Common Load Management Protocol

March 2026

Load Management Protocol

Version	Date	Description of changes	Author	Reviewed By	Approved By
1.0	Mar 2026	Incorporated all previous changes and cleared comments for publication of version 1.0.	EDB Common LMP project team	Richard Le Gros	ENA board

1. Introduction

1.1 Purpose and application

This Load Management Protocol ("Protocol") has been established pursuant to clause 5 of the Default Distributor Agreement (**DDA**) between the **Trader** and the **Distributor**. It constitutes the agreement between the **Trader** and the **Distributor** required under clause 5.6(b) of the DDA for coordinating **controllable electrical load** activities during **System Emergency Events**.

This Protocol operates under the framework of the **DDA** between the **Trader** and the **Distributor**. The **Trader** and **Distributor** will give effect to this Protocol in accordance with the provisions of the **DDA**, and in particular:

- Any disputes arising from activities under this Protocol must be addressed through the dispute resolution procedures specified in clause 23.
- Activities undertaken pursuant to this Protocol remain subject to the liability and indemnity provisions specified in clauses 24, 25, 26, 27 and 28.
- Information exchanged under this Protocol must be handled in accordance with the confidentiality provisions specified in clause 20.

The **Trader** acknowledges the importance of complying with this Protocol to assist in maintaining **Network** security before, during and following **System Emergency Events**. Failure to comply with the requirements of this Protocol may constitute a breach under clause 18 of the **DDA**.

The **Trader's** failure to comply with the requirements of this Protocol will not constitute a breach of the **DDA** where that failure is solely as a result of: (i) technical constraints of load control equipment or systems that pre-date the commencement of this Protocol, or (ii) contractual obligations owed by the **Trader** to its customers that pre-date the commencement of this Protocol, provided that:

- the **Trader** notifies the **Distributor** as soon as reasonably practicable which obligations it is unable to comply with, why it is unable to comply, and in respect of which ICPs;
- the **Trader** complies with any alternative obligations or actions proposed by the **Distributor** (acting reasonably) to enable the **Distributor** to prevent or manage **System Emergency Events** within the constraints of existing load control equipment, systems and customer agreements;
- the **Trader** ensures that any load control equipment or systems acquired, installed or commissioned after the commencement of this Protocol includes functionality to enable the **Trader** to comply with the Protocol in full;

- where the **Trader** has the power to amend existing customer agreements, it amends those agreements to enable it to comply with the Protocol in full; and
- any customer agreements entered into after the commencement of this Protocol enable the **Trader** to comply with the Protocol in full.

1.2 Scope

This **Protocol** ensures **controllable electrical load** is available to the **Distributor** for managing **Network** and Grid security. It applies to all types of **controllable electrical load**, and related enabling technologies connected to the **Network**, regardless of whether the controllable device consumes or injects energy, and irrespective of the method and timing of the **controllable electrical load** management employed.

Where **Controllable Electrical Load** is committed to respond to the System Operator under Instantaneous Reserves arrangements, such load shall:

- Continue to respond to System Operator signals during Grid Emergency events, including both developing events and immediate events;
- Be available for local **Network System Emergency Event** response when controlling this load would prevent emergency feeder shedding, significant asset damage, or cascade failure, subject to immediate notification to the System Operator.

The parties may agree in writing that parts of this Protocol may not apply to specific types of **controllable electrical load**, including for trial or pilot arrangements. Such trial agreements may be made in accordance with the **Distributor's** discretion under clause 5.6(b) of the **DDA**.

Existing **Controllable Electrical Load** subject to Instantaneous Reserves contracts entered into prior to [Protocol effective date] shall be exempt from Priority 3 control, as defined in Section 2.1, under this Protocol until such contracts are renewed or expire.

The **Trader** agrees:

- to provide information and respond to instructions to coordinate its **controllable electrical load** in accordance with this Protocol and clause 5.6(c) of the **DDA**; and
- at all times, to operate its **controllable electrical load** as a reasonable and prudent operator in accordance with Good Electricity Industry Practice as required by clause 5.6(d) of the **DDA**.

This Protocol does not limit the rights of the **Distributor** to manage or shed load in accordance with clause 4 of the **DDA**.

The Distributor agrees:

- to provide clear information and instructions related to **controllable electrical load** in accordance with this Protocol.

1.3 Objectives

Both parties acknowledge that this Protocol promotes the coordinated management of **controllable electrical load** before, during and following **System Emergency Events** in a way that:

- Assists the **Distributor** to maintain system security through prioritised control of load management during **System Emergency Events**, and when conditions indicate an emergency situation is developing.
- Supports the **Distributor** in complying with System Operator instructions and Code obligations.
- Establishes transparency through clear visibility of **controllable electrical load** activities between the **Trader** and the **Distributor**, including timely sharing of information.
- Protects the **Network** through safe operation by the **Trader** of **controllable electrical load**, as a reasonable and prudent operator, in accordance with Good Electricity Industry Practice.
- Creates a clear framework for coordination between parties during **System Emergency Events**.
- Ensures the **Distributor** provides the **Trader** with clear visibility of System Emergency Events, so the **Trader** can manage **controllable electrical load** in line with Good Electricity Industry Practice.

Successful application of this Protocol will support:

- All consumers being protected from avoidable and unnecessary electricity outages;
- Consumers with **controllable electrical load** having their **devices** managed according to their preferences, within the limitations of the Network;
- **Traders** having sufficient information about **Network** conditions to avoid causing **System Emergency Events** while optimising management of **DER** across wholesale, **Network** and other cost and revenue streams.

1.4 Related Documents

Document	Relationship to Protocol
Default Distributor Agreement ("**DDA**")	Primary governing document that establishes the relationship between the **Trader** and **Distributor**.
Data Sharing Agreement	Template for data sharing between **Distributors** and **Traders**.

1.5 Definitions

In this Protocol, capitalised terms not defined here have the meaning given in the **DDA** or the Code. Strictly for ease of reference, the definition of **System Emergency Event** from the **DDA** is replicated below.

- **Communications** means at least two forms of communication channels that must be maintained and available for **near real-time** response 24/7 to **System Emergency Events** between the **Trader** and the **Distributor** for the purposes of this **Protocol**. These channels may include automated systems that do not require continuous human monitoring.
- **Controllable Electrical Load** means load or injectable electrical load capable of responding to automated or manual control signals (regardless of signal source) to use electricity at other times, which the **Trader** or **Distributor** has obtained the right to control in accordance with clause 5 of the **DDA**. This can include distributed generation, storage, heat pumps and electric vehicles, as well as other technologies.
- **Distributor** means the party identified as such in the **DDA**.
- **Emergency Notice** (DEN) means a directive issued by the **Distributor** to **Traders** in relation to a **System Emergency Event**, in the form specified in *Appendix 1 – Emergency Notice*.
- **Emergency Notice Area** means the specific area of the **Network** impacted by a **System Emergency Event**, as noted in an **Emergency Notice**.
- **Maximum Ramp Rate** means the restoration rate for **controllable electrical load,** specified by the **Distributor** in kW/minute.
- **Near real-time** means within 5 minutes.
- **Network** has the meaning given to that term in the **DDA**.
- **Operating Envelope** is an **Operating Limit** with defined boundaries that **controllable electrical loads** must operate within at specific times and locations, to keep the **Network** safe, specified by the maximum and minimum limits for active and reactive power exchange.

- **Operating Limit** means a combination of any or all of the following: **Operating Envelope**, **Maximum Ramp Rate**, and load diversity requirements specified by the **Distributor** for the safe operation of the **Network**.
- **Priority Signal** means a **Distributor**-issued signal that takes precedence over all other control signals for directly or indirectly controlling **controllable electrical load**.
- **System Emergency Event** means a grid emergency in accordance with the definition of that term in Part 1 of the Code and, in respect of the **Network**, any emergency situation in which:
    - public safety is at risk;
    - there is a risk of significant damage to any part of the **Network**;
    - the **Distributor** is unable to maintain voltage levels within statutory requirements;
    - an Unplanned Service Interruption affecting part or all of the **Network** is imminent or has occurred.
- **Trader** means the party identified as such in the **DDA**.
- **Warning Notice** (DEW) means a notice issued by the **Distributor** to **Traders** to request that **Traders** take voluntary action to help maintain **Network** security and avoid mandatory load reduction under an **Emergency Notice**, in the form specified in *Appendix 2 – Warning Notice*.

2. Emergency Response Requirements

The **Distributor** has both **Network** and Grid obligations regarding emergency response. During Grid **System Emergency Events**, as soon as reasonably practicable following a request by the System Operator, the **Distributor** must inform the system operator of its available **controllable electrical load**,[1] and to comply with system operator instructions to reduce demand.[2] As required in the **DDA**, the **Distributor** must manage load on the **Network** during **System Emergency Events** in accordance with its **System Emergency Event** management policy in Schedule 4 of the **DDA**, and the Code.[3]

The following requirements enable the **Distributor** to both meet Code and **DDA** obligations and implement a coordinated response to **System Emergency Events** with the **Trader**.

[1] Clause 5A of Schedule 8.3, Technical Code B
[2] Clause 6 of Schedule 8.3, Technical Code B
[3] Clause 4.3 of the **DDA**.

2.1 Load control dispatch hierarchy

The following hierarchy is intended to guide the **Distributor** control room when determining required load reduction, and the **Trader's** response, during **System Emergency Events**.

Priority	Load type	Availability under this Protocol	Deployment trigger
1	Load available to the **Distributor's Priority Signal**	Always available for immediate **Distributor** deployment via the **Priority Signal**	Any **System Emergency Event**
2	Load available to the **Trader**	To avert imminent feeder shedding affecting Priority Loads[4] or cascade failure of the **Network** or **Grid**.	**Emergency Notice**
3	Emergency feeder shedding	**Distributor** direct action via disconnection of demand[5]	All other measures insufficient

2.2 Responses to System Operator instructions

When a CAN, WRN or GEN is issued by the system operator:

- Unless otherwise instructed by the **Distributor** via an **Emergency Notice**, no changes to **controllable electrical load** commands should occur.
- No further **controllable electrical load** should be added within 2 hours of the relevant trading periods.

2.3 Distributor warning notices (voluntary response)

Where a **System Emergency Event** is anticipated with more than one hour advance notice the **Distributor** may issue a **Warning Notice** requesting voluntary load reduction actions from **Traders**.

The **Trader** shall endeavour to comply with **Warning Notice** requests where operationally feasible.

2.4 Distributor emergency notices (required response)

If a **System Emergency Event** materialises or is anticipated to occur with less than one hour's advance notice, the **Distributor** will issue an **Emergency Notice**. For the avoidance of doubt, all requirements in an **Emergency Notice** remain in effect until the **Distributor** issues a formal end notice as specified in section 2.5.

[4] As described in the Distributor's Security of Supply Participant Rolling Outage Plan.
[5] In accordance with clause 7(19) of Technical Code B, Schedule 8.3.

- Where the **Distributor** has direct control capabilities, the **Distributor's Priority Signals** take precedence over **Trader** control signals.
- The **Distributor** will issue load reduction requirements in the **Emergency Notice** as a percentage (%) target for all **Traders** operating **Controllable Electrical Load** on its **Network**.
- During rapidly developing or severe **System Emergency Event**, the **Distributor** may direct immediate reduction of all **controllable electrical load**, within the **Emergency Notice Area(s)**.
- The **Distributor** will monitor **Network** conditions throughout the **System Emergency Event** and may issue revised or new **Emergency Notices** in response to changing **Network** conditions.

The **Trader** is responsible for implementing load reduction targets in **Emergency Notices** for any **controllable electrical load** under their control. For the avoidance of doubt, the **Trader** retains the right to determine which specific consumer loads are controlled to meet the load reduction target specified in the **Emergency Notice**.

- The **Trader** must acknowledge receipt of any **Emergency Notice** within **near real-time**. For the avoidance of doubt, this may be an automated acknowledgement.
- Upon receiving an **Emergency Notice**, the **Trader** must prioritise implementing the actions required by the **Emergency Notice**. For the avoidance of doubt, these actions may be carried out automatically by the **Trader's** systems.

2.5 System emergency event conclusion

The **Distributor** will issue an **Emergency Notice** to formally signal the end of the **System Emergency Event**. Upon issuance of this end notice, the requirements of the **Emergency Notice** cease to apply.

- This notice will specify when normal operations may resume and include specific restoration procedures that must be followed by the Trader when resuming normal operations, including any **Operating Limits** to maintain **Network** stability.

If the **Trader** requests a report from the **Distributor**, such request must be received by the **Distributor** within 72 hours after the **System Emergency Event's** end notice is sent. The **Distributor** must then submit a report within 5 **days** of receiving the request, submit a report documenting the cause of the **System Emergency Event**, a timeline of actions taken, **Distributor**-controlled load reductions achieved, and any issues encountered.

If the **Distributor** requests a report from the **Trader**, such request must be received by the **Trader** within 72 hours after the **System Emergency Event's** end notice is sent. The **Trader** must then submit a report within 5 **days** of receiving the request, documenting

the timeline of actions taken, **Trader**-controlled load reductions achieved, and any issues encountered.

3. Safe operation and information sharing to prevent and minimise the impact of **System Emergency Events**

To maintain safe **Network** operations and minimise the likelihood and impact of **System Emergency Events**, the **Distributor** and **Traders** must share operational information, as described in *Appendix 3*, to enable the **Distributor** to comply with Code obligations, and coordinate emergency response between multiple parties.

Trader: Network Operating Constraints From time to time, the **Distributor** may notify the **Trader** of specific **Operating Limits** to help prevent **System Emergency Events** and typically involve a discussion/coordination meeting. **Operating Limits** might include:

3.1 Distributor information to Trader

- The **Distributor** may, from time to time, by notice to the **Trader**, specify **Operating Limits**, to help prevent or respond to a **System Emergency Event**. This information may include some or none of the following:
    - **Operating Envelope** for different **Network** areas, or the whole of **Network**.
    - **Maximum Ramp Rates** that vary by **Network** area, time of day, the types of ICPs, different capacities and capabilities of **Network** assets, seasonal factors, and are proportional to the current loading of the **Network**.
        - The **Maximum Ramp Rate(s)** may vary for different groups of ICPs connected to the same GXP or zone substation (such as ICPs on different feeders), subject to the changing constraints on the **Network**.
    - Load diversity requirements that specify how restoration of **controllable electrical load** must be distributed across **Network** assets.
        - The **Trader** must implement measures in their restoration processes to prevent concentration of load that could overload the **Network** (such measures could include randomisation).
- Where **Operating Limits** have been specified, the **Trader** must establish and maintain processes and systems to manage **controllable electrical load** within these limits.
    - If the **Operating Limits** are exceeded, or are forecast to be exceeded imminently, the **Distributor** may issue an **Emergency Notice** to prevent or respond to a **System Emergency Event**.

Deferred application of **Operating Limits:**

- The requirements relating solely to compliance with **Operating Limits**, other than **Maximum Ramp Rates** which shall apply from the outset, shall not take effect until [date or the date being [2] years from the Protocol's effective date, or such other date as may be agreed in writing between the **Traders** and **Distributors**/ENA ("Deferred Application Date")]. For the avoidance of doubt, **Traders** and **Distributors** are not required to comply with the **Operating Limits** (other than **Maximum Ramp Rates**) specified in this Protocol, until the Deferred Application Date or as otherwise agreed.
- The parties shall review the readiness for compliance with **Operating Limits** no later than [6 months prior to the Deferred Application Date] and may agree to reasonably to amend the Deferred Application Date.
- Notwithstanding the above, **Traders** shall comply with any **Maximum Ramp Rates** advised by a **Distributor** for its network, from the commencement of this Protocol. The Deferred Application Date shall not apply to **Maximum Ramp Rates.**

3.2 **Trader** information to **Distributor**

To enable the **Distributor** to comply with its Code obligations and coordinate emergency response with **Traders** (subject to Commerce Act 1986 competition law):

- **Weekly**, on a **Monday**, **Traders** must share with the **Distributor** details of all Customer's **controllable electrical load** under clause 5.2 of the **DDA**,
- This data file, as per template as described in *Appendix 3*, is to provide a full view of all **controllable electrical load** information, including newly obtained rights to control, recent loss of right to control, and any changes to the amount or availability of **controllable electrical load** information previously provided.

The **Trader** must notify the **Distributor** within **near real-time** of any control system failures affecting communication systems, control capabilities, or monitoring systems that may impact the **Trader's** ability to respond to an **Emergency Notice** instruction.

The **Trader** shall coordinate with the **Distributor** to conduct a test of the **Trader's** capability to respond to **Emergency Notices** either once per calendar year, or after substantial changes to the technical systems or operational procedures in relation to **controllable electrical load**. This test shall include a simulated **Emergency Notice** and shall demonstrate the **Trader**'s ability to manage **controllable electrical load** in accordance with the Protocol. The **Trader** must provide the results of the test to the **Distributor**.

4. Communication requirements

This section outlines communication requirements that support coordinated emergency response.

4.1 Emergency contact management

Both the **Distributor** and **Trader** must establish and maintain an Emergency Contact Register that includes the primary and alternative contacts as follows, or as otherwise agreed, for the following roles:

- Operations Control Room (24/7 availability required);
- Management escalation point.

For each contact, the following information must be maintained:

- Name and position (where applicable);
- Direct telephone number;
- Email address;
- Group **communication** channel details (e.g. Teams, email distribution list); and
- Backup contact details.

The **Distributor** and **Trader** must establish and maintain appropriate group **communication** channels to facilitate efficient multi-party **communications** during **System Emergency Events** as follows, or as otherwise agreed. These channels must:

- Support immediate notification to multiple external and internal parties.
- Allow for message acknowledgement tracking.
- Be regularly tested for reliability.
- Have appropriate backup systems.

5. Protocol Governance and Management

5.1 Review and update process

This Protocol will be reviewed annually each September by the Electricity Networks Aotearoa (ENA). The ENA will conduct this review in consultation with participating **Distributors, Traders**, **System Operator** and any other external parties that ENA considers should be included.

The ENA, or any **Distributor** or **Trader** may request an earlier review of this Protocol if, as a result of:

- The occurrence of a **System Emergency Event**, or

- Technological advancements that materially affect **controllable electrical load capabilities**,
- There are material changes to law or the regulatory environment that affect the operation of this Protocol, or
- A **Trader** or **Distributor** determines that the Protocol should be amended to better enable **Distributors** and **Traders** to avoid and manage **System Emergency Events.**

Appendix 1 – Emergency Notice template

DEN

Distributor Emergency Notice New / Revision

To:	[The Trader]	**From:**	[The Distributor]
Sent:	[DateTime]	**Telephone:**	[Control room phone number]
Ref:	[Emergency Notice Unique Identifier]	**Email:**	[Control room email]

Revision of: [Prior notice reference, if applicable]

SEE cause:	Choose an item.
Emergency Notice area:	[Affected network areas / GXPs / Zone Substations / ICPs (if available)]
Starting:	[Start DateTime]
Ending:	[End DateTime]

For the period above you are required to:	[The specific instructions issued by the Distributor to the Trader (e.g. "Decrease demand by:")]
Decrease controllable load by:	[The amount of load control required (%) to be reduced by participants during the event]

Post-event restoration requirements:	[The maximum ramp rates and load diversity requirements that must be adhered to during restoration]

Consequences if insufficient response:	[The consequences if participant response is insufficient (e.g. "the distributor will manage demand to alleviate the system emergency event, and may disconnect feeders without further notice to affected parties")]

A revision of this notice will be sent if there is any change to the situation above, and upon conclusion of the System Emergency Event.

For more information contact [the Distributor's] Control Room on [1234 567 890].

This notice is issued in accordance with the Load Management Protocol.

Appendix 2 – Warning Notice template

DEW

Distributor Warning Notice

To:	[The Trader]	**From:**	[The Distributor]
Sent:	[DateTime]	**Telephone:**	[Control room phone number]
Ref:	[Emergency Notice Unique Identifier]	**Email:**	[Control room email]

Revision of: [Prior notice reference, if applicable]

SEE cause:	Choose an item.
Warning Notice area:	[Affected network areas / GXPs / Zone Substations / ICPs (if available)]
Starting:	[Start DateTime]
Ending:	[End DateTime]

For the period above you are requested to:	[The specific instructions issued by the Distributor to the Trader (e.g. "Follow any load management instructions")]
Capacity Shortfall:	[The amount of load control required (%) during the event]

Potential consequences if unresolved:	[Description of what may occur if voluntary action is insufficient, e.g., mandatory Emergency Notice, customer interruptions]

This is a request for voluntary action. If insufficient response is received, mandatory load reduction may be required via Emergency Notice.

For more information contact [the Distributor's] Control Room on [1234 567 890].

This notice is issued in accordance with the Load Management Protocol.

Appendix 3 – Data exchange templates

Part A: Distributor information to Trader

If applicable to the **Network**, the **Distributor** will provide the following information as described in clause 3.1:

- **Operating Envelope** for different **Network** areas and conditions, or the whole of **Network**.
- **Maximum Ramp Rates** which may vary by **Network** area and time of day.

Load diversity and measures (such as randomisation) that specify how restoration of **controllable electrical load** must be distributed across **Network** assets.

Part B: Trader information to Distributor

The **Trader** must provide the information defined in Schedule 1.

Schedule 1 – Data Sharing Agreement

Refer to accompanying document ‘ENA.EDB_Common_LMP.Sch1_DSA_V1.0.docx'