

Survey: removal of provision for South Island-only Official Conservation Campaigns

Survey response deadline: 7 October 2019

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1 Summary

- 1.1 Currently official conservation campaigns (OCCs) can be triggered for the South Island only or for the whole country. Earlier this year we asked stakeholders for their broad opinions on whether this is still appropriate.
- 1.2 We believe there is a case to remove South Island-only OCCs, so are now inviting stakeholders to tell us whether they agree.
- 1.3 In the light of submissions we have already received on this issue, and provided we are satisfied there is widespread support for the change, we expect to use one of the 'fast-track' provisions for amending the Electricity Industry Participation Code 2010 (**Code**), without further consultation.¹
- 1.4 We are keen to resolve this issue now in a pragmatic and efficient way, if possible.

We are now minded to remove provision for South Island-only OCCs

- 2.1 In December 2018 February 2019 we consulted on the *Review of regulatory settings for official conservation campaigns*.² One of the questions we asked was 'Do you agree there should be two forms of OCC a South Island-only OCC and a New Zealand-wide OCC?' Although we asked that question, we were not formally proposing a change to remove South Island-only OCCs at that time our position on this has now changed.
- 2.2 We have considered the feedback on retaining the provision for a sub-national OCC and after further consideration, favour removing the provision for South Island-only OCCs. If there is widespread stakeholder support, we would like to do this now.

We would expect to rely on section 39(3)(b) of the Act, if we are satisfied that there is widespread support for the amendment among the people likely to be affected by it, and/or section 39(3)(c), if we are satisfied there has been adequate prior consultation so that all relevant views have been considered. This is the second time we have considered using section 39(3)(b). We consider that it is potentially the most efficient way to resolve this question, rather than engaging in further detailed analysis followed by a more substantial consultation.

Refer: https://www.ea.govt.nz/development/work-programme/risk-management/review-of-regulatory-settings-for-official-conservation-campaigns-occs/consultations/

2.3 We are now surveying opinion on this question to clarify stakeholder views before making a final decision. While we considered there was likely to be widespread support for the change, we wanted to be sure this was the case and give participants the opportunity to provide further feedback on this specific proposal.

Survey question: Do you support the removal of the Code provisions for South Island-only official conservation campaigns?

- 2.4 We will consider all feedback received in response to this survey and, if we are satisfied there is widespread support for the Amendment, we intend to Gazette the Amendment as soon as possible and publicise the decision in Market Brief.
- 2.5 The change removes parts of clause 9.23 of the Code that pertain to South Island-only OCCs. There would also be consequential changes to:
 - (a) the provisions of the Code which relate to customer compensation schemes (CCS)
 - (b) the security of supply forecasting and information policy (SOSFIP)³
 - (c) the standing reserve supply determination.
- 2.6 Below we include a draft of the proposed Code amendment (the **Amendment**), as required by section 39(1)(a) of the Electricity Industry Act 2010 (the **Act**) (see Appendix A).
- 2.7 If we decide to revoke the provisions for South Island OCCs, consequential changes to the SOSFIP will be required. The SOSFIP was recently amended to include (among other things) rationalised references to security of supply information that is provided at both South Island and national level. If the proposed amendment is approved, the system operator proposes amending the SOSFIP to make the consequential deletions of references to information provided for the South Island.
- 2.8 If we are not satisfied there is widespread support for the Amendment, we will not amend the Code, unless, having considered all feedback received from this survey and in earlier submissions on this question, we consider that there has been adequate prior consultation for the purposes of section 39(3)(c) of the Act.

3 Rationale for removing South Island-only OCCs

3.1 Electricity shortages in 2001, 2003 and 2008 illustrated that there was relatively limited southward transfer capacity on the HVDC at the time. This limitation was the key reason why the Authority concluded that the two forms of OCC specified in clause 9.23 of the Code were appropriate.

There are three reasons for removing South Island-only OCCs

3.2 There are three reasons to remove the Code provision for South Island-only OCCs.

1) There is improved transfer of energy from the North to the South Island

3.3 Changes in the physical power system since 2011 have improved the ability to transfer energy from the North Island to the South Island. This means North Island savings would now have a more substantial effect on slowing the rate of decline of South Island hydro storage than in 2011. Reasons include:

The SOSFIP describes the system operator's policy for provision of information about security of supply in accordance with parts 7 and 9 of the Code.

- (a) Pole 3 of the HVDC is now in place
- (b) there is more electricity generation (wind) in the lower North Island
- (c) the North Island AC transmission grid has been reinforced.
- 3.4 In 2017-18, we completed a review of the winter energy margins. The analysis of that review found that the South Island faces energy risks that are lower than those faced by the whole of New Zealand, given present-day southward transmission capacity. The winter energy margin for the South Island was established on assumptions that were suitable in 2008 whereas the 2017/18 review recommended disestablishing it. This highlights the improved transmission capability since 2008.

2) Consumers may see a South Island-only OCC as confusing and unfair

- 3.5 Negative consumer perception of a South Island-only OCC could undermine its perceived legitimacy, weaken its effectiveness, damage long-term confidence in the electricity industry and affect the durability of the OCC and CCS arrangements. This could come about in a number of ways:
 - (a) In the absence of good reasons why, many consumers may find it unfair that South Islanders are asked to conserve electricity when North Islanders aren't. This may be exacerbated by South Islanders viewing North Islanders as contributing more to the low lake levels, because more electricity is consumed in the North Island than the South Island, creating resentment among consumers.
 - (b) If South Islanders conserve little electricity, a South Island-only OCC could largely fail. This could in turn undermine the effectiveness of a subsequent New Zealand-wide OCC.
 - (c) A South Island-only OCC may confuse North Islanders as to whether or not they should conserve electricity. This confusion could impact the effectiveness of a subsequent New Zealand-wide OCC.
 - (d) 'Flip-flopping' between South Island-only and New Zealand-wide OCCs is likely to confuse consumers in both islands. Such confusion would undermine electricity conservation.
- 3.6 The Security and Reliability Council (an advisory group to the Authority) supported this argument, stating "there are circumstances in which a South Island-only official conservation campaign could be warranted (such as major HVDC limitations), but that there are substantial risks if a South Island-only campaign couldn't be explained to the satisfaction of the public."⁴

3) We retain the ability to adapt to future changes and unlikely situations

- 3.7 As the mix of assets in the power system changes over time (for example due to transmission investments, or retirement of thermal generation), we will continue to assess the appropriateness of the OCC arrangements, including whether sub-national OCCs might again be warranted.
- 3.8 If a highly unlikely situation arises, such as an extended HVDC outage coinciding with poor hydrology, we retain the ability to amend the Code under urgency or rely on the existing power of the system operator to make a supply shortage declaration. As such, there is little or no value in keeping South Island-only OCC Code provisions just in case specific, unlikely events coincide. Such events are, by their very nature, impossible to predict and not necessarily well responded to by prescriptive regulation. Furthermore, the South Island-only

Refer: https://www.ea.govt.nz/dmsdocument/25232-correspondence

OCC triggers CCS payments to South Island consumers. This could be unwarranted, as a failure of transmission assets is not the sort of risk that the CCS regime is intended to offset.

We have completed sufficient analysis to make the Amendment

- 3.9 In our 2018-19 consultation⁵ we said we would need to consider at least the following issues to make a recommendation on South Island-only OCCs:
 - (a) significance of the issues with the current OCC design
 - (b) extent to which South Island hydro storage levels are affected by electricity conservation measures applied across the North Island versus across parts of the North Island
 - (c) economic cost to New Zealand if North Island electricity conservation is less effective at conserving South Island hydro storage than South Island electricity conservation
 - (d) design of start and exit trigger settings
 - (e) predicted effectiveness of sub-national OCCs, other than an island-based OCC.
- 3.10 In the light of our own analysis and consideration of stakeholders' views, we consider that we have a *sufficient* understanding of the benefits and drawbacks of South Island-only OCCs. We are confident removal of South Island-only OCCs is a substantial improvement over the current arrangements. We consider this survey is the most suitable way to capture those improvements without detracting from delivery of our work programme.⁶

4 What could the Amendment mean for you?

- 4.1 Removing South Island-only OCCs does not change how New Zealand-wide OCCs are calculated. The GWh storage levels needed to trigger New Zealand-wide OCCs would remain unchanged. Therefore, when compared to:
 - (a) a South Island-only OCC that starts and stops (with no New Zealand-wide OCC at all), the change means there would be no South Island-only OCC⁷
 - (b) a New Zealand OCC that starts and stops (with no South Island-only OCC at all), the change makes no difference
 - (c) an OCC that starts as South Island-only and expands to New Zealand before stopping, the change means that a New Zealand OCC would start slightly earlier. This is because hydro storage will tend to deplete faster if South Islanders have not been asked to conserve electricity
 - (d) an OCC that starts as New Zealand-wide and narrows to the South Island-only before stopping, the change means the New Zealand OCC starts and stops at the same time but there would be no South Island-only OCC.
- 4.2 While any OCC is unlikely, based on the present-day power system, the situations described by 4.1(a) and 4.1(c) are relatively more likely. This likelihood can change rapidly

The Major Electricity Users' Group, in their submission on our 2018-19 consultation, considered (among other things) that our resources could be deployed on higher value work than the issue of the geographic application of OCCs.

⁵ Paragraph 4.43 of the consultation linked in footnote 2.

There is a further variant to this situation. If, in the counterfactual, the South Island-only OCC caused conservation that was essential to avoiding a New Zealand-wide OCC, then the change would also mean that a New Zealand-wide OCC occurs where it would not have under the counterfactual.

Which of the OCCs is triggered first is determined by the relative position of the 10% risk curves for the South Island and New Zealand, along with the amount of water remaining in Lake Taupo. As at 1 August 2019, for the

in the case commissioning or decommissioning of large-scale generation, or gradually in the case of demand patterns changing the proportion of demand in the North and South Islands.

Retailers

- 4.3 The impact of removing South Island-only OCCs would be greatest for retailers, particularly any with an exclusively North Island customer base. Those retailers would have to pay CCS payments for the duration of the national campaign, which could be slightly longer in the scenario set out in paragraph 4.1(c).
- 4.4 For any retailers with South Island customers, the proposal would mean they do not need to compensate their South Island customers as set out in paragraphs 4.1(a), 4.1(c) and 4.1(d) (as they would only pay compensation when required to do so nationally).

Generators

4.5 The only affected generators are those who hold contingent storage. If the change was made, there would be no South Island version of the Alert Release Boundary. Consequently, there are fewer circumstances under which they will be able to access contingent storage.

Consumers

- 4.6 There would be a very small impact on consumers.
- 4.7 North Island consumers would largely be unaffected, but could be asked to conserve electricity slightly earlier in the scenario set out in paragraph 4.1(c) and consequently most consumers would receive slightly more money under the CCS (depending on their eligibility under the scheme).
- 4.8 South Island consumers would be slightly more impacted. If the change goes ahead, they would not be asked to conserve electricity independently from North Islanders (nor be paid for doing so under the CCS).

5 How to respond to the survey

5.1 Please email submissions@ea.govt.nz by **5.00pm on Monday 7 October 2019** with your answer to the following question:

Survey question: Do you support the removal of the Code provisions for South Island-only official conservation campaigns?

- 5.2 Please include as the subject of your email: Response to OCC survey.
- 5.3 Responses may include supporting arguments for the respondent's position (and any other feedback) but we request these be kept brief.
- 5.4 We will acknowledge receipt of all responses electronically. Please contact the Submissions' Administrator on submissions@ea.govt.nz if you do not receive acknowledgement of your submission within two business days.

period 1 September 2019 to 31 July 2020, the system operator is forecasting that the 10% risk curve for New Zealand will be lower than its South Island equivalent 36% of the time (in which case the conditions for a South Island-only OCC are certain to be met first, no matter the water in Lake Taupo) and a further 45% of the time will be no more than 60 GWh higher (in which case the conditions for a South Island-only OCC will be met first if Lake Taupo is more than 10% full, which it has been for 98.4% of the time since 1980).

⁹ Currently three parties: Contact, Genesis and Meridian.

The mechanism by which those generators get access to their contingent storage.

- 5.5 Please note we want to publish all submissions we receive. If you consider that we 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
 - (c) provide a version of your submission that we can publish (if we agree not to publish your full submission).
- 5.6 If you indicate there is part of your submission that should not be published, we will discuss with you before deciding whether to not publish that part of your submission.
- 5.7 However, please note that all submissions we receive, including any parts that we do not publish, can be requested under the Official Information Act 1982. This means we would be required to release material that we did not publish unless good reason existed under the Official Information Act to withhold it. We would normally consult with you before releasing any material that you said should not be published.

Appendix A Draft Code amendment

- A.1 Removal of South Island campaigns requires changes to clauses 9.22 to 9.25 of the Code.
- A.2 There will also be a consequential change to the definition of "official conservation campaign" in the Code.
- A.3 We intend to consult separately on changes to Part 9 of the Code that would replace many instances of 'public conservation period' with 'official conservation campaign'. That separate consultation is expected to be published as part of our Code Review Programme in late 2019.

Part 1 Preliminary Provisions

official conservation campaign is a campaign to encourage electricity conservation that—

- (a) is commenced by the system operator; and
- (b) lasts for 1 week or more; and
- (c) covers—
 - (i) [Revoked] the South Island; or
 - (ii) all of New Zealand

Part 9 Security of Supply

9.22 Requirement to implement customer compensation schemes

- (1) A **retailer** must make payments to its **qualifying customers**, in respect of **ICPs** described in clause 9.21(1)(b), under its **customer compensation schemes** during a **public conservation period**.
- (2) [Revoked] Despite subclause (1), if a public conservation period is running because the system operator has commenced an official conservation campaign under clause 9.23(1), a retailer must make payments under its customer compensation scheme to its qualifying customers only in respect of ICPs, as described in clause 9.21(1)(b), in the South Island.

Official conservation campaign

9.23 System operator commences official conservation campaign

(1) [*Revoked*]

The system operator must commence an official conservation campaign for the South Island

- (a) when a comparison of storage in the South Island hydro lakes with the South Island electricity risk curves, as that term is defined in the security of supply forecasting and information policy,
 - (i) shows a risk of shortage for the South Island of 10% or more; and
 - (ii) forecasts that the risk of shortage for the South Island will be 10% or more for 1 week or more; or
- (ab) when hydro storage in the South Island hydro lakes is, and the system operator forecasts will remain for 1 week or more, equal to or less than
 - (i) that part of available hydro storage in the South Island hydro lakes that, as published by the system operator under the security of supply forecasting and information policy, may only be used during an official conservation campaign; plus

- (ii) the buffer, as that term is defined in the security of supply forecasting and information policy; or
- (b) despite paragraphs (a) and (ab), if it has agreed a date with the **Authority** for an **official** conservation campaign to commence for the South Island, on that date.
- (2) The **system operator** must commence an **official conservation campaign** for New Zealand
 - (a) when a comparison of storage in New Zealand's hydro lakes with the electricity risk curves, as that term is defined in the **security of supply forecasting and information policy**,—
 - (i) shows a risk of shortage for New Zealand of 10% or more; and
 - (ii) forecasts that the risk of shortage for New Zealand will be 10% or more for 1 week or more; or
 - (ab) when hydro storage in the New Zealand hydro lakes is, and the **system operator** forecasts will remain for 1 week or more, equal to or less than—
 - (i) that part of available hydro storage in the New Zealand hydro lakes that, as **published** by the **system operator** under the **security of supply forecasting and information policy**, may only be used during an **official conservation campaign**; plus
 - (ii) the buffer, as that term is defined in the **security of supply forecasting and information policy**; or
 - (b) despite paragraphs (a) and (ab), if it has agreed a date with the **Authority** for an **official conservation campaign** to commence for New Zealand, on that date.
- (3) The **system operator** must use reasonable endeavours to give each **participant** and the **Authority** at least 2 weeks' notice of an **official conservation campaign** commencing.
- (4) During the period of an **official conservation campaign**, the **system operator** must regularly review the steps that it must take, and encourage **participants** to take, under the **emergency management policy**.
- (5) If the **system operator** and the **Authority** agree under subclause (1)(b) or (2)(b) that an **official conservation campaign** will commence, the **system operator** must **publish** the reasons for agreeing that the **official conservation campaign** will commence.
- (6) [Revoked]

9.23A System operator ends official conservation campaign

- (1) If the **system operator** has commenced an **official conservation campaign** under clause 9.23, it must end the **official conservation campaign**
 - (a) [Revoked]

for an official conservation campaign for the South Island

- (i) when a comparison of hydro storage in the South Island hydro lakes with the South Island electricity risk curves, as that term is defined in the security of supply forecasting and information policy, shows a risk of shortage for the South Island of less than 8%; and
- (ii) the amount of hydro storage in the South Island hydro lakes is greater than the amount of hydro storage determined under subparagraphs (i) and (ii) of clause 9.23(1)(ab); or
- (b) for an official conservation campaign for New Zealand when—
 - (i) when a comparison of hydro storage in the New Zealand hydro lakes with the New Zealand electricity risk curves, as that term is defined in the **security of supply forecasting and information policy**, shows a risk of shortage for New Zealand of less than 8%; and

- (ii) the amount of hydro storage in the New Zealand hydro lakes is greater than the amount of hydro storage determined under subparagraphs (i) and (ii) of clause 9.23(2)(ab); or
- (c) despite <u>paragraph</u> paragraphs (a) and (b), if it has agreed a date with the **Authority** for an **official conservation campaign** to end, on that date.
- (2) The **system operator** must, as soon as practicable after ending an **official** —**conservation campaign**, give notice to each **participant** and the **Authority** of the date on which the **official conservation campaign** ended.

Default customer compensation scheme

9.24 Requirements of default customer compensation schemes

- (1) A retailer's default customer compensation scheme must provide for the retailer to pay compensation, during an official conservation campaign or public conservation period to each of its qualifying customers for each of the qualifying customer's ICPs described in clause 9.21(1)(b).—
 - (a) during an **official conservation campaign** for the South Island, to pay each of its **qualifying customers** in the South Island at least the minimum weekly amount of compensation determined by the **Authority** under clause 9.25, at a pro rata daily rate for each day of the **official conservation campaign** that the **qualifying customer** is the **retailer's customer**; and
 - (b) at any other time during a public conservation period, to pay each of its qualifying customers at least the minimum weekly amount of compensation determined by the Authority under clause 9.25, at a pro rata daily rate for each day of the public conservation period that the qualifying customer is the retailer's customer; and
 - (c) to pay at least the minimum weekly amount, at a pro rata daily rate, for each day of a public conservation period that the qualifying customer is the retailer's customer
 - (i) to each of its qualifying customers in the South Island or New Zealand (as the case may be), for each of the qualifying customer's ICPs described in clause 9.21(1)(b):
 - (ii) no later than the end of 2 billing periods after the last day of a public conservation period.
- (1A) The compensation must be at least the minimum weekly amount determined by the **Authority** under clause 9.25, at a pro rata daily rate for each day of an **official conservation campaign** or **public conservation period** that the **qualifying customer** is the **retailer's** customer.
- (1B) A retailer must pay the compensation no later than the end of 2 calendar months after the last day of an official conservation campaign or public conservation period.
- (2) [Revoked]
- (3) For the purposes of this clause—
 - (a) compensation includes—
 - (i) money:
 - (ii) a credit on the qualifying customer's electricity account with the retailer; and
 - (b) the form of the compensation is to be determined by the **retailer**.

Minimum weekly amount of compensation

9.25 Authority must determine minimum weekly amount

- (1) In determining the minimum weekly amount that each **retailer** must pay to its **qualifying customers**, the **Authority** must take into account—
 - (a) the estimated value, in dollars/MWh, of the savings that the Authority expects all qualifying customers in the South Island or New Zealand, as the case may be, of all retailers, will achieve during an official conservation campaign; and
 - b) any other factors that the **Authority** considers relevant.
- (2) The **Authority** must—
 - (a) **publish** the minimum weekly amount; and
 - (b) review the minimum weekly amount—
 - (i) after each public conservation period ends; and
 - (ii) at least once every 3 years; and
 - (c) following a review under paragraph (b), ensure that it gives **participants** at least 3 months' notice if it determines a new minimum weekly amount.

Appendix B Draft new standing reserve supply determination

- B.1 As of 1 August 2019, our standing reserve supply determination is:
 - (a) made when "the system operator reports that available hydro storage is less than or equal to the Alert Release Boundary for New Zealand or the South Island as described in clause 6.1C of the security of supply forecasting and information policy"
 - (b) rescinded when "the system operator reports that available hydro storage is greater than the Alert Release Boundaries for both New Zealand and the South Island as described in clause 6.1C of the security of supply forecasting and information policy."
- B.2 If provision for South Island-only OCCs was removed the new standing reserve supply determination would be:
 - (a) made when "the system operator reports that available hydro storage is less than or equal to the Alert Release Boundary for New Zealand or the South Island—as described in clause 6.1C of the security of supply forecasting and information policy"
 - (b) rescinded when "the system operator reports that available hydro storage is greater than the Alert Release Boundaries for both New Zealand and the South Island Boundary as described in clause 6.1C of the security of supply forecasting and information policy."