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Kersti Berge
Ofgem
9 Millbank
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By email to: SWW@ofgem.gov.uk

28 May 2014

Dear Kersti,

Consultation on SHE Transmission's proposed Caithness-Moray Project

In your open consultation letter of 2 April 2014 you raise a number of points in relation to the proposed Caithness-Moray transmission project that is being developed by SHE Transmission. In the letter you ask whether there are any other relevant issues to the needs case assessment that should be examined.

We believe that there is one particularly important issue that needs to be examined, and that is whether the project could be delivered more efficiently in a competitive framework, for instance one based on the proven OFTO model with the suggested extensions to the model to allow delivery of new build projects.

Your open letter expresses concern at the high cost estimates provided by SHE Transmission and notes that this concern "is compounded now that SHE Transmission is at preferred bidder stage with a supplier for the cable and converter equipment [which means] that there might not be as much competitive pressure". We agree with this concern, and would further question whether SHE Transmission has an incentive to deliver this project at the least cost for consumers.

The cost savings from introducing competition are, as we shall show below, potentially very substantial. In the open letter Ofgem expresses its concern that the cost-benefit case for the project is sensitive to even a 10% change in costs¹. This implies that introducing competition would significantly improve the need case for reinforcement, and likely remove the current difficulties associated with the project approval.

Cost of Project Relative to Competitive Benchmark

The estimated cost of £1.3bn covers one HVDC link of 160km, six new substations², 62km of 275kV reconductoring and building 32km of 275kV line. While the

¹ "SHE Transmission's analysis shows that an increase in costs of only 10% could erode much of the positive benefits ... A larger increase would most likely turn the project's net present value negative"

² One 400kV substation, four 275kV substations and one 132kV substation.

breakdown of this cost estimate have been redacted, all of our analysis suggests that in a fully competitive situation this cost would be substantially reduced.

We have focused below on the cost of the HVDC link which represents the majority of the £1.3bn figure. However we expect that savings will also be possible on the substation and overhead line assets where DNV KEMA has commented that SHE Transmission's prices are "high end".

SHE Transmission's price for the HVDC equipment is not stated explicitly, but DNV KEMA do state that the price is higher than their benchmark of £642m and "at the higher end" of a reasonable range, which implies that it must be substantially above £642m. This is for a link which is 160km long with a rating of 800MW at one end and 1200MW at the other end. For purposes of comparison it seems reasonable to average these ratings and to compare to a 1000MW HVDC link.

A suitable comparator is provided by the Nemo project, a 1000MW 134km HVDC link where Ofgem has recently published³ an "economic and efficient provisional cost". This cost is divided into a converter station cost (€220m), a cable cost (€180m) and other costs (€30.1m). It is therefore a simple matter to increase the cost of cable pro-rata to the longer length on Caithness-Moray: this increases the cable cost to €215m. On this basis, therefore, the economic and efficient cost of the Caithness-Moray HVDC link would be €465m, which is £378m at the current exchange rate. This is likely to be around half of the price estimated by SHE Transmission.

There is therefore a strong case that the current regulatory regime, where SHE Transmission is not exposed to competitive pressures, has resulted in capital costs of around twice the economic and efficient level as assessed by Ofgem. We believe that introducing a competitive regime will give transmission bidders the incentive necessary to drive costs down to an efficient level.

Effective Cost of Project to Consumers

In addition to the reduction in underlying capital costs, the introduction of competition can be expected to reduce the costs to consumers even if the capital cost is unchanged – i.e. a reduction in the tariffs born by consumers relative to the associated capital costs.

Evidence for this comes from the analysis undertaken for Ofgem by BDO and CEPA⁴ of the benefits arising from the first round of tendering under the OFTO regime. In this case the transfer value of the assets was set by Ofgem, so all of the benefits arose from a lower cost of capital, more efficient operations and more effective pass-through of these benefits to consumers.

³ See table 2 in the Ofgem report "Cost assessment consultation for the proposed GB-Belgium interconnector, Nemo".

⁴ See Ofgem open letter of 13 May 2014: "Evaluation of OFTO Tender Round 1 Benefits"

In the OFTO Tender Round 1, assets with a value of £1.1bn were transferred to OFTOs, and the analysis calculates that the benefit of doing this relative to “price control based solutions” was £200-250m “driven primarily by competition leading to the adoption of more efficient operating strategies and the revelation of efficient costs”. This implies that competitive ownership of transmission should give a saving equal to 18-23% of capex even without any saving in the underlying capital cost.

Conclusions

It seems likely that in the Caithness-Moray case there will be both a saving in the underlying capital cost, and a further saving from reduced tariffs relative to the capital cost. Total savings can be expected to be on the order of hundreds of millions of pounds, and the need case for the project would no longer be marginal.

In addition, arguments against the introduction of competition seem particularly weak:

- i) Integrating competitively-bid parts of the project with the existing grid would not be complex. The HVDC link clearly forms a distinct network element, similar to OFTOs. Even the new substations are relatively easy to deal with separately as they are entirely new elements, built “offline” (i.e. in a site isolated from the existing grid) rather than as extensions to existing live sites.
- ii) Although some time would be required to undertake a competitive process, we believe that it is better to use the time available to bring in competition, which should then provide a clear economic case to build the project, rather than spending time reconsidering what currently appears to be a marginal economic case.

On the basis of the above, we recommend that the need case assessment be extended to include an assessment of opening the project to competition.

Please let me know if you have any questions or if you wish to discuss any aspects of this letter in more detail.

Yours sincerely



Sean Kelly
Partner