

A Summary of Consultation Responses on the Caithness Moray Needs Case

We received 25 responses from stakeholders on our Needs Case consultation. All respondents supported the proposed standalone subsea cable (Option 1a). A couple of respondents commented that having a minded-to position on Option 1a would not preclude delivering Option 1b (the subsea cable combined in future with a downstream reinforcement across the B1 boundary), which has comparable consumer benefits to onshore Option 2b. One respondent thought the issue of whether the link could be delivered more efficiently through a competitive framework should be examined.

Respondents to the consultation came almost exclusively from Scotland (except National Grid, TI and RWE Innogy UK) and included: Transmission Owners, System Operator, generation developers, industry bodies, local councils, Chambers of Commerce, regional development agencies, a Scottish Member of Parliament, statutory environmental and heritage bodies, as well as individuals. The main arguments for the proposal and against an onshore alternative are summarised in the table below.

Benefits of the HVDC proposal	Disadvantages of an onshore option
Allows timely deployment of renewables currently restrained by lack of network capacity	Will result delay delivery by at least eight years if not longer
Will not undermine investor confidence in Scottish and Island renewables (including wave/tidal)	Will have significant impacts on visual amenity
There will be large economic benefits to the local economy and islands	There is a greater chance an onshore option will result in higher costs for consumers
Has a strong positive Net Present Value and doesn't preclude completing option 1b, which has a comparable NPV to option 2b	Will miss 2020 renewable targets and it may cost consumers to pay for the replacement renewable energy from other sources to meet the targets
	There are significant costs associated with outages that haven't been accounted for (ie delays, constraint costs)

In our consultation, we asked for views on the following issues:

- whether the proposed solution is in the interests of consumers;
- whether the timing and scale of SHE Transmission's proposal are appropriate;
- what are the costs of generation constraints in Northern Scotland;
- what were the wider benefits associated with SHE Transmission's proposal; and
- whether we had identified the relevant issues to consider.

Responses to each of the above questions are summarised below.

Is proposed solution is in the interests of consumers?

Almost all respondents commented that SHE Transmission's proposal will result in the timely deployment of renewable resources in the region. One respondent stated that by addressing the limited capacity in northern Scotland, over 1.8GW of generation with conditional contracted dates in the area can be built, which will help towards the 2020 renewable targets.

Many respondents argued that if the link was not built, there would be a number of negative impacts. First, because the island links (ie Shetland and Orkney) are dependent on the CM reinforcement, if it did not go ahead, there would be a number of economic costs including reduced investment in renewables locally.

Second, some respondents argued that if a link was not built it would also undermine the development of wave and tidal energy in GB, which would have a negative impact on the regional economy. Third, because the onshore alternative could only be delivered in later in 2026, there would be a wider impact on investor confidence in renewables in Scotland. One respondent argued that a delay in delivering additional capacity would influence which generation scenario is most likely to materialise. The respondent argued that for example, Option 2b is more likely to cause SP, SSP or reduced deployment whereas choosing Option 1a or 1b would increase the probability of a gone green scenario occurring.

Many of the respondents also highlighted significant drawbacks associated with an onshore reinforcement. Most respondents commented that there would be a sizeable delay if this solution was chosen. A few respondents (including National Grid) thought that an eight-year delay might be a bit optimistic, with one response qualifying the risks of obtaining timely planning approvals and the issues involved with considerable construction outages. A couple of respondents felt that the costs, delays and increased constraint costs caused by the outages should also be considered as part of our assessment of the options. A number of respondents noted that a delay, associated with an onshore option would result in GB missing the 2020 renewable energy targets. Moreover, assuming the subsea cable is not constructed and we still intend to meet the targets, we would need to acquire the energy from other sources which would be costly to consumers.

Another drawback of the onshore option, highlighted by some of the respondents, is the impact of building a new overhead line on visual amenity. A 275kV overhead line would have larger towers than the current 132kV, and hence would have a negative effect on areas of natural beauty in the Caithness area and other regions. Finally, a couple of respondents argued that the relatively poor scoping of the onshore costs could lead to significant increases in the overall cost of the project which would be bad for consumers.

Are the timing and scale of SHE Transmission's proposal appropriate?

All respondents who provided responses to this question argued that in terms of timeliness, the link should be delivered as soon as possible. Some respondents said that a delay in delivery would lead to uncertainty in future connections with many projects either being delayed or cancelled. One respondent said that even a one-year delay could have a significant impact on the viability of its projects. The uncertainty caused by a delay would also cause investor uncertainty, which would negatively affect renewable development, particularly on the Scottish islands. A delay could also expose consumers to the risks of continued and increasing constraint costs. One respondent stated that northern Scotland (B0 and B1 boundaries) had approximately £65 million of constraint costs (2011 to 2013),

which would increase if there was a delay. Another respondent argued that a delay could negatively affect over 300 jobs in Orkney, and with a reinforcement only coming online in 2026, those workers would move to develop projects outside GB.

A few respondents commented on the scale of SHE Transmission's proposal, and in particular the anticipatory assumptions used by SHE Transmission. One respondent noted that KEMA considers SHE Transmission's approach in this regard to be "reasonable". Others argued that the scale was necessary, and that it was needed to ensure that the link was future-proofed.

What are the costs of generation constraints in Northern Scotland?

NGET thought the costs of constraints ranged between £100-125/MWh.

From the other responses, one respondent stated that they did not have the enough information to make an assessment of this type. Another said that there were concerns about the differences in costs between SHE Transmission (£130/MWh) and Pöyry (£40-90/MWh), but these possibly indicated uncertainty in future policy (eg contracts for difference). Several of the respondents that answered this question think that Pöyry's estimate is probably too low.

What were the wider benefits associated with SHE Transmission's proposal?

Most of the respondents cited some form of wider benefits that should be included as part of the needs case assessment. A number of respondents noted that the development of a HVDC cable would result in lower carbon emissions and significantly lower visual amenity and landscape impacts. This is particularly relevant as there are several landscape designations in the area. Moreover, building the subsea cable will help to meet the UK's 2020 targets. Therefore, there will be cost savings involved in not having to use more expensive offshore wind to meet these.

Respondents also mentioned some economic benefits. These included: increased investor confidence, more economically efficient future reinforcements in the area (eg Shetland), and economic benefits to the islands. One respondent suggested that these benefits could spread to the rest of the UK. It cited Baringa's analysis (DECC/Scottish Government 2013) that 180 MW of renewable generation in Orkney by 2020 would create 1563 jobs across the UK as a whole with tidal accounting for 965 of these jobs.

Whether we have identified the relevant issues to consider

Respondents mentioned areas where more analysis could be done or if specific variables needed greater emphasis. Many of the respondents argued that insufficient weight and consideration had been put on the potential economic impacts of our decision. On the issue of wave and tidal, a few of the respondents asked whether we had considered the impact a significant delay might have on GB's role as a leading figure in this field.

Another respondent thought that we have not fully considered the costs of outages to consumers that would come from building an onshore option. Some respondents questioned whether sufficient thought had been given to the socio-economic effects of an eight-year delay on the islands (eg investor confidence, job losses). On this point, a couple of respondents wondered whether we had seen the amount of capacity currently contracted on the islands which will rely on this link.