

Certification of Emergency Management Policy.
I certify that this is a correct copy of the Emergency Management Policy incorporated by reference into the Electricity Industry Participation Code 2010 (the Code) for the purposes of clause 7.4 of the Code with effect from 1 December 2022.

Emergency Management Policy

Gazette effective Date: 1 December 2022



SARAH GILLIES,
Acting Chief Executive Officer, Electricity Authority
Date: 19 October 2022

1. Background

- 1.1 This Policy is the **emergency management policy**, which the **system operator** is required to prepare and **publish** under clause 7.3(3)(a) of the **Code**. This Policy replaces the **emergency management policy published** by the **system operator** on 19 June 2016.
- 1.2 This Policy sets out the steps the **system operator** must take, as a **reasonable and prudent system operator**, and encourage **participants** to take at various stages of an **extended emergency**, including one contributed to by a **critical contingency**. It does not relate to management of short term power system conditions. Those are managed through the **system operator's** "business as usual" obligations under the **Code** and the **policy statement**.
- 1.3 Part 7 of the **Code** sets out the **system operator's** obligation to prepare and publish the **security of supply forecasting and information policy** and the **emergency management policy**. Part 9 of the Code sets out the **system operator's** obligation to prepare and publish the **system operator** rolling outage plan and the **system operator** may request specified **participants** to develop a **participant rolling outage plan**. Part 9 also sets out the circumstances when the **system operator** must commence an **official conservation campaign**. Together, these policies and obligations relate to managing an extended emergency in which the ability of the power system to meet **demand** over an extended period of time is at risk.

2. Glossary

- 2.1 In this Policy, unless the context otherwise requires-

available hydro storage has the meaning given to it in the **security of supply forecasting and information policy**

contingent hydro storage has the meaning given to that term in the **security of supply forecasting and information policy**

critical contingency has the meaning given to that term in the Gas Governance (Critical Contingency Management) Regulations 2008

critical contingency operator has the meaning given to that term in the Gas Governance (Critical Contingency Management) Regulations 2008

electricity risk curve has the meaning given to it in the **security of supply forecasting and information policy**

extended emergency means a situation where the ability of the power system to meet **demand** over an extended period of time is at risk, such as an extended dry sequence or an extended period of capacity (energy, reserves or transmission) inadequacy

grid support contract means a contract (other than an **ancillary service arrangement**) under which a **participant** is paid to reduce its **demand**, or make standby generation available, when required to do so by another party to the contract

simulated storage trajectories have the meaning given to it by paragraph 12 of the **security of supply forecasting and information policy**

information guide means the information guide published by the **critical contingency operator** under regulation 36 of the Gas Governance (Critical Contingency Management) Regulations 2008

risk assessment metrics means-

- (a) **electricity risk curves** and **simulated storage trajectories**
- (b) any other information prepared or published under the **security of supply forecasting and information policy**
- (c) the security of supply metrics referred to in paragraph 4.1 of this Policy

supply shortage means a situation in which the **system operator** may make a **supply shortage declaration** under clause 9.14(2) of the **Code**

watch status curve has the meaning given to it in the **security of supply forecasting and information policy**

2.2 Any term in bold that is defined in the **Code** and used but not defined in this Policy has the same meaning as in the **Code**.

3. Overview of tools to manage extended emergencies

3.1 The **Code** contains several tools the **system operator** may use to manage an **extended emergency**-

- (a) provide information and forecasts to **participants** in accordance with the **security of supply forecasting and information policy**
- (b) request an urgent temporary grid reconfiguration under clause 9.13B of the **Code**
- (c) commence an **official conservation campaign** under clause 9.23 of the **Code**

- (d) make a **supply shortage declaration** and give directions to **specified participants** under Part 9 of the **Code** and the **system operator rolling outage plan**
 - (e) for the purposes of maintaining **common quality** during the **extended emergency**, require **asset owners** and **purchasers** to co-operate with the **system operator** generally under clause 8.26 of the **Code**.
- 3.2 An **extended emergency** may involve one or more **grid emergencies**. The **system operator** has obligations and powers under technical code B of schedule 8.3 of the **Code** to manage **grid emergencies** which may also assist the **system operator** to manage the **extended emergency**.
- 3.3 *[Revoked]*
- 3.4 The **Code** contains **asset owner performance obligations** (Part 8 of the Code) which apply at all times, including obligations for some **asset owners** to provide **automatic under-frequency load shedding**. The **system operator** will rely on compliance with **asset owner performance obligations** in managing an **extended emergency**.
- 3.5 For avoidance of doubt the **system operator** does not-
- (a) enter into in **grid support contracts**
 - (b) grant access to **contingent hydro storage**
 - (c) pay compensation to **participants** for complying with their **Code** obligations or taking voluntary actions during an **extended emergency**.

4. Management of extended emergencies

Increased reporting and analysis

- 4.1 When **available hydro storage** crosses the New Zealand or South Island **watch status curve** the **system operator** will-
- (a) *revoked*
 - (b) make available each business day on its website security of supply metrics aimed at ensuring the system operator and other participants understand the prevailing security of supply risks and can quickly identify any power system or wholesale market circumstances that impact on those risks. This will include an estimate of the time to 'Alert' status and an **official conservation campaign** and make public the methodology used to derive this estimate.

- (c) make available the information provided under clause 4.1(b) for a minimum of 5 business days and until **available hydro storage** exceeds the **watch status curve** by 100GWh or more.

Preparation for an official conservation campaign

- 4.2 When **available hydro storage** is at or below the New Zealand or South Island 1% **electricity risk curve** the **system operator** will (in addition to the activities described in paragraph 4.1 of this Policy)-
 - (a) begin preparations for an **official conservation campaign**, including applying for funding and otherwise engaging with the **Authority** and service providers
 - (b) monitor whether the assumptions made for the **risk assessment metrics** are consistent with how **generators** are operating and revise the assumptions if necessary.

Official conservation campaign

- 4.3 Clause 9.23 of the **Code** indicates when the **system operator** must commence an **official conservation campaign**.
- 4.4 The **system operator** will not commence an **official conservation campaign** at any other time.

Rolling outages

- 4.5 If there is a **supply shortage** the **system operator** may make a **supply shortage declaration** and give directions to **specified participants** under Part 9 of the **Code** and the **system operator rolling outage plan**.

5. Gas critical contingencies

- 5.1 A **critical contingency** may be declared by the **critical contingency operator** when there is a shortage of gas supply relative to demand, as indicated by decreasing pressure on gas transmission pipelines. Due to reliance on gas-fired thermal **generating plant**, a **critical contingency** may have an impact on the power system and contribute to an **extended emergency**.
- 5.2 Under the Gas Governance (Critical Contingency Management) Regulations 2008 the **critical contingency operator** must-
 - (a) give urgent notice to the **system operator** when a **critical contingency** is declared or terminated (regulations 51(1) and 62(1))
 - (b) consult with the **system operator** before curtailing the gas consumption of certain gas-fired thermal **generating plant** during a **critical contingency**, and give urgent notice to

the **system operator** if the **critical contingency operator** determines to allow certain gas-fired thermal **generating plant** to use gas during the **critical contingency** (regulation 53(1)(da)).

- 5.3 The **system operator** will manage an **extended emergency** contributed to, or caused, by a **critical contingency** in the same way as it manages other **extended emergencies** and in accordance with this Policy. In addition, the **system operator** will communicate and coordinate with the **critical contingency operator** in accordance with the **information guide**.