

Renewables Obligation (Scotland)

**Consultation on enabling additional capacity
at large hydro generating stations**

March 2018

Consultation on amendments to the Renewables Obligation (Scotland)

Introduction

1. The Renewables Obligation (Scotland) (ROS) was introduced in 2002, alongside an equivalent Order covering England and Wales, and, later, Northern Ireland. It was designed to provide incentives to invest in renewable electricity generation, and has successfully supported a year on year increase in installed renewable capacity and generation – renewable electricity output in Scotland has almost trebled since 2006, and is now equivalent to 54% of the electricity consumed in Scotland.
2. Support provided by the ROS has also helped increase economic growth and job creation in Scotland. Scotland is internationally recognised as an area of energy excellence, with the low carbon and renewable energy sector and supply chain supporting 58,500 jobs in Scotland in 2015.

Purpose of this consultation paper

3. This consultation seeks views on an amendment to the Renewables Obligation (Scotland) Order 2009, the aim of which would be to permit additional “excluded capacity” at certain hydro generating stations. Operators of any such stations who choose to increase declared net capacity (DNC) beyond the current 20 MW threshold would be able to retain eligibility for Scottish Renewables Obligation Certificates (SROCs) in respect of electricity generated by their ROS accredited capacity only –SROCs will not be awarded in respect of any output attributable to the increased / additional capacity.
4. This consultation applies only to generating stations located in Scotland.

Additional excluded capacity at large hydro generating stations

5. The Scottish Government’s Energy Strategy¹, published on 20 December 2017, set two new targets for the Scottish energy system by 2030:
 - The equivalent of 50% of the energy for Scotland’s heat, transport and electricity consumption to be supplied from renewable sources.
 - An increase by 30% in the productivity of energy use across the Scottish economy.
6. Any and all means to encourage additional renewable electricity generation will help us progress towards our 50% ‘all energy’ target, especially where those can be achieved at no additional costs to consumers. While market mechanisms that influence the future energy mix in Scotland are generally reserved to the UK Government, the Scottish Government is determined to ensure that the policies and levers at its control are designed to maximise output from renewable generators across Scotland.

¹ <http://www.gov.scot/Publications/2017/12/5661>

7. After the closure of the UK ROs to new generating capacity, rules were created to allow generators to add capacity – which is not eligible for SROCs – known as “excluded capacity”.² However, article 17(4) of the Renewables Obligation (Scotland) Order 2009³ has the effect of limiting the ability of accredited hydro stations to deploy excluded capacity where that takes the DNC of any such station to over 20 MW.
8. This consultation seeks views on an amendment to the 2009 Order which would allow relevant hydro generating stations, in line with all other eligible generating stations and technologies, to increase their DNC above 20MW. The stations would not receive any SROCs for the electricity generated by the “excluded” capacity.
9. As the ROS is now closed to new capacity (subject to certain grace periods), this will only affect stations with existing accreditations. This applies to all existing and accredited ROS hydro generating stations below 20MW DNC.
10. This would bring arrangements for hydro generating stations in line with all other technologies and secure as much renewable generation in Scotland as possible, while creating no additional costs for consumers.

Strategic Environmental Assessment (SEA)

11. We have considered the impact that this proposed change would have on environment and statutory consultees. This consultation does not require a SEA.

Your response

12. The Scottish Government welcomes the views of consultees on the proposed amendments to the ROS as set out above.

² https://www.ofgem.gov.uk/system/files/docs/2017/03/ro_guidance_for_generators-130317.pdf

³ <https://www.legislation.gov.uk/sdsi/2009/9780111003268/contents>

Amendments to the Renewables Obligation (Scotland) - Technical Note

Summary

This note summarises the potential impacts of increased hydro electricity generation capacity in Scotland, occurring as a result of the amendments proposed by this consultation.

The system-wide impacts of this legislative change have been assessed in terms of:

1. Electricity generation from renewable sources
2. Greenhouse gas emissions
3. Cost

The Scottish Electricity Dispatch Model (SEDM) was used to model three scenarios, outlined below. These scenarios cover a range of estimates concerning how much additional hydro DNC would be added to the system, from 2019 onwards, and are based on the latest intelligence from the key operators in this sector:

- i. Low – zero additional hydro capacity (counterfactual)
- ii. Central – 10 MW additional hydro capacity
- iii. High – 50 MW additional hydro capacity

High and low impact estimates have been modelled for each of the scenarios above, reflecting the range of actual observed load factors in Scottish hydro stations in recent years.

Electricity Generation from Renewable Sources

The introduction of additional hydro generation capacity could result in an increase in electricity generated from renewable sources in Scotland. Table 1 outlines the potential (GWh) impacts on renewable electricity generation in Scotland of each of the three scenarios outlined above.

Table 1: GWh Renewable Electricity Generation

Scenario	Additional Hydro Capacity (MW)	Additional Renewable Generation (Annual, GWh)	Additional Renewable Generation (Annual, GWh)
		Low	High
Low	0	0	0
Central	10	30	80
High	50	150	400

The central and high scenarios represent between 0.6-3.0% of Scotland's existing hydro generation capacity, and would contribute towards Scotland's renewable electricity target.

Additional hydro generation could decrease generation levels of other technologies, based on the merit order. From 2019 onwards, the modelling suggests that generation from Combined Cycle Gas Turbines is displaced.

Greenhouse Gas Emissions

The introduction of additional hydro generation capacity could result in a reduction of Greenhouse Gas Emissions (CO₂) in Scotland through displacement of higher-emitting, fossil fuel generation. Table 2 outlines the potential CO₂ impacts of each of the three scenarios outlined above.

Table 2: CO₂ displacement

Scenario	Additional Hydro Capacity (MW)	CO ₂ Displaced (Annual, ktCO ₂)	
		Low	High
Low	0	0	0
Central	10	12	30
High	50	60	150

The central and high scenarios are expected to reduce CO₂ emissions, contributing towards progress on Climate Change targets.

Cost

The introduction of additional hydro generation of the levels set out within the three scenarios covered is not expected to result in any changes to the cost of electricity within the energy system.

Responding to this Consultation

We are inviting responses to this consultation by **Tuesday 12 June 2018**. The time period for this consultation is 12 weeks.

Please respond to this consultation using the Scottish Government's consultation platform, Citizen Space. Your views and response to this consultation can be submitted online at <https://consult.gov.scot/energy-markets/renewables-obligation>.

You can save and return to your responses while the consultation is still open. Please ensure that consultation responses are submitted before the closing date of **Tuesday 12 June 2018**.

If you are unable to respond online, please complete the Respondent Information Form (see "Handling your Response" below) to:

ROS2018@gov.scot with the subject heading 'ROS 2018'.

Handling your response

If you respond using Citizen Space (<http://consult.scotland.gov.uk>), you will be directed to the Respondent Information Form. Please indicate how you wish your response to be handled and, in particular, whether you are happy for your response to be published. If you ask for your response not to be published, we will regard it as confidential, and we will treat it accordingly.

All respondents should be aware that the Scottish Government is subject to the provisions of the Freedom of Information (Scotland) Act 2002 and would therefore have to consider any request made to it under the Act for information relating to responses made to this consultation exercise.

Next steps in the process

Where respondents have given permission for their response to be made public, and after we have checked that they contain no potentially defamatory material, responses will be made available to the public at <http://consult.scotland.gov.uk>.

If you use Citizen Space to respond, you will receive a copy of your response via email.

Following the closing date, all responses will be analysed and considered along with any other available evidence to help us. Responses will be published where we have been given permission to do so.

Comments and complaints

If you have any comments about how this consultation exercise has been conducted, please send them to ROS2018@gov.scot with the subject heading 'ROS 2018'.

Scottish Government consultation process

Consultation is an essential part of the policy-making process. It gives us the opportunity to consider your opinion and expertise on a proposed area of work.

You can find all our consultations online: <http://consult.scotland.gov.uk> Each consultation details the issues under consideration, as well as a way for you to give us your views, either online, by email or by post.

Consultations may involve seeking views in a number of different ways, such as public meetings, focus groups, or other online methods such as Dialogue (<https://www.ideas.gov.scot>)

Responses will be analysed and used as part of the decision making process, along with a range of other available information and evidence. We will publish a report of this analysis for every consultation. Depending on the nature of the consultation exercise the responses received may:

- indicate the need for policy development or review
- inform the development of a particular policy
- help decisions to be made between alternative policy proposals
- be used to finalise legislation before it is implemented.

While details of particular circumstances described in a response to a consultation exercise may usefully inform the policy process, consultation exercises cannot address individual concerns and comments, which should be directed to the relevant public body.

Consultation on amendments to the Renewables Obligation (Scotland)

RESPONDENT INFORMATION FORM

Please note this form **must** be completed and returned with your response.

Are you responding as an individual or an organisation?

- Individual
 Organisation

Full name or organisation's name

Phone number

Address

Postcode

Email

The Scottish Government would like your permission to publish your consultation response. Please indicate your publishing preference:

- Publish response with name
 Publish response only (without name)
 Do not publish response

Information for organisations:

The option 'Publish response only (without name)' is available for individual respondents only. If this option is selected, the organisation name will still be published.

If you choose the option 'Do not publish response', your organisation name may still be listed as having responded to the consultation in, for example, the analysis report.

We will share your response internally with other Scottish Government policy teams who may be addressing the issues you discuss. They may wish to contact you again in the future, but we require your permission to do so. Are you content for Scottish Government to contact you again in relation to this consultation exercise?

- Yes
 No



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