

## **FN-24-18 Fortnightly report 11 October 2024**

This report summarises items that may be of interest to the Minister for Energy but not necessarily require a formal briefing. Further information on any topic can be provided on request. Substantive items and decision papers will be provided to the Minister in the form of briefings.

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**Mobile:** s9(2)(a)

## 1. Current and upcoming publications and advice

Strategic outcome(s)	Title	Purpose	Action and timing
Efficient: <i>Accurate pricing and distributed energy</i>	Consultation: Distribution network connections (pricing and non-price)	This consultation seeks feedback on proposals to regulate pricing methodologies and improve non-price processes for connecting to distribution networks.	Intended publication: 18 October 2024
Affordable: <i>Effective competition</i>	Decision: Changes to the default distributor agreement (DDA) template, consumption data template, and related Part 12A clauses	The DDA is the template agreement that makes it easier for traders and distributors to enter agreements. The Authority is improving the functioning of the DDA template and associated historical consumption data template, by amending the Code. A key change is updating 'recorded' terms (placeholder terms which the Commerce Commission may also regulate) to be 'core or 'operational' terms. This will make these terms more consistent nationally. Changes will also address the balance of risk between parties, to support competition and efficiency, to benefit consumers. improvements include allowing distributors to more easily use consumption data, and introducing two new provisions to ensure consumers are not charged for services they do not receive.	Intended publication: 22 October 2024
Accountability document	Consultation: 2025/26 levy-funded appropriations and	We are required to consult with the public on our proposed funding to	Ministerial Briefing: 25 October 2024

	indicative work programme	inform our funding request to the Minister in early 2025.	Intended publication: 1 November 2024
Secure and resilient: <i>Effective risk management</i>	Consultation: Update to scarcity pricing settings	This consultation will seek feedback on the Authority's proposal to update scarcity pricing settings in the wholesale market. The updated settings will ensure that consumer expectations for security of supply are better reflected in the wholesale market. Updating scarcity pricing settings will also ensure that the market sends stronger and more reliable pricing signals for investment in flexible generation and demand side resources.	Intended publication: 1 November 2024

## 2. Consultations underway

Strategic outcome(s)	Title	Purpose	Action and timing
Improving the affordability, efficiency and security/ resilience of the system	Consultation: Code review omnibus 4	<p>Four Code amendment proposals to:</p> <ol style="list-style-type: none"> <li>1. Improve consumers' access to their electricity data</li> <li>2. Remove the system operator's obligation to eliminate frequency time error</li> <li>3. Introduce a hedge settlement agreement for fixed price variable volume hedges</li> <li>4. Remove the need for the Electricity Authority to consult on under-frequency events if the causer admits culpability.</li> </ol>	<p>Consultation closes:</p> <p>15 October 2024</p>
Affordability: <i>Consumer care and affordability</i>	Consultation: Improving retail market monitoring: Amended information notice and updated analysis	<p>The Authority is consulting on the workability and cost effectiveness of an updated information notice for retailers as well as a Privacy Impact Assessment and cost-benefit analysis.</p> <p>The Authority is working with MBIE to ensure the information request aligns with MBIE's work on the Consumer Data Right for Energy.</p>	<p>Consultation closes:</p> <p>22 October 2022</p>
Efficiency: <i>Innovation and distributed energy</i>	Consultation: Part 8 Common quality requirements review	<p>We're seeking feedback on two consultation papers which cover:</p> <ul style="list-style-type: none"> <li>• A set of short-listed options to improve the common quality information available to network operators and</li> </ul>	<p>Consultation closes:</p> <p>12 November 2024</p>

		<p>owners about assets that are looking to connect to electricity networks</p> <ul style="list-style-type: none"> <li>• Some Code amendment proposals that update key terms in the Code to better enable emerging technologies to be used in New Zealand's electricity sector.</li> </ul>	
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### 3. Upcoming Electricity Industry Participation Code amendments

The following table has Electricity Industry Participation Code amendments that need to be presented to the House by the Minister's office **within 20 working days** following the date on which it is made.

Tracking number	Name	Date made	Date of Gazette notification	Date in force	Due date for presentation to the House
	None				

### 4. Key external engagements

- Energy Competition Taskforce: 11 October
- ENA CE meeting: 14 October
- Transpower's 2024 Engineering and Technology Excellence Awards: 15 October
- Council of Energy Regulators: 21 October
- Minister for Energy/CE monthly meeting: 23 October
- EA/Commerce Commissioner meeting: 24 October
- Environment Committee oral submission on 350 Aotearoa's petition on community energy: 24 October
- Energy Competition Taskforce: 25 October

## 5. Security of supply in 2025

- 5.1. With a changing power system and security of supply risks, the Authority is focusing on a more sophisticated approach to forward monitoring and reporting of security of supply (daily and forward forecasting/ scenario planning).
- 5.2. Below is more detail on the framework we are now using for monitoring security of supply. This considers likely demand and supply, planned and unplanned outages, treatment of new generation coming to market and thermal fuel availability against three key risk scenarios. We will also be able to understand the likelihood and consequence of outcomes and impact on pricing.
- 5.3. The Authority is also engaging with DPMC, MBIE and GIC to undertake a rolling scenario planning process for security of supply.

### Approach to daily reporting

- 5.4. The Authority is moving to a daily reporting schedule on fuel availability to ensure there is accurate information available to the System Operator and the Authority.
- 5.5. We have included more information below about the process and timeline for this.

### Approach to forward scenarios

- 5.6. In addition to immediate monitoring and reporting, the Authority is currently implementing a more sophisticated approach to forecasting and reporting through a three-month risk matrix (see Figure 1.)
- 5.7. Demand:
  - (a) We will forecast demand for the subsequent three months so that we understand what generation we are going to need.
  - (b) From this we will subtract generation from geothermal and wind. We will use averages to account for the intermittency of wind.
- 5.8. Outages:
  - (a) We account for any planned outages. As we are implementing improvements to outage notification, we will have greater confidence in our outage data.
  - (b) For unplanned outages we will use a N-1 scenario, to imagine a situation where a large generator is unavailable.
- 5.9. We will also subtract any generation from new generators that are going to be commissioned within the forecast horizon.
- 5.10. This will give us the demand that has to be met with hydro and thermal generation.

### Three monitoring and reporting scenarios

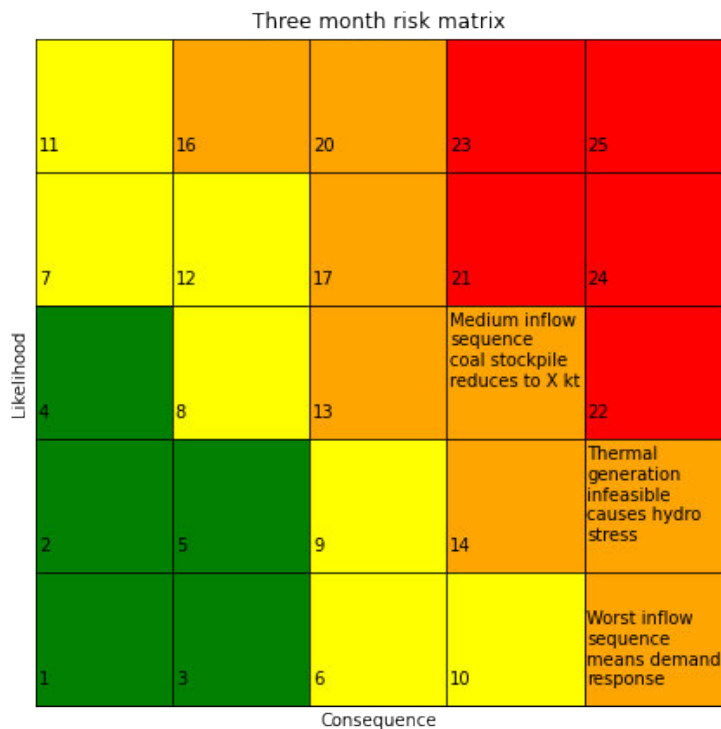
- 5.11. We will use three scenarios that represent two extremes of hydro storage and a mid point:
- (a) High hydro generation and low thermal generation
  - (b) Low hydro generation and high thermal generation
  - (c) A midpoint for hydro and thermal generation.
- 5.12. These three scenarios should bracket the possibilities so that any stress in the power system can be identified.

### Thermal fuel information

- 5.13. We have improved our thermal fuel information. In the short term, we have done this through ongoing information requests, but we are implementing an enduring solution that will supersede the current ad hoc arrangements from next March through publication of a clause 2.16 notice under the Code. We are required to consult on this notice before it can be published. Consultation will start in early November.
- 5.14. For coal, this information will be stockpile and delivery information. We are now focused on obtaining the information necessary to understand the daily stockpile size. s9(2)(b)(ii) [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- 5.15. Given the importance of gas and coal we are seeking more frequent information to give visibility of daily fuel positions for all thermal fuels.
- 5.16. All of these figures are **commercially sensitive and confidential**.
- 5.17. For gas we will base our assumptions on the gas supply agreements that the generators have and Ahuroa storage. We will also seek information on diesel storage.
- 5.18. We will use this information to check whether the thermal generation in our three scenarios is feasible given the fuel situation. This will mean assuming all contracted gas is burnt and that the remaining thermal fuel requirement is met using coal.
- 5.19. We can then calculate the end of horizon thermal storage.

### Checking the energy situation at the end of the horizon

- 5.20. We will check our required hydro generation against three inflow sequences: very low, low and medium. This will give us end of horizon hydro storage which we can assess for consequence, alongside the coal stockpile.
- 5.21. We can use a risk matrix to set out the security of supply risks for the next 3 months. This will set out the likelihood and consequence of outcomes.



**Figure 1: A mock up of a risk matrix**

**Spot price impacts**

- 5.22. The ASX forward market means that we have an unbiased predictor of spot prices out to three years.
- 5.23. Our midpoint scenario should correspond to forward prices over the three months as forward prices are unbiased predictors of spot prices.
- 5.24. We can estimate prices under the high consequence risks based on ASX prices.

**The risk matrix will trigger actions**

- 5.25. The scenario planning will determine the detail of any actions and that work is being undertaken by DPMC, MBIE and the Authority and will be presented to you in mid November.
- 5.26. A high consequence risk, or a risk that develops between reports as inflows become apparent will cause actions. Depending on the source of the stress in the power system actions are likely to include:
  - (a) Meeting with thermal generators to impress upon them the seriousness of the risk, ask about the possibility of improving their fuel positions etc
  - (b) Ensuring that the system operator is prepared to carry out the mandated actions set out below
  - (c) Brief Ministers on the risks
  - (d) Meet with load customer to ensure they are aware of the spot prices under high consequence events and remind them of the importance of hedging
  - (e) Work with the system operator to consult on the changes to contingent storage which were implemented this year.

**Mandated actions by the system operator**



- 5.27. The Emergency Management Policy, which is incorporated by reference into the Code, sets out how the system operator will respond to an ‘extended emergency’. An extended emergency is a situation where the ability of the power system to meet demand over an extended period is at risk, such as an extended dry sequence or an extended period of capacity inadequacy.
- 5.28. The system operator’s activities are triggered by the Electricity Risk Curves (ERCs). Note that significant and extended changes to capacity can also rapidly change the ERCs.
- 5.29. The table below sets out a summary of the system operator’s actions:

Available Hydro Storage (<=)	Actions
<b>Watch Status Curve (1% ERC)</b>	<ul style="list-style-type: none"> <li>• Daily updates, incl. time to Alert Status and an Official Conservation Campaign (<b>OCC</b>).</li> <li>• Begin preparations for an OCC, including applying for funding from the Authority</li> <li>• Monitor if assumptions being made are consistent with real life activity, and revise if required.</li> </ul>
<b>Alert Status Curve (4% ERC)</b>	<ul style="list-style-type: none"> <li>• Contingent Storage Release Boundary crossed for ‘Alert’ linked hydro</li> </ul>
<b>Emergency Curve (10% ERC)</b>	<ul style="list-style-type: none"> <li>• An OCC must be declared for either the South Island, or all of New Zealand (as the case may be) if the requirements of the Code are met. If an OCC is declared, the Customer Compensation Scheme is activated.</li> <li>• Contingent Storage Release Boundary for ‘Emergency’ linked hydro</li> <li>• The System Operator Rolling Outage Plan may be activated if OCC does not achieve sufficient savings and the system operator forecasts that unplanned outages may occur.</li> </ul>

### Quarterly seasonal outlook for consumers

- 5.30. Under the new programme, a Seasonal Power Outlook will be issued quarterly. This is a consumer-friendly visual dashboard with supporting commentary to provide a seasonal outlook for the following three months and identify potential risks.
- 5.31. By presenting clear and accessible data, we aim to equip consumers with greater knowledge and awareness, enabling them to better prepare for any developments that may arise. The Seasonal Power Outlook will be released in November (for summer), February (for autumn), May (for winter) and August (for spring).