

Regulatory Impact Statement

Agency Disclosure Statement

This Regulatory Impact Statement (RIS) has been prepared by the Ministry of Business Innovation and Employment.

It outlines proposed regulations to support new extended reserve arrangements established by the Electricity Authority in the Electricity Industry Participation Code 2010. Under the regulations, the extended reserve manager will oversee a wholesale market mechanism to enhance the resilience of New Zealand's electricity system.

The mechanism will enable an extended reserve manager to select providers of extended reserve, or back up power generation, in emergency situations. The extended reserve manager will be established as a market operation service provider in the electricity market. The proposed regulations also limit the liability of the new market operation service provider.

This RIS starts with the decision by the Electricity Authority to create extended reserve arrangements. The Authority extensively evaluated and consulted on different design options. It identified the extended reserve manager as a market operation service provider as the most efficient and cost effective solution. After consultation, the Authority was supported in this decision by industry stakeholders.

The status quo is not the absence of an extended reserve manager; rather the operation of extended reserve arrangements without the certainty provided by the supporting regulations. Options for consideration in the RIS are limited to whether or not to implement the regulations. No other options are relevant as the decision to create an extended reserve manager rests with the Authority.

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Status quo and Problem Definition

The role of the Authority and market operation service providers

- 1 The Electricity Authority (the Authority) is responsible for the effective day-to-day operation of the electricity system and the market and systems that support it.
- 2 The Authority undertakes the function of market administrator, and contracts with market operator service providers (MOSPs) to perform the core wholesale market and system operation services required to run the electricity system. A list of MOSPs can be found in table 1.

Background

- 3 Electrical systems around the world are subject to the risk of rare and extreme events that, if not appropriately planned for, could lead to catastrophic power failure. In New Zealand, the principal means of addressing such risks has been through dropping large blocks of electrical load called Automatic Under-Frequency Load Shedding (AUFLS).
- 4 Several events have occurred that have tested these 'last resort' systems. While the system stayed on for these events, the System Operator (Transpower) identified that the AUFLS scheme could be improved to reduce the risk of non-performance for a wider range of events than considered when the AUFLS scheme was first designed.
- 5 In parallel, the Authority identified significant inefficiencies in the mechanisms for determining which loads should provide AUFLS to meet the overall system requirement. As well as economic costs arising from inappropriate load being assigned to provide AUFLS, the poor procurement approach was also exacerbating system reliability risks.

Extended reserve arrangements

- 6 The Authority has introduced new extended reserve arrangements as a means to address the problems with the AUFLS scheme. The new arrangements manage situations where an unplanned event causes the frequency on New Zealand's electrical system to fall too far below 50 Hertz for the event to be managed through instantaneous reserves (i.e. the system operators' ability to manage the loss of a large amount of generation).
- 7 This new method for procuring extended reserve requires a new market operation service provider, the extended reserve manager, to oversee the process. The extended reserve manager will develop a methodology to select industry participants to provide extended reserve and to manage the selection process. The new service provider role will improve on the current regime which imposes a 'one size fits all' mandatory requirement on providers of extended reserve.
- 8 For the efficient operation of the extended reserve arrangements a new market operation service provider (MOSP) is required. The Authority has amended the Electricity Industry Participation Code 2010¹ (the Code) to create the arrangements to allow for a new MOSP (the extended reserve manager). However, the Authority does

¹ The Electricity Industry Participation Code (Code) is the set of rules that govern and bind the operations of participants in the electricity market. Under section 38 of the Electricity Act, the Authority may amend the Code at any time. The Authority manages and operates the electricity market through the services of several market operation service providers. Section 5 of the Act identifies one market operation service provider and six market operation service provider roles, and states that market operation service provider roles may be created by regulations.

not have the ability to define new MOSPs or to set liability limits for MOSPs. These functions must be performed through regulations.

- 9 The Authority is currently implementing the new arrangements, and has selected NZX for the extended reserve manager role via an open tender process. NZX is expected to begin operations in mid-2015.

Problem definition

- 10 The problem to be addressed is that, without regulations, the:
- status of the extended reserve manager would be legally unclear. This lack of clarity could lead to a variety of legal problems, particularly in the event of legal challenge to the extended reserve manager's role under the Code;
 - extended reserve arrangements will not operate efficiently without a liability limit on the extended reserve manager. This is because the extended reserve manager is likely to seek compensation for its exposure to unlimited liability, with the costs passed on to industry participants; and
- extended reserve manager is likely to be overly conservative if its liability is not limited, adversely impacting on the effectiveness of the extended reserve arrangements in achieving their objectives.

Objectives

- 11 The overall objective is the efficient operation of the electricity market. The specific objective is to enable the efficient operation of the new extended reserve arrangements by addressing the problems identified in paragraph 10.

Regulatory Impact Analysis

Proposal 1A: Regulations to define the role of extended reserve manager as a market operation service provider role

- 12 It is proposed that the extended reserve manager should be designated a MOSP under the Act.
- 13 The Act lists MOSPs to be the system operator and any person appointed by the Authority to perform the role of registry manager, reconciliation manager, pricing manager, clearing manager, market administrator and wholesale information trading system provider (see table 1).
- 14 The Act also provides that the Governor-General may make regulations identifying MOSP roles additional to those listed above.
- 15 It is considered appropriate for the extended reserve manager to be a MOSP. This is because the extended reserve manager's roles and relationship with the Authority are akin to those of existing MOSPs, raising similar regulatory and contractual issues.

- 16 Under this proposal, the extended reserve manager will be subject to all regulation pertaining to MOSPs. The Act defines a MOSP as an industry participant. Industry participants are required to comply with the Code and are subject to the Rulings Panel's decisions on determining complaints about rule breaches, resolving disputes under the Code, and making appropriate remedial and other orders. MOSPs are protected from actions in tort from other industry participants.

The Electricity Authority's consultation

- 17 The Authority consulted with industry participants and industry on the proposed arrangements for extended reserve procurement and the associated amendments to the Code, including the proposal to create the role of extended reserve manager. Twelve submissions were received on this point, all but one of them were supportive of creating a new MOSP. The alternative view was that the role could be attached to that of the system operator.

Costs and benefits of this regulation

- 18 The regulation has a net benefit. The efficiency improvements to the electricity industry's extended reserve arrangements outweigh the additional costs from establishing and operating the extended reserve manager. The Authority intends to fund the direct costs associated with implementing the extended reserve manager in 2015/16 from existing appropriations.
- 19 Without this regulation, the Authority would be able to operate the extended reserve procurement process, but would be unable to rely on the provisions of the Code that ensure compliance as described in paragraph 16 above. This would reduce efficiency, leading to raised costs.
- 20 Benefits of the regulation² are the efficient operation of the procurement process by removing uncertainty about the status of the extended reserve manager and avoiding unnecessary legal costs.

Proposal 1B: Regulations to set a liability limit for the extended reserve manager

- 21 The proposed regulation places limitations on the liability of the extended reserve manager in relation to a single event or group of closely related events of \$550,000. Total liability over any financial year would also be limited to \$550,000. Liability may arise from breaches of the Code or other requirements pertaining to MOSPs.
- 22 The proposed level was arrived at having regard to the level of risk associated with the extended reserve manager's actions, the likely size of damages if the extended reserve manager performed poorly, as well as the fees payable. Because the extended reserve manager is expected to cause harm to others very infrequently, it is recommended the per event and annual liability limits be the same.
- 23 It is important to not set the liability limit too high or too low. The limit needs to provide an adequate incentive for MOSPs to comply with their performance obligations and avoid overly risky behaviour, whilst avoiding conservative actions that lead to a reduction in competition and efficiency, thereby increasing costs for consumers.

² The benefits of new extended reserve arrangements are improved management of unplanned events that threaten the stability of the electricity system.

- 24 If the liability limit is too low, it may provide incentives to engage in too risky and inefficient behaviour. If the liability limit is too high, service providers are too strongly deterred from taking on risk. Exposure to liability increases insurance costs and/or the risks facing service providers.
- 25 The proposed liability limits were calculated by the Authority using an economic liability methodology.
- 26 As an industry participant, if the extended reserve manager breaches the Code the matter may end up before the Rulings Panel. The Rulings Panel may decide that no action should be taken, or it may impose a remedial order on the participant.

Background - Limitation on liability for other MOSPs

- 27 The Electricity Industry (Enforcement) Regulations 2010 provides for certain limitations on the liability of industry participants, including MOSPs. The limits on liability apply only to orders of the Rulings Panel in relation to a breach of the Electricity Industry Participation Code 2010 (Code).
- 28 The following table shows the limits on liability for each MOSP. It also shows the annual fixed fee charged to the Authority by the service provider.

Table 1: Existing limitations on liability for MOSPs

Service provider	Company	Annual fixed fee (\$ million)	Limit on liability (\$ million)	
			Single event	Single year
System Operator	Transpower	25.08	0.2	2
Reconciliation Manager	NZX	1.18	0.5	2
Clearing Manager	NZX	1.18	5	10
Registry	Jade Direct	0.38	0.05	1
Market Administrator	Electricity Authority	-	0.05	0.5
Pricing Manager	NZX	1.58 incl. software licence	0.2	5
FTR Manager	EMS	0.85	0.5	2

- 29 Total liability for the extended reserve MSOP is at lower level than many of the other MOSPs as its role in the electricity system is materially smaller.

The Authority's consultation

- 30 The Authority consulted on the proposed liability limits in November 2014 and received five submissions. Three out of the five agreed the per event and per annum limits should be the same, and of those three, two agreed with the proposed limits of \$550,000. The other two submitters agreed broadly with the per event limit, but preferred a larger per annum limit.³

³ One submitter considered the annual limit should be twice the per event limit, while another submitter considered the annual limit should be four times the per event limit.

Costs and benefits of this regulation

- 31 Having a liability limit promotes the efficient operation of the electricity market by ensuring that the onus to manage risk in relation to extended reserve is on the party best placed to do so at least cost. The benefit of this regulation is that it creates a fair apportionment of risk between the extended reserve manager and other parties, which is accepted by industry participants.
- 32 If no limitation of liability is introduced, the extended reserve manager could be liable for very large damages if it breaches the Code. Insurance against a potentially unlimited liability could be expensive (or even impossible) for the extended reserve manager to obtain. The cost of this insurance would ultimately fall on electricity users as it would be passed on via a higher electricity industry levy, which funds the extended reserve MOSP.
- 33 It is more efficient (cheaper) overall to limit the extended reserve manager's liability and to leave risks in excess of that quantity where they fall – with vulnerable participants. The vulnerable participants will then have an incentive to monitor and manage large risks.
- 34 The costs to participants of monitoring and managing risk would ultimately be included in electricity prices, but the total cost to electricity users should be less than the cost of insuring against an unlimited risk.

Alternative options for regulation

Not implementing the extended reserve arrangement regulations

- 35 The alternative option to the regulations is the status quo (i.e. developing the extended reserves market without the regulations).
- 36 The regulations efficiently implement the extended reserve arrangements. The consequence of not making them has been covered under the problem definition (paragraph 10) and includes legal uncertainty over the status of the extended reserve manager, and likely higher costs arising from lack of a liability limit.
- 37 Not making these regulations does not mean that the extended reserve manager could not proceed. However, the absence of the regulations will reduce the efficiency of the extended reserve arrangements and will increase cost and risk for the Authority, other service providers, and electricity market participants.
- 38 As there are no material identifiable benefits from not implementing the regulations, this option is not recommended.

Consultation

- 39 The Electricity Authority consulted with electricity industry participants⁴ on the proposed establishment regulations in May, October and December 2014. See paragraphs 17 and 30.
- 40 The Ministry of Business Innovation and Employment has consulted with the Treasury, and with the Electricity Authority on the recommendations in this paper.

⁴ Consultation is open to the public.

Conclusions and Recommendations

- 41 The regulations are minor and collectively provide the appropriate regulatory support for the implementation by the Authority of a new part of the wholesale electricity market, the extended reserve arrangements.
- 42 The electricity industry was consulted on the proposed regulations on several occasions in 2014 by the Authority, who is in the best position to engage with the industry. No concerns were raised that the regulations would pose any significant risks or increased cost on any party. There is no fiscal risk to the Crown.
- 43 It is recommended that the proposed regulations be approved.

Implementation

- 44 After tendering the extended reserve manager contract last year, the Authority recently named NZX as the preferred provider of the new extended reserve arrangements. The making of these regulations will provide for the extended reserve manager to be established as a market operation service provider and to engage with industry in preparation for the extended reserve manager's commencement in early 2016.

Monitoring, Evaluation and Review

- 45 The Authority will review the performance of the extended reserve manager under the normal provisions for market operations service providers in Part 3 of the Code. These include:
 - the annual setting of performance standards,
 - a monthly self-review by the service provider of its performance, including with obligations under the Code and service provider agreement,
 - a monthly report by the service provider to the Authority on deviations from obligations and other matters, including any changes the service provide considers could be made to the Code. and
 - an annual review by the Authority of the performance of the service provider against Code obligations, Act obligations and agreed performance standards.