

25 August 2014

Commerce Commission

Attention: John McLaren (Chief Advisor, Regulation Branch)

Dear John

Re Draft Determination for Proposed Electricity Distribution Input Methodology Amendments 2014

The Electricity Authority (the Authority) welcomes the opportunity to write to the Commerce Commission's (the Commission) on the proposed Electricity Distribution Input Methodology Amendments 2014.

This letter addresses only one aspect of the Commission's proposals, namely the proposed arrangements to address costs and revenues incurred by electricity distribution businesses (EDBs) for the provisions of automatic under frequency load shedding (AUFLS arrangements).

In this respect, the Authority welcomes the constructive dialogue that has occurred between itself and the Commission over the appropriate treatment of AUFLS between the two regulatory regimes.

However, it believes that the draft clauses relating to AUFLS set out in the draft determination may not fully achieve the intent of the revised AUFLS arrangements.

1 Background

AUFLS is the 'last resort' mechanism used to prevent a total collapse of the electricity system in the event of very large supply interruptions.

To-date, AUFLS has been secured through a requirement in the Electricity Industry Participation Code 2010 (Code), that every transmission-connected load (EDBs, and so-called 'direct connect' industrial customers) arm a minimum of 32% of their load for AUFLS.

However, this 'one-size-fits-all' approach to AUFLS provision has been revealed to result in a range of poor outcomes including:

- system security costs from the actual amount of load being armed for AUFLS at any one moment in time deviating significantly from the ideal amount
- economic costs arising from some load being prevented from being more valuably used for other purposes (for instance for the provision of instantaneous reserves), or from some high-



interruption cost load (for example civil-defence infrastructure or dairy factories) being armed for AUFLS instead of lower-interruption cost load (for example residential load).

The Authority has developed a revised set of arrangements for AUFLS procurement. Under the new arrangements, varying amounts of AUFLS will be required to be provided by different transmission-connected loads according to their relative suitability. These arrangements have been set out in the various consultations the Authority has undertaken with industry on this issue. ¹

From the perspective of regulating EDBs, the new arrangements introduce two key elements:

- some EDBs may be required to provide a greater proportion of AUFLS than others based on the relative suitability of their load.
- compensation payments will be paid to parties providing AUFLS. Such compensation payments are to cover:
 - the interruption costs AUFLS connected loads are expected to occur
 - the cost of providing 'standard' AUFLS equipment
 - the cost of providing 'enhanced' AUFLS services. Such enhanced services include the ability to remotely programme/arm/monitor AUFLS relays, and to provide faster-responding AUFLS relays & breakers.²

2 Considering the appropriate approach to regulate AUFLS-related costs and revenues under the Part 4 regime

One issue that arises from these new AUFLS arrangements is the appropriate treatment of AUFLS-related costs and revenues for EDBs regulated under Part 4 of the Commerce Act.

In considering this issue, it is worth reviewing the objectives of the two regulatory bodies (the Commission and the Authority):

- the Commission needs to develop a price control regime which enables EDBs to earn an
 appropriate return on undertaking those activities which fall under the Commission's control –
 i.e. the provision of network services.
- the Authority intends that the AUFLS regime will:
 - result in the most appropriate load being armed for AUFLS; and
 - over time provide incentives on parties to provide enhanced AUFLS services through
 positively influencing their investment decisions when they come to make asset investment
 decisions. The progressive provision of such enhanced services will enable the AUFLS
 technical scheme to deliver even more secure outcomes through having a larger number of
 AUFLS blocks which can be more finely tuned to deliver the right quantity of load to meet the
 on-the-hour system requirements.

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¹ http://www.ea.govt.nz/development/work-programme/wholesale/efficient-procurement-extended-reserves/

² The current requirement is for an AUFLS relay and associated breaker to open within 400ms of system frequency dropping to a specified threshold. Some relays and breakers are able to operate substantially faster than that, for example 250ms.



One option that was considered by the Authority was to suggest that AUFLS relays costs and compensation be completely un-regulated activities under the Part 4 regime. However, this was considered inappropriate because:

- many AUFLS relays and associated control equipment (particularly the more modern relays) are
 not dedicated AUFLS assets. Instead, they are assets which are principally for the purposes of
 providing core distribution network management services, but which also have AUFLS capability.
 Given the core network management purpose of these assets, it would be inappropriate to treat
 them as unregulated activities
- a significant proportion of the compensation payments relate to compensation for customers' expected interruption costs during AUFLS events. It would not be appropriate for EDBs shareholders to keep such compensation intended for their customers.

Accordingly, the following approach was proposed in discussions between the Authority and Commission which was felt should deliver the desired objectives for both regulatory bodies:

- 1) costs incurred in providing network assets used for AUFLS would not have any special treatment under the Part 4 regime administered by the Commerce Commission. That is, any capital and operating costs associated with providing assets that provide AUFLS services would continue to be treated as they are now for the purposes of the price control regime. The capital assets would be included within the regulatory asset base (RAB) and the operating costs would be included with other operating costs associated with the provision of core network services.
- 2) the compensation payments regime developed by the Authority will explicitly distinguish between three different types of compensation:
 - a) compensation for expected customer interruption costs
 - compensation for providing assets for 'standard' AUFLS services. These payments will be based on the typical costs of providing such assets
 - c) payments for provision of enhanced AUFLS services. These payments will be based on the extra system security value that such services provide.
- 3) These different payments could then be treated differently under the Part 4 regime, with some being 'regulated' and some being 'unregulated':
 - a) 'regulated' revenues would be treated as a pass-through for the purposes of the Part 4 regime. This would include
 - i) compensation payments for expected interruption costs. This would appear appropriate as it is the customers incurring interruption costs, not the lines company's shareholders
 - ii) compensation payments for provision of assets to provide 'standard' AUFLS services. Treating such payments as pass-throughs would appear appropriate as it will be in relation to costs which will have already been recovered through the 'standard' approach to cost recovery under the Part 4 regime (inclusion within the RAB and standard network operating costs as set out in paragraph 1) above).
 - b) 'Unregulated' revenue would only be for payments for provision of enhanced AUFLS services. This seems appropriate as:
 - i) the provision of such services is not a core aspect of EDBs business



- ii) treating such revenues as unregulated preserves the positive incentive on EDBs to make investments to provide such services if they can do so at a cost lower than the revenue they would receive
- iii) the Authority would set the level of payments for the enhanced services at a level which is consistent with achievement of its statutory objective. These should result in payments being set at a level which strike the right balance between setting positive incentives for the provision of such services, but not too high that payments outweigh the benefit of improved security.

3 Consideration of the Commerce Commission's draft proposals

The Commerce Commission's draft proposals for the treatment of AUFLS-related costs within the Part 4 regime are to amend sub-clause 3.1.3(1) of the EDB IM Determination as follows:

"(1) A recoverable cost is a cost that is-

..........

(o) a positive allowance for costs incurred and amounts payable or negative allowance for amount receivable under any automatic under-frequency load shedding regulation made under the Electricity Industry Act 2010, subject to the requirement specified in sub-clause (2);"

The concern the Authority has is that this draft clause may not give the Commission sufficient flexibility to treat the different types of AUFLS payments received in different ways as set out in the previous section, that is:

- for some compensation payments to be treated as regulated 'pass-throughs'; and
- those for the provision of enhanced services to be treated as unregulated revenue.

Similarly, it is not clear how the costs of providing AUFLS assets will be treated under this draft clause. That is, will the costs of assets used to provide AUFLS continue to be treated as they are at the moment (forming part of the RAB), or will this clause result in a different regulatory treatment?

Authority staff would be happy to meet with Commission staff to discuss and elaborate on the points made in this letter.

Yours sincerely

John Rampton

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