

# Dispatch notification enhancement and clarifications

Consultation paper

1 September 2023

## Executive summary

The dispatch notification product provides a low-cost path for owners or aggregators of small-scale generation and flexible load, such as electric vehicle (EV) chargers, solar and battery installations or commercial buildings, to directly participate in the wholesale electricity spot market. The product supports competition in the industry and contributes to Aotearoa New Zealand's transition to a lower emissions economy by helping displace high-cost and carbon-intensive thermal generation.

Dispatch notification went live in April 2023. Since then, the Electricity Authority Te Mana Hiko (Authority) has identified one enhancement and two clarifications to the dispatch notification product that we consider will help realise or further deliver the benefits of dispatch notification, at minimal cost, for the long-term benefit of consumers:

1. **enhancing** the dispatch notification product by enabling load aggregators with resources spread across several locations (grid exit points or GXPs) to apply to the system operator to bid an aggregate of their resources at a single GXP
2. **clarifying** that obligations on dispatch notification purchasers only impact Part 13 of the Code relating to trading arrangements (and in particular there are no reconciliation requirements specific to dispatch notification participants)
3. **clarifying** that participants in dispatch notification will need to provide appropriate data to the Authority to enable us to monitor compliance.

The Authority acknowledges the demand response market in Aotearoa New Zealand is in its early stages of development. We will be monitoring the market as it develops and ensuring the Electricity Industry Participation Code 2010 (Code) evolves alongside it.

We invite feedback on the issues discussed in this paper. This feedback will inform the Authority's decisions about whether to implement our proposed amendments.

Please direct any specific questions or queries to: [OperationsConsult@ea.govt.nz](mailto:OperationsConsult@ea.govt.nz).

## Contents

<b>Executive summary</b>	<b>2</b>
<b>1. What you need to know to make a submission</b>	<b>4</b>
What this consultation is about	4
Reducing barriers to participation	4
How to make a submission	5
When to make a submission	6
<b>2. Enabling dispatch notification purchasers to aggregate across GXPs (Item 1)</b>	<b>6</b>
Context	6
Problem	7
Proposed solution	7
Assessment	8
Future considerations	9
<b>3. Clarifying obligations on dispatch notification purchasers only impact Part 13 - Trading Arrangements (Item 2)</b>	<b>10</b>
Context	10
Problem	11
Proposed solution	11
Assessment	11
<b>4. Requiring information be provided for monitoring compliance (Item 3)</b>	<b>12</b>
Context	12
Problem	12
Proposed solution	12
Assessment	13
<b>5. Regulatory Statement for the proposed amendments</b>	<b>14</b>
Objectives of the proposed amendments	14
The proposed amendments	14
The proposed amendments' benefits are expected to outweigh the costs	14
The Authority has not identified any other means for addressing the objectives	14
The proposed amendment complies with section 32(1) of the Act	14
The Authority has given regard to the Code amendment principles	16
<b>Appendix A Proposed amendment</b>	<b>17</b>
<b>Appendix B Format for submissions</b>	<b>22</b>

# 1. What you need to know to make a submission

## What this consultation is about

- 1.1 The dispatch notification product was introduced in April 2023 to allow providers of small-scale generation, small-scale load and aggregators of very small-scale resources (such as residential solar and battery systems) to directly participate in the wholesale electricity spot market (spot market). These participants can now apply to submit bids and offers indicating the price responsiveness of their resources. This allows them to contribute to the setting of spot prices and to receive dispatch notifications based on price.
- 1.2 Dispatch notification participants can be either dispatch notification generators or dispatch notification purchasers, each with slightly different obligations under the Code.
- 1.3 Load aggregators can participate as dispatch notification purchasers. A load aggregator in this context refers to an entity that aggregates small-scale resources that reduce the effective electricity consumption at a number of premises.
- 1.4 Load aggregators can participate regardless of whether they purchase electricity from the wholesale market, allowing other parties, such as retailers, to contract with load aggregators as a means of hedging exposure to spot prices.
- 1.5 The key benefit of dispatch notification is greater and more efficient competition in the market from flexible resource. This will help reduce costs to consumers in the long run, for instance by displacing high-cost and carbon intensive thermal generation as Aotearoa New Zealand transitions toward a low emissions future.

## Reducing barriers to participation

- 1.6 To encourage inclusion of smaller generation and load in the spot market, the dispatch notification product was designed to reduce the costs of participation by imposing less onerous technical and regulatory requirements compared to larger generation and load.
- 1.7 This consultation seeks to consult on three proposed Code amendments to address issues that have been identified since dispatch notification first went live, in April 2023:
  - (a) enhancing the dispatch notification product by enabling load aggregators with resources spread across several locations (grid exit points or GXPs) to apply to the system operator to bid an aggregate of their resources at a single GXP (item 1)
  - (b) clarifying that obligations on dispatch notification purchasers only impact Part 13 of the Code relating to trading arrangements (and in particular there are no reconciliation requirements specific to dispatch notification participants) (item 2)
  - (c) clarifying that participants in dispatch notification will need to provide appropriate data to the Authority to enable it to monitor compliance (item 3).
- 1.8 The first proposed amendment aims at removing unnecessary costs associated with load aggregators participating in dispatch notification, potentially removing barriers to entry into the market. The remaining two proposed amendments seek to

clarify the Code so that it is consistent with prior policy intent. The proposed amendments would then better align dispatch notification with the Authority's main statutory objective – to promote competition in, reliable supply by, and efficient operation of, the electricity industry for the long-term benefit of consumers.

- 1.9 Before amending the Code, section 39(1) of the Act requires the Authority to publicise a draft of the proposed amendment, prepare and publicise a regulatory statement, and consult on the proposed amendment and the corresponding regulatory statement. However, section 39(3) of the Act provides that the Authority need not comply with the requirements to prepare and publicise a regulatory statement or to consult on the proposed amendment and regulatory statement if it is satisfied on reasonable grounds that the nature of the amendment is technical and non-controversial, or that there is widespread support for the amendment among the people likely to be affected by it, or there has been adequate prior consultation so that all relevant views have been considered.
- 1.10 The Authority considers that the clarifications discussed in this paper (items 2 and 3 above) are technical in nature and should be non-controversial. They address minor errors or oversights in the Code while otherwise ensuring that the dispatch notification product achieves its policy intent. One of the clarifications (item 3) was also the subject of previous consultation in 2019, so that relevant views have already been considered. The Authority therefore considers that section 39(3) of the Act applies, and these amendments can be made without the Authority preparing a regulatory statement and consulting on that statement and the proposed Code amendments. The Authority is nevertheless consulting on these amendments, alongside the proposed amendments to enhance the dispatch notification product, noting that scrutiny of the drafting may result in further improvements. As the policy underlying dispatch notification has been consulted on previously, the focus of this paper is on the technical drafting of the proposed amendments.
- 1.11 The regulatory statement for these proposed amendments is set out in Part 5 of this paper. Section 39(2) of the Act provides that the regulatory statement must include a statement of the objectives of the proposed amendment, an evaluation of the costs and benefits of the proposed amendment, and an evaluation of alternative means of achieving the objectives of the proposed amendment.

### **How to make a submission**

- 1.12 The Authority's preference is to receive submissions in electronic format (Microsoft Word) in the format shown in Appendix B. Submissions in electronic form should be emailed to [OperationsConsult@ea.govt.nz](mailto:OperationsConsult@ea.govt.nz) with 'Consultation Paper—Dispatch notification enhancements' in the subject line.
- 1.13 If you cannot send your submission electronically, please contact the Authority ([OperationsConsult@ea.govt.nz](mailto:OperationsConsult@ea.govt.nz) or 04 460 8860) to discuss alternative arrangements.
- 1.14 Please note the Authority intends to publish all submissions it receives. If you consider that the Authority should not publish any part of your submission, please:
  - (a) indicate which part should not be published,
  - (b) explain why you consider we should not publish that part, and
  - (c) provide a version of your submission that the Authority can publish (if we agree not to publish your full submission).

- 1.15 If you indicate part of your submission should not be published, the Authority will discuss this with you before deciding whether to not publish that part of your submission.
- 1.16 However, please note that all submissions received by the Authority, including any parts that the Authority does not publish, can be requested under the Official Information Act 1982. This means the Authority would be required to release material not published unless good reason existed under the Official Information Act to withhold it. The Authority would normally consult with you before releasing any material that you said should not be published.

### **When to make a submission**

- 1.17 Please deliver your submission by **5pm** on Friday 29 September 2023.
- 1.18 Authority staff will acknowledge receipt of all submissions electronically. Please contact the Authority at [OperationsConsult@ea.govt.nz](mailto:OperationsConsult@ea.govt.nz) or 04 460 8860 if you do not receive electronic acknowledgement of your submission within two business days.
- 1.19 There will be an opportunity to make cross-submissions. The cross-submission period will close at **5pm** on Friday 13 October 2023.

## **2. Enabling dispatch notification purchasers to aggregate across GXPs (Item 1)**

### **Context**

- 2.1 The dispatch notification product was designed to enable greater participation in the spot market by operators of small-scale resource where the cost of participation may have otherwise provided a barrier to entry or efficient competition.
- 2.2 Under the Code, a 'purchaser' can apply for approval from the system operator to operate as a 'dispatch notification purchaser' and submit bids in relation to one or more small-scale resources, referred to under the Code as a 'dispatch-capable load station'.<sup>1</sup> A 'purchaser' in this context includes a load aggregator that does not purchase electricity in the spot market.<sup>2</sup>
- 2.3 Currently, load aggregators participating in the spot market as dispatch notification purchasers are required to bid at each grid exit point (GXP) where their resource is physically located.
- 2.4 Previously, the Authority indicated this requirement was necessary to get the most benefit from nodal scarcity pricing and to manage potential security issues on the grid.<sup>3</sup>
- 2.5 However, the system operator have recently indicated that this requirement could be relaxed in some situations, at least in the short to medium term, without compromising their ability to meet the PPOs and with minimal impact on prices. The

---

<sup>1</sup> Electricity Industry Participation Code 2010, cls 13.3A and 13.3E.

<sup>2</sup> Electricity Industry Participation Code 2010, cl 1 definition of 'dispatch notification purchaser'.

<sup>3</sup> See following video at 7:48, [Dispatch notification participation – YouTube](#)

section 'Future considerations' below covers potential concerns the system operator have advised could occur in the longer term as a result of relaxing this requirement.

- 2.6 The system operator must already consider, before deciding whether to approve or decline an application to operate a dispatch-capable load station, the effect an approval would have on the system operator's ability to comply with the PPOs.<sup>4</sup>
- 2.7 As part of their current processes, the system operator generally requires, for practical reasons, that each dispatchable bid or offer must be of a quantity no less than 1 MW.

## **Problem**

- 2.8 The current requirement that dispatch notification purchasers must bid at each GXP where their resources are physically located could impose unnecessary costs on both load aggregators and the system operator, as well as potential barriers to participation where the total resource behind a given GXP is less than 1 MW.
- 2.9 The costs for set-up, operation, and compliance increase with the number of GXPs load aggregators are required to bid at, and to receive and respond to dispatch notifications.<sup>5</sup>
- 2.10 These potentially unnecessary costs could then provide a barrier to entry or efficient competition in the spot market.
- 2.11 On the other hand, bidding at each GXP where the resources are located allows for greater accuracy in the calculation of transmission flows, and therefore transmission losses and constraints, within the system operator's Scheduling, Pricing, and Dispatch tool (SPD). This could lead to more optimal dispatch, more effective price signals, and provide the system operator a greater ability to meet the PPOs. This is because SPD will more accurately schedule the right amount and location of generation and load to assist with system security.
- 2.12 The Authority seeks to reduce the costs and barriers associated with load aggregators participating in the spot market without significantly compromising on dispatch optimisation, price signals, and system security by reducing the accuracy of transmission flows calculated within SPD.

## **Proposed solution**

- 2.13 The Authority proposes to amend the Code as detailed at Appendix A to make the following changes to dispatch notification:
- (a) Purchasers (including load aggregators) who have resource at more than one GXP would be able to apply to the system operator to operate the aggregated resource as a single dispatch-capable load station. This would reduce costs and barriers associated with participation as described in paragraphs 2.8 and 2.9.
  - (b) The system operator would assign the GXP at which the aggregated resource will be bid if it approves an application. This would allow the system operator to choose the most appropriate GXP in the context, considering the effect an

---

<sup>4</sup> Electricity Industry Participation Code 2010, Schedule 13.8, cl 3(1)(a).

<sup>5</sup> The system operator has advised that there are additional costs to them associated with requiring bids at each GXP where the resource is physically located, and that these costs increase with the number of GXPs a participant bids at.



approval would have on the system operator's ability to comply with the PPOs.

- (c) The system operator would be able to assign one or more alternative GXPs at which the dispatch notification purchaser must bid, instead of the primary assigned GXP, when required by the system operator. This would allow the system operator to better manage the PPOs during temporary situations such as transmission outages where bidding at the assigned GXP could lead to inaccurate calculation of transmission constraints.
- 2.14 The system operator would continue to have the ability to approve or decline an application to operate a dispatch capable load station, after considering the effect an approval would have on the system operator's ability to comply with the PPOs.
- 2.15 The system operator would have the ability to suspend, amend, or revoke a previously approved application to bid an aggregate of resource at a single GXP, including where the system operator considers its ability to meet the PPOs has become compromised by the arrangement. This would ensure the system operator can maintain its ability to meet the PPOs following changes to system conditions or an increase in the size of the participant's load.
- 2.16 Only dispatch notification purchasers would be able to bid an aggregate of resource at a single GXP. As a dispatch notification purchaser can amend its application should it want to become a full dispatchable demand purchaser, the system operator would be required to suspend or revoke an approval to aggregate across GXPs if a purchaser ceased to be a dispatch notification purchaser.

## Assessment

- 2.17 We consider our proposed solution would solve the problem as defined in paragraph 2.12 by reducing costs associated with dispatch notification purchasers bidding at each GXP where the resource is located, without materially compromising on dispatch optimisation, price signals, and system security associated with the reduced accuracy of transmission flows within SPD.
- 2.18 This proposal would result in reduced accuracy in the calculation of transmission flows within SPD, because bids would no longer be made at each GXP at which the resource is physically located (with bids instead being made at the GXP assigned by the system operator). However, we are satisfied that any impact this may have on system security, dispatch optimisation and price signals is likely to be low.
- 2.19 In particular, the system operator would maintain its ability to decline an application, as well as its broad discretion to amend, revoke or suspend an approval based on their ability to comply with the PPOs. This should ensure system security is not materially compromised due to the reduced accuracy in the calculation of transmission flows.
- 2.20 The Authority considers the impact of the reduced accuracy of transmission flows on dispatch optimisation and price signals would only be material in situations where there would also be a material impact on the system operator's ability to meet their PPOs.
- 2.21 Therefore, as the system operator should ensure they can meet their PPOs under their current obligations, we would expect dispatch optimisation and price signals should not be materially compromised. Importantly, we note the system operator have advised they would not accept an application that they reasonably expect



would impact the accuracy of transmission constraint calculations, including under planned transmission outage scenarios. It is when a transmission constraint binds, or fails to bind, that inaccuracies resulting from bidding at assigned GXPs are most likely to impact system security, dispatch, and prices, including nodal scarcity situations.

- 2.22 The Authority considers the costs of implementing the required Code changes for our proposed solution to be minimal.
- 2.23 We consider the ongoing operational costs to the system operator under our proposed solution to be less than their costs under the status quo. The proposed solution may introduce some additional costs on the system operator to assess the impact on their PPOs of bids being submitted at the assigned GXP (which may differ from the location of the resource). However, the system operator have advised these costs are likely to be less than the set-up and operational costs associated with the current Code provisions requiring bids at each GXP.<sup>6</sup>
- 2.24 We expect that reducing the costs of load aggregators' participation would help to further realise the intended benefits of dispatch notification – greater and more efficient competition in the market from flexible resources. This would help reduce costs to consumers in the long run, for instance by displacing high-cost and carbon intensive thermal generation as Aotearoa New Zealand transitions toward a low emissions future.
- 2.25 By helping to further realise the intended benefits of dispatch notification at minimal cost, the Authority considers our proposed amendments would be for the long-term benefit of consumers.

### **Future considerations**

- 2.26 The Authority is acutely aware that the power system will continue to transform. The demand response market in Aotearoa New Zealand is in its early stages of development. We will be monitoring the market as it develops and ensuring the Code evolves alongside it.
- 2.27 In the medium to long-term, this proposal may have cumulative effects that could require further consideration by the Authority in the future.
- 2.28 This is because, as more load aggregators apply to the system operator for 'assigned GXP bidding' (to bid at a single GXP, assigned by the system operator, resources that are physically located across more than one GXP), the system operator's ability to meet the PPOs could become compromised due to cumulative effects of assigned GXP bidding on the accuracy of scheduled transmission flows across certain circuits.
- 2.29 The system operator have advised that, as these effects accumulate, new applicants may be required to submit bids at a greater number of GXPs or, in the extreme, at each GXP where their assets are physically located.
- 2.30 This could create a 'first mover advantage', whereby the earlier applicants would be able to submit bids and so receive and comply with dispatch notifications at fewer GXPs than later, similar, applicants.

---

<sup>6</sup> The system operator notes the benefit would be on a per-application or per-participant basis.

- 2.31 At this stage the Authority does not consider any amendments are appropriate to address this potential issue, as the extent of the issue is uncertain, and the appropriate response is unclear. It may, for example, be appropriate that the first mover is given an advantage to provide them more certainty that they can have reduced costs of participation, thus making them more likely to participate.
- 2.32 The Authority would monitor the uptake of assigned GXP bidding and the impact this has on the system operator's ability to meet the PPOs, and would reconsider this issue in the future as the scope of the problem became more apparent.
- 2.33 The system operator has also advised that tool changes may be required at some point in the future if the total number of bids they need to process became very large, as a result of requiring an increasing number of dispatch notification purchasers to bid at an increasing number of GXPs. The Authority would consider this issue in the future should this become a problem in practice.
- 2.34 More generally, the Authority would monitor the impact of our proposed solution on the power system to ensure tools and regulations remain fit for purpose in the medium to long term.

Q1. Do you think the current requirement to bid at each GXP where resources are located imposes unnecessary costs on load aggregators and the system operator, and do you think this may cause a potential barrier to entry? Please provide details.

Q2. Do you agree with our framing of the problem?

Q3. Do you agree with our proposed solution? If not, why not? Are there other solutions you consider would better solve the problem?

### 3. Clarifying obligations on dispatch notification purchasers only impact Part 13 - Trading Arrangements (Item 2)

#### Context

- 3.1 In an earlier consultation on real-time pricing, the Authority confirmed that the dispatch notification product was not intended to change any aspect of the metering requirements for the reconciliation process,<sup>7</sup> and that there was no need to provide separate reconciliation information for dispatch notification purchasers.<sup>8</sup>
- 3.2 Dispatchable load purchasers that participate in full dispatchable demand, rather than the 'lite' version that is dispatch notification, are eligible for constrained on and off payments and so have additional reconciliation requirements to other purchasers.<sup>9</sup>

---

<sup>7</sup> Electricity Authority Final elements of real-time pricing: Decision paper (27 September 2022) at [4.19]. Available at: [https://www.ea.govt.nz/documents/1958/Copy\\_of\\_Final\\_elements\\_of\\_real-time\\_pricing\\_-\\_Decision1374145.1.pdf](https://www.ea.govt.nz/documents/1958/Copy_of_Final_elements_of_real-time_pricing_-_Decision1374145.1.pdf)

<sup>8</sup> Electricity Authority Final elements of real-time pricing: Code amendment consultation paper (7 June 2022) at [13.2]. Available at: <https://www.ea.govt.nz/projects/all/rtp/consultation/final-elements-of-real-time-pricing/>

<sup>9</sup> Constrained on and off payments ensure purchasers pay the price they are willing to pay, based on their bids, for the quantities they have been dispatched to account for differences between the settlement price and the dispatch price.

- 3.3 Dispatch notification purchasers, on the other hand, are not eligible for constrained on and off payments.
- 3.4 This means that dispatch notification purchasers that also purchase electricity from the clearing manager should only need to submit information to the reconciliation manager according to the requirements for purchasers.
- 3.5 Load aggregators that do not purchase electricity from the clearing manager should not need to provide any information to the reconciliation manager as they are not reconciliation participants. The reconciliation manager should receive all the information they need for their purposes from other reconciliation participants, such as retailers.
- 3.6 More generally, obligations relating to dispatch notification purchasers are only intended to impact trading arrangements, which are covered in Part 13 of the Code and related definitions of terms in Part 1.

### **Problem**

- 3.7 When the dispatch notification product was introduced, the Code was amended to define 'dispatch notification purchaser' as a type of 'dispatchable load purchaser'. However, due to an oversight, this has had the unintended consequence of imposing requirements on dispatch notification purchasers that were meant to only apply to full dispatchable load purchasers (specifically, reconciliation requirements in part 15 of the Code, and associated audit requirements in part 16 of the Code).
- 3.8 The Authority is also concerned that, due to the way dispatch notification purchaser was defined, there may be an ongoing risk that any future Code amendments that impose obligations on dispatchable load purchasers could inadvertently impose further obligations on dispatch notification purchasers that, like the reconciliation requirements, are not intended to apply.
- 3.9 Imposing such requirements goes against the intent of dispatch participation – to provide a low-cost, low-compliance path for small-scale resources to join the spot market. It could also provide additional cost to participants and therefore limit participation.

### **Proposed solution**

- 3.10 The Authority proposes to amend the Code as detailed at Appendix A to clarify that dispatch notification purchasers are only dispatchable load purchasers for the purposes of Parts 1 and 13 of the Code. Accordingly, dispatch notification purchasers would no longer be dispatchable load purchasers for the other Parts of the Code and therefore would not be subject to the same reconciliation requirements that apply to dispatchable load purchasers (for example under clauses 15.5A and 15.5B) or any other requirements that apply to dispatchable load purchasers outside Parts 1 and 13 of the Code.

### **Assessment**

- 3.11 The unintended consequences of defining dispatch notification purchaser as a type of dispatchable load purchaser could add unnecessary costs to participants and the reconciliation manager.
- 3.12 The Authority considers the cost of clarifying the Code under our proposed solution to be minimal.

- 3.13 The Authority expects the clarification would help to realise the intended benefits of dispatch notification – greater and more efficient competition in the market from flexible resources. This would help reduce costs to consumers in the long run, for instance, by displacing high-cost and carbon intensive thermal generation as Aotearoa New Zealand transitions toward a low emissions future.
- 3.14 By helping to realise the intended benefits of dispatch notification at minimal cost, the Authority considers our proposed amendments would be for the long-term benefit of consumers.

Q4. Do you agree with the proposed solution to clarify that obligations relating to dispatch notification purchasers should only impact trading arrangements, which are covered in Part 13?

## 4. Requiring information be provided for monitoring compliance (Item 3)

### Context

- 4.1 In earlier consultation and decision papers on real-time pricing, the Authority stated that compliance with dispatch notifications would be assessed retrospectively using monthly reconciliation data comparing metered volume against dispatch notifications.<sup>10</sup> The Authority also stated in its decision paper that the controllable load or generation source must be separately metered to participate in dispatch notification, as is standard for all other forms of dispatch, which will be used to assess compliance with dispatch notifications each month.<sup>11</sup>

### Problem

- 4.2 Due to an oversight, currently the Code does not require dispatch notification generators and dispatch notification purchasers to provide the necessary information to the Authority to enable us to monitor bid and dispatch notification compliance.
- 4.3 The Authority notes that while reconciliation data is available, this may not always be appropriate as it may include estimated data and will not include metering of behind the meter resource that load aggregators may bid in as dispatch notification purchasers.

### Proposed solution

- 4.4 The Authority proposes to amend the Code, as detailed at Appendix A, to ensure that dispatch notification generators and dispatch notification purchasers provide information about the usage or provision of electricity and any other information the

---

<sup>10</sup> Electricity Authority, *Remaining elements of real-time pricing: Consultation paper* (19 March 2019) at [3.40], available at: <https://www.ea.govt.nz/projects/all/rtp/consultation/proposal-for-the-design-of-the-remaining-elements-of-real-time-pricing/>. Also see Electricity Authority *Implementing spot market settlement on real-time pricing: Decision* (28 June 2019) at [5.38], available at: <https://www.ea.govt.nz/documents/2644/253582019-RTP-decision-paper.pdf>.

<sup>11</sup> Electricity Authority, *Implementing spot market settlement on real-time pricing: Decision* (28 June 2019). Available at: <https://www.ea.govt.nz/documents/2644/253582019-RTP-decision-paper.pdf>

Authority may reasonably require, for the purpose of monitoring compliance with Part 13 of the Code.

- 4.5 Dispatch notification participants would be required to agree with the Authority the:
- (a) data format
  - (b) delivery mechanism
  - (c) frequency of delivery
  - (d) time periods at which electricity usage or generation information is provided.
- 4.6 Allowing participants to agree requirements with the Authority would enable the Authority to account for the unique data provision capabilities of each participant. Hence, the Authority would retain the flexibility necessary to balance monitoring needs with the intention of the dispatch notification product to encourage greater market participation. The non-prescriptive nature of the proposed Code changes would also accommodate future changes in technologies affecting information provision capabilities and needs.
- 4.7 In addition, the Authority also proposes to amend the Code such that the system operator can only approve an application to be a dispatch notification generator or a dispatch notification purchaser if the Authority has confirmed to the system operator that the applicant will be able to comply with the above requirements.

### **Assessment**

- 4.8 Compliance monitoring is an essential component of a well-functioning market. Therefore, it is appropriate to ensure dispatch notification generators and dispatch notification purchasers provide suitable information for compliance monitoring.
- 4.9 Participants would be able to use their resources in a manner inconsistent with their bids or dispatch notifications without regulatory consequence if they did not have to provide information for compliance monitoring purposes. This could lead to price manipulation and reduced system security. The system operator may also be inclined to decline applications to become dispatch notification purchasers if the system operator considered the potential for non-compliance threatened their ability to meet the PPOs; this would negate the intent of dispatch notification to encourage greater market participation.
- 4.10 The Authority expects the cost of providing information for compliance monitoring purposes would be outweighed by the benefits of ensuring compliance outlined in the preceding paragraph.
- 4.11 We consider the cost of clarifying these requirements to be negligible.
- 4.12 Given this, we expect the clarification would help to realise the intended benefits of dispatch notification - greater and more efficient competition in the market from flexible resources. This would help reduce costs to consumers in the long run, for instance by displacing high-cost and carbon intensive thermal generation as Aotearoa New Zealand transitions toward a low emissions future.

Q5. Do you agree with our proposed solution to ensure dispatch notification participants provide the Authority with appropriate data for compliance monitoring purposes?

## 5. Regulatory Statement for the proposed amendments

### Objectives of the proposed amendments

- 5.1 The objectives of the proposed amendments are described against each of the items set out in this paper.

### The proposed amendments

- 5.2 The proposed amendments are described against each of the items set out in this paper and are shown as tracked changes to the relevant Code provisions in Appendix A.

### The proposed amendments' benefits are expected to outweigh the costs

- 5.3 The Authority has already implemented the dispatch notification product as part of the real time pricing project, following assessments of benefits and costs in 2017<sup>12</sup> and 2019<sup>13</sup>, when dispatch notification was introduced and modified, respectively.
- 5.4 The Authority has assessed the costs and benefits of the proposed Code amendments discussed in this paper and has determined that their benefits would outweigh their costs. The Authority's assessment of each item is described under the 'Assessment' headings in sections 2-4 of this paper.
- 5.5 In the Authority's view, the proposed amendments would help to realise or further realise the intended benefits of the dispatch notification product at minimal cost. The above assessment builds on the cost-benefit analyses conducted as part of the real-time pricing project.

Q6. Do you agree the benefits of the proposed amendments outweigh its costs? If not, please explain.

### The Authority has not identified any other means for addressing the objectives

- 5.6 The Authority has considered whether there are other means of addressing the objectives and has not found any reasonable alternatives.

Q7. Do you consider there are any other options that better meet the objectives? If so, please explain your preferred option in terms consistent with the Authority's statutory objectives in section 15 of the Electricity Industry Act 2010.

### The proposed amendment complies with section 32(1) of the Act

- 5.7 The Authority's main objective under section 15(1) of the Act is to promote competition in, reliable supply by, and efficient operation of, the electricity industry for the long-term benefit of consumers. The Authority's additional objective under section 15(2) of the Act is to protect the interests of domestic consumers and small business consumers in relation to the supply of electricity to those consumers. The

<sup>12</sup> Electricity Authority, Real-time pricing proposal. Consultation paper (1 August 2017). Available at: <https://www.ea.govt.nz/projects/all/rtp/consultation/real-time-pricing-proposal/>

<sup>13</sup> Electricity Authority, Proposal for the design of the remaining elements of real-time pricing. Consultation paper (19 March 2019). Available at: <https://www.ea.govt.nz/projects/all/rtp/consultation/proposal-for-the-design-of-the-remaining-elements-of-real-time-pricing/>



additional objective applies only to the Authority’s activities in relation to the dealings of industry participants with domestic consumers and small business consumers.

5.8 Section 32(1) of the Act provides that the Code may contain any provisions that are consistent with the Authority’s objectives and are necessary or desirable to promote one or all of the following:

**Table 1: How proposal complies with section 32(1) of the Act**

(a) Competition in the electricity industry	The proposed amendments would promote greater competition by reducing the cost of participation for small-scale resource providers.
(b) The reliable supply of electricity to consumers;	The proposal promotes reliable supply as it would enable more resources to interact with the market and so receive dispatch notifications, facilitating greater response to potential shortfall situations or transmission security constraints.
(c) The efficient operation of the electricity industry;	The proposed amendments are expected to result in reduced costs and so more efficient operation by the system operator and dispatch notification participants. Efficient operation would also be expected to be improved due to more resource being subject to the dispatch optimisation process (which schedules generation of lowest cost to meet the demand receiving the greatest benefit).
(d) the protection of the interests of domestic consumers and small business consumers in relation to the supply of electricity to those consumers;	The proposed amendments do not directly concern the dealings of industry participants with domestic consumers and small business consumers, but rather how industry participants can participate in the spot market. For practical reasons, the system operator does not allow consumer scale resources to bid and offer directly into the market; instead their resource can be bid on their behalf by a load aggregator.
(e) The performance by the Authority of its functions;	The proposed amendment will improve the performance by the Authority of its monitoring and compliance functions.
(f) Any other matter specifically referred to in this Act as a matter for inclusion in the Code	The proposed amendment will not materially affect any other matter specifically referred to in the Act for inclusion in the Code.



Q8. Do you agree the Authority's proposed amendment complies with section 32(1) of the Act? If not, please explain.

### The Authority has given regard to the Code amendment principles

5.9 When considering amendments to the Code, the Authority is required by its Consultation Charter to have regard to the Code amendment principles, to the extent that the Authority considers that they are applicable. The Authority is satisfied the Code amendments proposed in this paper are consistent with the Code amendment principles, to the extent they are relevant, as set out in Table 2 below.

**Table 2: Regard for Code amendment principles**

Principle	
1. Lawful	The Authority is satisfied that the proposed Code amendments are consistent with the Act, as discussed above in relation to the Authority's statutory objectives and the requirements set out in section 32(1) of the Act.
2. Provides clearly identified efficiency gains or addresses market or regulatory failure	The proposed Code amendments are consistent with principle 2 because they address identified problems with the Code, which require Code amendments to resolve.
3. Net benefits are quantified	It has not been practicable to quantify the costs and benefits of the proposed Code amendments. A qualitative assessment of costs and benefits has therefore been undertaken, and as a result of this assessment, the Authority considers the proposed Code amendments would have a positive net benefit, for the reasons set out above.

## Appendix A Proposed amendment

Set out below are the proposed Code amendments.

The red text indicates the proposed changes.

### Item 1: enabling dispatch notification purchasers to aggregate across GXPs

#### Part 1 – Preliminary provisions

##### 1.1 Interpretation

(1) In this Code, unless the context otherwise requires, —

...

**dispatch-capable load station identifier** means a unique code—

- (a) assigned to a **dispatch-capable load station** under clause 6(2) of Schedule 13.8; and
- (b) that is used to identify the **dispatch-capable load station and the GXP at which nominated bids are to be submitted for that dispatch-capable load station**

#### Part 13 – Trading Arrangement

##### 13.3A Approval process for dispatch-capable load stations

- (1) A **purchaser** at a **GXP** may apply to the **system operator** for approval for a device or a group of devices at the **GXP** to be a **dispatch-capable load station** under Schedule 13.8.
- (1A) In addition to subclause (1), a **purchaser** who intends to operate devices or a group of devices as a **dispatch notification purchaser** may apply to the **system operator** for approval for devices or a group of devices located at more than one **GXP** to be a **dispatch-capable load station** under Schedule 13.8.
- (2) The **system operator** must consider ~~an~~the application under subclause (1) or (1A) in accordance with Schedule 13.8.
- (3) If the **system operator** approves a device or a group of devices as a **dispatch-capable load station** following an application by a **purchaser** under subclause (1) or (1A),—
  - (a) the approval is valid until the date the approval is revoked under clause 10 of Schedule 13.8; but
  - (b) a device or group of devices in respect of which the approval is granted is not a **dispatch-capable load station** while its approval is suspended under clause 10 of Schedule 13.8.
- (4) The **system operator** must suspend or revoke an approval for devices or a group of devices located at more than one **GXP** to be a **dispatch-capable load station** in accordance with clause 10 of Schedule 13.8 if the **purchaser** is not, will not in the future or states that it no longer intends to operate as, a **dispatch notification purchaser** in respect of the relevant **dispatch-capable load station**.

- (5) Where the **system operator** suspends such an approval under subclause (4), the **system operator** must continue such suspension until—
- (a) the **purchaser** re-commences operating as a **dispatch notification purchaser** in respect of the relevant **dispatch-capable load station**; or
  - (b) the **system operator** revokes the approval for devices or a group of devices located at more than one **GXP** to be a **dispatch-capable load station** in accordance with clause 10 of Schedule 13.8.

### 13.7 Purchaser to submit bids for dispatch-capable load station

- (1) This clause applies to each **dispatchable load purchaser**.
- (2) Unless the **dispatchable load purchaser** relies on clause 13.8A, the dispatchable load purchaser must submit to the system operator for each of its dispatch-capable load stations for each trading period in the schedule period—
- (a) a **nominated non-dispatch bid**; or
  - (b) a **nominated dispatch bid**.
- (3) A **nominated bid** submitted under subclause (2) must represent a reasonable estimate of the total quantity of **electricity** the **dispatchable load purchaser** will purchase—
- (a) for the **dispatch-capable load station**; and
  - (b) for the **trading period**; and
  - (c) at the prices specified in the **nominated bid**.
- (4) A **dispatch notification purchaser** operating a **dispatch-capable load station** consisting of devices or a group of devices located at more than one **GXP** must submit **nominated bids** at—
- (a) the primary **GXP** assigned by the **system operator** under clause 6(1A)(a) of Schedule 13.8; or
  - (b) if the **system operator** gives reasonable notice requiring the **dispatch notification purchaser** to submit **nominated bids** at an alternative **GXP** specified by the **system operator** under clause 6(1A)(b) of Schedule 13, that alternative **GXP** for the period specified in the notice.

## Schedule 13.8

### 1 Applications for approval

Each application for approval for a dispatch-capable load station must—

- (a) be in writing; and
- (b) list ~~a~~the device, **devices** or ~~a~~group(s) of devices that the applicant wishes to have approved as a **dispatch-capable load station**; and
- (ba) specify whether the applicant intends to operate the device, **devices** or ~~a~~group(s) of devices as a **dispatch notification purchaser**; and
- (c) include information to enable the **system operator** to determine the application.

...

### 3 Factors that system operator must consider

- (1) Before the **system operator** approves a device or a group of devices to be a **dispatch-capable load station**, it must consider—
  - (aa) where the application is for a **dispatch-capable load station** consisting of devices or a group of devices located at more than one **GXP**, the most appropriate **GXPs** at which **nominated bids** for the **dispatch-capable load station** would be submitted; and
  - (a) the effect an approval would have on the **system operator's** ability to comply with the **PPOs**; and

....

### 6 System operator's decision

- (1) The **system operator** must decide whether to—
  - (a) approve an application; or
  - (b) decline an application.
- (1A) Where the **system operator** decides to approve an application under subclause (1) and the **dispatch-capable load station** consists of devices or a group of devices located at more than one **GXP**, the **system operator** must—
  - (a) assign a primary **GXP** at which **nominated bids** are to be submitted for that **dispatch-capable load station**; and
  - (b) specify one or more alternative **GXPs** at which, following the **system operator** giving reasonable notice under clause 13.7(4)(b), **nominated bids** are to be submitted for that **dispatch-capable load station**.
- (2) If the **system operator** decides to approve an application, the **system operator** must assign a **dispatch-capable load station identifier** to each approved **dispatch-capable load station** and, if subclause (1A) applies, must assign separate **dispatch-capable load station identifiers** for the primary and alternative **GXPs** at which **nominated bids** are to be submitted.

...

### 12 Authority to keep register of all current approvals

- (1) The **Authority** must keep a register of all current approvals—
  - (a) granted under this Schedule; and
  - (b) of which the **system operator** has advised the **Authority**.
- (2) The **Authority** must keep the register available for public inspection free of charge—
  - (a) at its offices, during normal office hours; and
  - (b) on its website, at all reasonable times.
- (3) The register must state, for each approval granted,—

- (a) the name of the applicant; and
- (b) the name of the **dispatch-capable load station**; and
- (c) the **dispatch-capable load station identifier(s)**; and
- (d) the date from which the approval takes effect; and
- (e) any conditions.

## Item 2: clarifying obligations on dispatch notification purchasers only impact Part 13 - Trading Arrangements

### Part 1 – Preliminary provisions

#### 1.1 Interpretation

- (1) In this Code, unless the context otherwise requires,

...

**dispatch notification purchaser** means, for the purposes of Part 1 and Part 13 only, a **dispatchable load purchaser** that is approved by the **system operator** under Schedule 13.8 to operate a **dispatch-capable load station** as a **dispatch notification purchaser**. For the purpose of this definition and for the purpose of all references to **purchaser** in relation to a **dispatch notification purchaser**, **purchaser** includes a load aggregator

...

**dispatchable load purchaser** means a **purchaser** that purchases **electricity** for a **dispatch-capable load station** and, for the purposes of Parts 1 and 13 only, includes a **dispatch notification purchaser**. For clarity, other than in Parts 1 and 13, a **dispatch notification purchaser** is not a **dispatchable load purchaser**

...

## Item 3: requiring information be provided for monitoring compliance

### Part 13 – Trading Arrangement

...

#### 13.82B Dispatch notification purchasers and dispatch notification generators to provide information

- (1) Each **dispatch notification purchaser**, in respect of each **dispatch-capable load station** for which it submits **nominated bids**, and each **dispatch notification generator**, in respect of each **generating unit** or **generating station** for which it submits **offers**, must provide information about the usage or provision of electricity, and any other information the **Authority** may reasonably require, for the purpose of monitoring compliance with Part 13.
- (2) Each **dispatch notification purchaser** and each **dispatch notification generator** must agree with the **Authority** the format, time periods to be captured, method of delivery and frequency of delivery for information provided under subclause (1).

...

### 13.3E Approval process for dispatch notification purchasers

- (1) A **purchaser** may apply to become a **dispatch notification purchaser** by applying to the **system operator** for approval of the relevant device or group of devices as a **dispatch-capable load station** under Schedule 13.8.
- (2) If the **system operator** receives an application under subclause (1), the **system operator** must consider the application in accordance with Schedule 13.8.
- (2A) The **system operator** may only approve an application if the **Authority** has confirmed to the **system operator** that the applicant will be able to comply with clause 13.82B.

...

### 13.3F Approval process for dispatch notification generators

- (1) A **generator** may, by notice in writing to the **system operator**, apply to become a **dispatch notification generator** in respect of a **generating station** that exports less than 30 MW to the **grid** or a **local network**.
- (2) The notice must specify the **generating station** in respect of which the **generator** wishes to be a **dispatch notification generator**.
- (3) The **system operator** must approve an application received under subclause (1) if the application—
  - (a) relates to a **generating station** that exports less than 30 MW to the **grid** or a **local network**; and
  - (b) meets any criteria for approval set out in the **policy statement**.
- (3A) Notwithstanding subclause (3), the **system operator** may only approve an application received under subclause (1) if the **Authority** has confirmed to the **system operator** that the applicant will be able to comply with clause 13.82B.

Q9. Do you have any comments on the drafting of the proposed amendment?

## Appendix B Format for submissions

Submitter	
Questions	Comments
Q1. Do you think the current requirement to bid at each GXP where resources are located imposes material costs on load aggregators and do you think this may cause a potential barrier to entry? Please provide details.	
Q2. Do you agree with our framing of the problem?	
Q3. Do you agree with our proposed solution? If not, why not? Are there other solutions you consider would better solve the problem?	
Q4. Do you agree with the proposed solution to clarify that obligations relating to dispatch notification purchasers should only impact trading arrangements, which are covered in Part 13?	
Q5. Do you agree with our proposed solution to ensure dispatch notification participants provide the Authority with appropriate data for compliance monitoring purposes?	
Q6. Do you agree the benefits of the proposed amendments outweigh its costs? If not, please explain.	
Q7. Do you consider there are any other options that better meet the objectives? If so, please explain your preferred option in terms consistent with the Authority's statutory objectives in section 15 of the Electricity Industry Act 2010.	



Q8. Do you agree the Authority's proposed amendment complies with section 32(1) of the Act? If not, please explain.

Q9. Do you have any comments on the drafting of the proposed amendments?