being exposed to last-minute procurement under stressed conditions.

Q19. Do you agree that each obligated generator's obligation should be determined by reference to the winter load its portfolio is expected to support, including its own retail load and relevant contractual commitments? If not, what alternative basis should be used?

☒ Yes, I agree ☐ I agree in part ☐ No, I don't agree

Please explain your views.

Winter peak demand is the period of greatest system sensitivity, and historically the point at which dry-year and adequacy concerns have emerged - particularly during **Q2 leading into peak winter**. Determining each obligated generator's requirement by reference to the **winter load their portfolio is expected to support** is therefore a logical and proportionate basis for allocating obligations.

Using expected winter load ensures that obligations reflect:

- the **actual contribution** a generator makes to meeting winter demand
- the **risk profile** associated with their retail load and contracted commitments
- the **seasonal nature** of adequacy challenges, which are concentrated in winter rather than annual averages

This approach aligns obligations with the period of highest system stress and ensures that generators are responsible for the portion of winter demand they must reliably support.

Q20. What forms of firm energy fuel cover should qualify under the short-term obligation? In particular, how should hydro be treated, including whether, and in what circumstances, existing stored water should be capable of counting toward compliance?

Please explain your views.

As indicated above in question 9 regarding long-term obligations hydro and other generation forms that have natural variation in output (wind and solar) should have their levels of the contribution assessed on a statistical basis with reference to a specified confidence level or risk standard – e.g. 1/50 years. This should take into account and positive or negative correlations to give a conservative but not overly pessimistic estimation of the level of contribution over the relevant winter demand period.

Q21. How should compliance be assessed? We welcome views on what evidence should be required, and how the Authority should approach questions of firmness, attribution, double counting, and reliance on third-party arrangements (including examples of how these matters are addressed in other jurisdictions).

Please explain your views.

Compliance should be assessed through a **credible, evidence-based process** that applies consistent standards across all obligated parties. The framework should allow the Authority to evaluate the reliability of cover arrangements while preserving natural justice and recognising the practical realities of physical and contracted supply.

Todd considers the following principles essential:

- **Evidential standards**

Evidence submitted by participants should meet normal standards of **credibility, reliability, and verifiability**. The framework should apply normal standards of credibility, reliability and procedural fairness. Participants should be required to demonstrate:

- the nature and scope of the cover arrangement
- the physical or contractual basis for firmness
- the steps taken to ensure reliability
- any mitigating actions undertaken when issues arise

This ensures that compliance assessments are grounded in objective, fact-based evaluation rather than assumptions or nominal claims.

- **Firmness**

The Authority should adopt a **reasonableness-based approach** to firmness, consistent with the principles outlined in Todd's response to **Q12**. Absolute firmness—whether of fuel supply, generation availability, or contractual hedges—is unrealistic and would lead to excessive costs and unachievable expectations.

A workable firmness standard should recognise that:

- events outside a party's control can occur
- parties must take **all reasonable steps** to mitigate issues
- contractual rights must be exercised diligently
- cover arrangements must be sufficiently robust to be relied upon under normal and foreseeable stress conditions

This approach balances reliability with practicality and avoids imposing strict liability for uncontrollable events.

- **Attribution, portfolio treatment, and double counting**

These issues are inherently **fact-specific** and should be addressed through principles-based guidance rather than rigid formulae:

- **Attribution** should reflect the actual contribution of each asset or contract to the participant's position.
- **Portfolio treatment** should consider the interaction between generation, contracted supply, and demand response within the participant's overall net position.
- **Double counting** must be avoided by ensuring that the same physical capacity is not claimed by multiple parties or counted under multiple arrangements.
- **Shared or third-party arrangements** should be assessed based on the clarity, enforceability, and reliability of contractual rights, including the participant's ability to require performance or mitigation.

These principles ensure that compliance assessments reflect the real physical and contractual landscape rather than nominal or duplicated claims.

- **Overall approach**

A credible compliance framework should:

- apply consistent evidential standards
- recognise reasonable steps and uncontrollable events
- avoid strict liability
- ensure physical and contracted arrangements are genuinely reliable
- prevent double counting and misattribution
- preserve natural justice through transparent processes and rights of appeal

This approach provides the flexibility needed to manage real-world reliability challenges while maintaining fairness and confidence in the regime.

Q22. How should the regime deal with arrangements that appear compliant in advance but fail in practice because of upstream supply failure, transport disruption, force majeure, counterparty failure, or similar events?

Please explain your views.

The regime should adopt a **reasonableness-based approach**, consistent with Todd's position in **Q12**. Absolute obligations are unlikely to be workable and would create significant unintended consequences, including excessive risk premiums, over-contracting, and ultimately higher costs for consumers.

A practical and equitable framework should recognise that some failures are genuinely outside a party's control, provided the party has acted responsibly.

Reasonableness and force majeure

The framework should recognise genuine force majeure provisions and other events outside a participants reasonable control. In particular, parties should be required to demonstrate that they have:

- taken **all reasonable steps** to mitigate the effects of the disruption
- exercised relevant **contractual rights** to restore performance
- kept affected parties **informed in a timely manner** so they can also take mitigating steps

This approach ensures that unavoidable events do not result in disproportionate penalties, while still requiring parties to act diligently and responsibly.

Consistency with existing Code mechanisms

Todd also notes that where events outside a party's control lead to actual supply deficits, the Code already provides mechanisms to manage the supply–demand balance, including:

- **scarcity pricing**
- **public conservation campaigns**
- **customer compensation schemes**

These tools are designed to operate during real-time stress events and can be activated by the Authority to maintain system balance. They provide an appropriate backstop for situations where physical or contracted arrangements fail despite reasonable efforts by participants.

Overall position

A workable regime should:

- avoid strict liability
- recognise uncontrollable events
- require reasonable mitigation and use of contractual rights
- integrate with existing scarcity and conservation mechanisms
- maintain fairness while preserving strong incentives for prudent risk management

This balanced approach ensures reliability without imposing unrealistic or counterproductive obligations on market participants.

Ultimately, expecting a 100% reliability would be excessively expensive, just as NZ cannot afford to be 100% immune from other natural disasters.

Q23. How should penalties for non-compliance be designed and calibrated so that they provide a credible incentive to secure genuine firm fuel cover without encouraging inefficient or disproportionate responses?

Please explain your views.

The penalty regime should be **proportionate, balanced, and designed to avoid unintended or perverse outcomes**. Penalties must be strong enough to create a credible incentive for parties to secure genuine firm fuel cover, but not so punitive that they distort investment behaviour, encourage inefficient over-procurement, or impose excessive costs on consumers.

A well-calibrated penalty framework should recognise that participants may face **multiple layers of financial exposure** across the reliability and scarcity regimes. In particular, penalties may arise:

- under the **long-term obligation**,
- again under the **short-term obligation**, and
- potentially through **scarcity pricing** and **customer conservation and compensation schemes** if the Authority activates Section 9 mechanisms.

The cumulative impact of these financial consequences could be significant. The regime should therefore include a mechanism to consider whether **scaling or moderating penalties** is appropriate in circumstances where:

- a party is technically in breach but has taken reasonable steps to mitigate risk,
- multiple overlapping obligations are triggered by the same underlying event, or
- external factors outside the party's control have contributed to the shortfall.

This approach ensures that penalties remain **credible and effective**, while avoiding disproportionate outcomes that could undermine competition, raise consumer costs, or discourage efficient investment.

A balanced penalty structure—aligned across long-term obligations, short-term obligations, and scarcity/conservation mechanisms—will help maintain coherent incentives and support a reliable, cost-effective security-of-supply framework.

Q24. What other design features, transitional arrangements, or implementation issues should be considered to ensure that the short-term obligation is workable, proportionate, cost-effective, and beneficial for consumers?

Please explain your views.

Todd considers it essential that the short-term obligation is designed to operate **coherently with the existing security-of-supply mechanisms** in the Code. In particular, the **scarcity pricing** and **public conservation and customer compensation schemes** in Section 9 should be fully integrated into the overall framework. These mechanisms already provide strong incentives for participants to manage supply risks and offer a proven backstop for real-time supply–demand imbalances.

A short-term obligation that sits alongside, rather than above or in conflict with, these existing tools will help ensure clarity, avoid duplication, and maintain consistent incentives across the regime.

Proportionate and balanced penalties

Penalties for non-compliance must be **proportionate to actual or potential harm** and calibrated to avoid distorting market behaviour. They should not be:

- so punitive that they raise consumer costs or suppress competition, or
- so weak that they fail to influence behaviour or improve reliability.

A balanced penalty structure is essential to ensuring that the short-term obligation supports efficient investment and operational decision-making without creating perverse incentives.

Avoiding cumulative and disproportionate financial impacts

Todd also notes that participants may face **multiple layers of financial exposure** if a shortfall scenario emerges:

- penalties under the **long-term obligation**,
- penalties under the **short-term obligation**, and
- additional financial consequences under Section 9 scarcity pricing and compensation schemes.

The cumulative effect of these mechanisms could be significant. The regime should therefore include a means of assessing whether **scaling or moderating penalties** is appropriate in circumstances where overlapping obligations are triggered by the same underlying event, or where a participant has taken reasonable steps to mitigate risk.

It would be reasonable to commence with penalties that are potentially on the low side and increase those in steps if it is apparent the market is not responding to the new regime in an appropriate manner. That would reduce the risk of creating undue costs to the market.

This approach ensures that the overall framework remains **workable, proportionate, and cost-effective**, while still providing strong incentives for prudent risk management.