

Notice of the Electricity Industry Participation (Automatic Under-Frequency Load Shedding Systems) Code Amendment 2012

1. Pursuant to section 38 of the Electricity Industry Act 2010 ("Act"), the Electricity Authority ("Authority") gives notice of the making of the Electricity Industry Participation (Automatic Under-Frequency Load Shedding Systems) Code Amendment 2012.
2. The amendment is made urgently under section 40 of the Act.
3. The amendment comes into force on **3 January 2013** and expires on **2 October 2013**.
4. The amendment amends clause 7 of Technical Code B of Schedule 8.3 of the Electricity Industry Participation Code 2010 ("Code") to provide that:
 - (a) if the system operator considers that the provision of automatic under-frequency load shedding by any participant as required by the Code will put the system operator's ability to comply, or plan to comply, with its principal performance obligations at risk, the system operator may publish a declaration to that effect;
 - (b) if the system operator has published a declaration, the system operator may give notice to one or more participants specifying modifications to the extent to which the requirements to provide automatic under-frequency load shedding apply to the participant;
 - (c) the system operator may give a notice to a participant only if the system operator has consulted with the participant, and the participant and the system operator agree that it is reasonably practicable for the participant to comply with the requirements of the notice;
 - (d) a participant to whom a notice is issued must use reasonable endeavours to comply with the requirements of the notice; and
 - (e) a declaration or a notice may be revoked by the system operator.
5. The Authority considers that it is desirable to make the amendment urgently for the following reasons:
 - (a) Transpower is due to carry out commissioning tests on Pole 3 of the HVDC link in January 2013;
 - (b) there is an increased risk of an under-frequency event occurring during testing;
 - (c) the Code requires participants to have an automatic under-frequency load shedding system that enables automatic disconnection of two large blocks of demand;
 - (d) compliance by participants with the automatic under-frequency load shedding requirements during an under-frequency event may result in participants disconnecting more load than needs to be disconnected to respond to the under-frequency event, which could result in the system frequency exceeding acceptable limits, a consequential cascade failure of multiple generating units, and a system blackout during testing;
 - (e) the effect of the amendment is that the system operator will be able to modify the automatic under-frequency load shedding system requirements to ensure that participants disconnect only as much load as is necessary to respond to an under-frequency event; and

- (f) a delay in making a Code amendment will mean that the system operator would not be able to modify the requirements for automatic under-frequency load shedding during the testing, and will be unable to effectively manage the risk of a cascade failure occurring during testing as the result of an under-frequency event.

6. A copy of the amendment and the Code is available on the Electricity Authority's website at
www.ea.govt.nz/act-code-regs/code-regs/code-changes/proposed-amendments/
7. A copy of the amendment and the Code may also be inspected free of charge or purchased from the Electricity Authority, Level 7, ASB Bank Tower, 2 Hunter Street, Wellington.

Dated at Wellington this 20th day of November 2012.

DR THOMAS BRENT LAYTON, Chairperson, Electricity Authority.

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