

Transmission licensees,  
generators, suppliers, consumer  
groups and any other party who  
has an interest in the  
transmission arrangements

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Date: 18 July 2013

Dear colleague,

**The Authority's "minded-to" position on the Needs Case for the proposed Kintyre-Hunterston reinforcement under the Strategic Wider Works process**

This letter sets out the Authority's "minded-to" position on the Needs Case for the proposed reinforcement around the Kintyre peninsula (in the South West of Scotland), which was submitted by Scottish Hydro Electric Transmission plc (SHE Transmission). The proposed reinforcement is designed to deliver approximately 260MW of capacity at an estimated cost of around £212 million and is planned to be completed in 2016.

This letter is structured as follows:

- First, we provide a summary of the Strategic Wider Works (SWW) process and the Authority's "minded-to" position on the Needs Case for the proposed reinforcement from Kintyre to Hunterston.
- We set out further detail of the Needs Case for the proposed reinforcement and summarise our recent consultation (including the responses received).
- We then set out our assessment of the proposal and the reasons for our "minded-to" position.
- Finally, we set out the next steps in our assessment process.

**Summary of the SWW process and Authority's "minded-to" position**

During the RIIO-T1 price control review (which took effect from 1 April 2013) there was some uncertainty around both the need for, and the cost of, a number of major reinforcements to the electricity transmission system. As a result we put in place SWW arrangements for considering and determining potential revenue adjustments during the price control period to enable the delivery of SWW outputs (which are significant increases in transmission capacity).

Our assessment of the Needs Case for the Kintyre-Hunterston proposal, informed by our recent consultation, focussed on whether the investment is necessary and likely to be economic over the long term. This included consideration of the scope and timing of the project.

The Authority's "minded-to" position on the Needs Case is that:

- There is a well justified need for reinforcement of the transmission system in the Kintyre area.
- The delivery timetable put forward by SHE Transmission appears to be appropriate, given the expected generation in the area.

- The technical scope of the option for reinforcement being proposed appears to be an appropriate first step for the need identified.
- We think it is likely to be in the interests of existing and future consumers. The scale of the benefit is dependent on the generation that connects in the area, but could be of the order of £526 million over the life of the project.

Our “minded-to” position on the Needs Case is subject to further consideration as part of our detailed Project Assessment, which will include consideration of the efficient costs of delivering the new Strategic Wider Works (SWW) output.<sup>1</sup> We are currently undertaking the Project Assessment, the second part of our assessment under the SWW arrangements, to assess whether the proposed technical plans, delivery approach and costs of the proposal are efficient.

### **The Needs Case for the proposed Kintyre Hunterston reinforcement**

The existing transmission network in the Kintyre-Hunterston area does not currently comply with the requirements of the National Electricity Transmission System Security and Quality of Supply Standard (NETS SQSS) for the amount of generation connected in the area. In 2010 we granted SHE Transmission a derogation from certain aspects of the SQSS in order to enable additional generation to connect to the network ahead of further reinforcements. We recognised at that time that SHE Transmission was developing plans for future reinforcement works to achieve compliance in the longer term.

The SWW arrangements include a requirement upon the licensee to provide notice to the Authority of a project for consideration under the SWW mechanism, including:

- A Needs Case submission which should outline the justification for the project (including the proposed technical scope and timing) and an explanation of how the proposed reinforcements would meet the required need; and
- A detailed project submission which includes detailed plans on design, cost and risks for the project along with evidence that the proposed costs are efficient.

On 8 January 2013 SHE Transmission submitted a Needs Case to us for a proposed reinforcement of the B3 boundary (Argyll and Kintyre peninsula) to allow the export of power from new renewable generation in the area. The proposed reinforcement would deliver approximately 260MW of additional capacity.<sup>2</sup> The proposed project,<sup>3</sup> expected to cost £212 million<sup>4</sup> and planned to be completed in 2016, comprises:

- 2 x 220kV 240MVA AC subsea cables from Crossaig to SP Transmission Ltd’s (SPT) existing substation at Hunterston;
- A new 132/220kV substation, including quad boosters, at Crossaig; and
- Construction of 13km of new 132kV double circuit overhead line between Crossaig and Carradale (and dismantling of the existing 132kV overhead line).

The proposed reinforcement is largely located in SHE Transmission’s licensed Transmission Area but 3.5km of cable and associated substation works are located in SPT’s licensed area at Hunterston. SPT will complete the required works in its licensed area and their share of the works has been included in the RIIO-T1 baseline allowance for SPT, and therefore will not be subject to the SWW process.

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<sup>1</sup> SWW outputs are defined as increases in boundary transfer capability (measured in accordance with the Security and Quality of Supply Standard), or equivalent additional transmission capacity where there is no boundary.

<sup>2</sup> As with the existing capacity the additional capacity can vary by season.

<sup>3</sup> Additional information can be found on the SHE Transmission website

<http://www.sse.com/KintyreHunterston/ProjectInformation/>

<sup>4</sup> £212million relates to the expected SHE Transmission costs. SPT’s costs have been allowed for in their baseline allowance spend.

A description of the proposed reinforcement including a diagram showing the proposed reinforcement is provided in Annex 1.

### **Our consultation on the Needs Case**

We published an open letter consultation on the Needs Case for the Kintyre-Hunterston project on 18 April (along with our consultants' report). This letter set out (and asked for responses to) our initial assessment of the Needs Case. Our initial view was:

- That there was a well justified need for reinforcing the transmission system in the Kintyre area.
- That the timescale set out for delivery appeared to be appropriate.
- The scope of the reinforcement being proposed by SHE Transmission was appropriate.
- The project was expected to be in the interests of existing and future consumers.

The consultation closed on 13 June and we received eight responses. One response is confidential but the others have been published on our website<sup>5</sup>. A summary of these responses has been included in Annex 2 to this letter. The key points coming out of the responses to consultation include the following:

- All respondents were supportive of the need to reinforce the transmission system around Kintyre.
- Three respondents believe that the proposed link is too small and that a third cable should be considered. Another two respondents indicate that the proposal is a 'first step' and that further reinforcement (a third cable and/or reinforcement of the existing overhead line) should be considered. These concerns around the size of the reinforcement stem from a belief that the generation assumptions may be too pessimistic.
- Two respondents indicate that better stakeholder engagement by SHE Transmission would be welcomed – particularly in coming to its position on the generation assumptions.
- Some respondents also commented on the need to give certainty to the market (generators in particular) about grid capacity in the area. Some of these respondents expressed concern about the impact of the regulatory process on that certainty.

Our view on these points is set out below:

- We note the views on the size of the reinforcement (indeed this issue was raised by our consultants). However, if SHE Transmission were to reconsider the design at this stage it would likely cause a significant delay in delivery (redesign, planning permission, renegotiating contracts). Such a delay would be expected to result in additional constraint costs being paid by consumers as well as delays in the renewable generation connection. The generation currently connected and contracted to connect will not utilise the full capacity of the proposed link meaning that there is some scope for future generation to connect. Therefore, although we consider that further reinforcement might be necessary in order to fully realise the potential for generation in the area, we consider that the proposed project is an appropriate first step. This view is supported by our consultants.
- If further capacity is needed in the longer term this could be achieved either by adding a third subsea cable or by reinforcing the overhead lines on the Kintyre

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<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=1&refer=Networks/Trans/ElecTransPolicy/CriticalInvestments/strategic-wider-works>

peninsula. The appropriateness of the solution will depend on the scale, precise location and timing of new generation. We consider that this first step will allow flexibility for further reinforcement if necessary whilst minimising the risk of stranded assets.

- Based on the comments received during the consultation (and other discussions) we agree that improved stakeholder engagement from SHE Transmission is needed going forward.
- The RIIO-T1 Final Proposals set out the rationale behind the SWW process and the expected timescales involved. The process was designed to ensure a stable regulatory framework whilst allowing flexibility around investments that were still uncertain during the price control.

### **Our assessment of the proposed Kintyre-Hunterston transmission reinforcement project**

Consistent with the RIIO-T1 principles,<sup>6</sup> we have taken a proportionate approach in our assessment of SHE Transmission's Kintyre-Hunterston proposal focussing on our review on the aspects that we consider need the most consideration.

#### *The overall need for reinforcement*

In assessing the Needs Case we have considered whether there is a well justified investment case for the reinforcement against a credible range of uncertainties. In its Needs Case submission, SHE Transmission presented evidence which included cost benefit analysis for a range of generation scenarios. In terms of the overall need for the reinforcement:

- Our initial view (set out in our April letter) was that given the scale of generation expected to connect in the Kintyre area over the coming year there is a need to reinforce the transmission system.
- All respondents to our April consultation letter were supportive of the need to reinforce the network.
- Considering the above, our view remains that **there is a well justified need** for reinforcement of the transmission system in the Kintyre area.

#### *The scope of the reinforcement*

In assessing the Needs Case we have considered whether the technical scope and timing of the delivery proposed by the Transmission Owner (TO) are sufficiently well justified. In doing so we have considered whether SHE Transmission's plans are likely to represent long term value for money for existing and future consumers.

SHE Transmission has set out in its Needs Case submission a variety of reinforcement options that it has considered (these are summarised in the Pöyry report published alongside this letter). These options vary in technical scope, offer different levels of additional capacity, capital costs and delivery timescales. In terms of the scope of the reinforcement:

- Our initial view, based on the options presented by SHE Transmission and reviewed by our consultants, is that the preferred option SHE Transmission is proposing to take forward appears to be appropriate at this time.
- A number of respondents believe that the proposed reinforcement will not provide sufficient capacity and would be supportive of a larger project (for example, the inclusion of a third cable).
- As set out earlier, although we consider that further reinforcement might be necessary in order to fully realise the potential for generation in the area, we

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<sup>6</sup> The RIIO principles (set out the RIIO Handbook published on our website) include proportionate treatment, open and transparent decision making, and ensuring accountability to stakeholders. Adopting these principles within the SWW arrangements will ensure that individual projects receive an appropriate level of scrutiny.

consider that the **proposed project is an appropriate first step.**

#### *Timing of delivery*

In assessing the timing of reinforcements of the transmission system we consider the costs to consumers (both existing and future consumers) associated with delivering capacity too early (incurring financing costs earlier than necessary and risk of asset stranding) or too late (increased constraint costs). With regard to the Kintyre-Hunterston proposal, SHE Transmission envisages that key assets will become available, releasing transmission capacity, in late 2015 (although work will continue during 2016).

In terms of timing of delivery:

- Our initial view, based on the cost benefit analysis presented by SHE Transmission and reviewed by our consultants, is that the delivery timescale appears to be appropriate in terms of providing additional transmission capacity to export power from generation connected in the area in a cost efficient manner.
- Some respondents commented that they believe the link should have been delivered earlier. However, we note that the timetable for delivery in 2016 is challenging and consider that it would not be possible to bring forward the delivery date.
- Considering the above our view remains that the proposed **timescale appears to be appropriate.**

#### *Impact on consumers*

Our principal objective is to protect the interests of both existing and future consumers. Therefore in coming to our "minded-to" position on the Needs Case for the proposed Kintyre-Hunterston reinforcement we have considered the impact the proposal is expected to have on consumers:

- Cost benefit analysis was carried out by SHE Transmission's consultants to consider the expected balance between operational costs associated with not reinforcing the network (ie constraint costs) and the cost of the proposed reinforcement. The central case (of generation assumptions) presented indicated a net benefit of the project of £526 million, with the most pessimistic case considered (which included only connected and contracted generation) resulting in a small dis-benefit of £2 million. Our initial view (set out in the April consultation) was that the project was likely to be in the interests of consumers.
- Respondents to our April consultation letter did not address the impact on consumers explicitly. However respondents were overwhelmingly supportive of the need for reinforcement in order to meet the needs of expected generation in the area.
- Based on the analysis summarised above we also consider that the project is likely to be in the interests of existing and future consumers to the order set out above.
- Given the project is intended to provide additional transmission capacity to export power from generation in the Kintyre area, our "minded-to" position is that the project is likely to have a positive impact on the ability to meet sustainable development targets, subject to our full Project Assessment and final funding decision.

#### **The Authority's "minded-to" position on the Needs Case**

For the reasons set out above, our "minded-to" position on the Needs Case is that:

- There is a well justified need for reinforcement of the transmission system in the Kintyre area.

- The timetable put forward by SHE Transmission appears to be appropriate, given the expected generation in the area.
- The technical scope of the option for reinforcement being proposed appears to be an appropriate first step for the need identified.
- We think it is likely to be in the interests of existing and future consumers.

Our “minded-to” position is subject to further consideration as part of our detailed Project Assessment which will include consideration of the efficient costs of delivering the new SWW output.

### **Next steps in our Project Assessment**

In the next stage of our assessment (referred to as the Project Assessment) we examine the forecast total costs, outputs and scheduled delivery. As set out in our April consultation letter, we have been progressing the Project Assessment in tandem with the consultation on the Needs Case. The Project Assessment focuses on whether the TO has developed a sufficiently robust development plan and risk management strategy as well as assessing the efficiency of the proposal. We intend to publish a consultation on the Project Assessment including the specifics of funding later this month.

Our final decision on the appropriate adjustment to revenues allowed and outputs to be delivered under RIIO-T1 would be subject to a licence modification. This will include statutory consultation on the proposed licence modifications to SHE Transmission’s electricity transmission licence. The modification would be intended to amend the licence to reflect any new SWW output and associated revenue adjustment. This licence obligation would place a requirement on SHE Transmission to deliver the specified increase in transmission capacity within the agreed timescales.

Any questions about the content of this letter should also be addressed to Sheona Mackenzie in the first instance ([SWW@ofgem.gov.uk](mailto:SWW@ofgem.gov.uk); telephone 0141 331 6019).

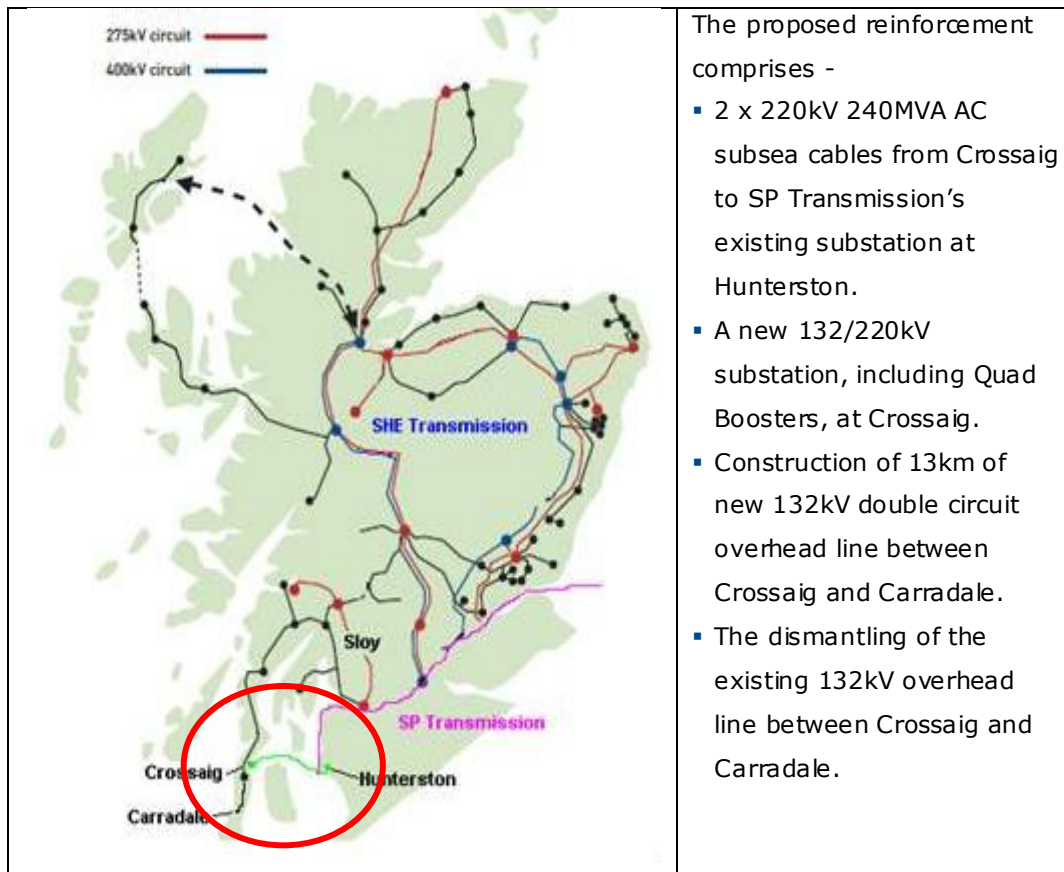
Yours sincerely,

Kersti Berge

**Partner – Electricity Transmission**

## Annex 1: Summary of proposed Kintyre-Hunterston reinforcement

On 8 January 2013 SHE Transmission submitted a Needs Case to us for a proposed reinforcement of the B3 boundary (Argyll and Kintyre peninsula) to allow the export of additional renewable generation in the area. The proposed reinforcement is largely located in SHE Transmission's licensed Transmission Area but 3.5km of cable and associated substation works are located in SPT's licensed area at Hunterston. SPT will be completing the required works in its licensed area and SPT's share of the works has been included in its RIIO-T1 baseline allowance and therefore will not be subject to the SWW process.



## Annex 2: Summary of consultation responses

Full responses of non-confidential responses are available on our website.

<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=1&refer=Networks/Trans/ElecTransPolicy/CriticalInvestments/strategic-wider-works>

Respondent	Supportive	Main points made in response
<b>EDF Energy</b>	Yes	<ul style="list-style-type: none"> <li>• Main point is the need for quality Needs Cases from TOs which robustly justify the preferred option (it noted the SWW framework is not a new concept – TII etc). Better Needs Cases could shorten assessment time and give greater certainty for the industry.</li> <li>• Welcome our decision to undertake the Project Assessment concurrently with this consultation period, and with consultation responses feeding into our final decision.</li> <li>• Would welcome confirmation in our summer update of when we plan to publish our decision and the licence consultation.</li> </ul>
<b>E ON UK plc</b>	Yes	<ul style="list-style-type: none"> <li>• Link not the appropriate size (should be larger: a third cable and rebuilding OHL between Invernay and Crossaig to deliver an additional 200MW which would cost £200m by 2020).</li> <li>• E ON has identified 681MW of capacity in scoping and awaiting planning decisions (excluding sites not already in the public domain).</li> <li>• Want the TO to work with stakeholders to gather a firmer generation estimate.</li> </ul>
<b>Renewable UK</b>	Yes	<ul style="list-style-type: none"> <li>• Concerned that media reports of cessation of government financial support after 2020 had been given weight in the decision (but note it wouldn't have affected the Needs Case). They believe this is not in line with government policy.</li> <li>• They also plan to share observations on the SWW process in due course, and request that lessons learned from this project are fed back into our process.</li> </ul>
<b>Scottish Power Energy Networks</b>	Yes	<ul style="list-style-type: none"> <li>• Supportive of the timing, technical scope, and need for the reinforcement.</li> <li>• SP note the minor modification to SHE Transmission's licence required for this project (to enable ownership of the cable and transition joint at Ardrine Bay), and support the recent application for a licence change to enable this.</li> </ul>
<b>Scottish Power Renewables</b>	Yes	<ul style="list-style-type: none"> <li>• Proposal is a first step in an incremental pathway - there is a very robust Needs Case.</li> <li>• Encourage concluding the reinforcement as a top priority to help support the Government's energy policy objectives.</li> <li>• They agree with Poyry that the Needs Case is based on a pessimistic view of generation profile. They have several onshore wind projects in the area in the early stages of development which will not be included in the generation considered.</li> <li>• They recommend "stress testing" the proposal by considering scenarios that might need additional flexibility in the design to accommodate future growth in capacity.</li> <li>• They encourage us to conclude on the case swiftly to give the market some certainty of grid capacity in this area, even to the point of exploring opportunities to fast track and "lock-in" the Needs Case as early as possible given the strong case.</li> </ul>

<b>Respondent</b>	<b>Supportive</b>	<b>Main points made in response</b>
<b>Argyle and Bute Council and the Argyle and Bute Renewable Alliance</b>	Yes	<ul style="list-style-type: none"> <li>• Size - agree that the option of a third cable should be explored.</li> <li>• Have been working with SSE on the generation background case for over 5 years. They express some concerns about the profiling of generation (too conservative).</li> <li>• Timing – optimal to have built it sooner, and “the process” has caused delays.</li> <li>• They believe the Needs Case, and generation projects considered, should have been made available with the consultation.</li> <li>• Note that Highlands and Islands Enterprise, the Argyle and Bute Renewables Alliance and the Highlands and Islands Transmission Working Group all support the Needs Case.</li> <li>• They have asked for clarification (from SHE Transmission) on the size of the “insignificant” projects mentioned – as they believe they may not be being treated in the same way as projects are normally treated in the area.</li> <li>• They have concerns as to the timing of the assessment of the Needs Case. They have asked why SPT’s part is baseline in RIIO-T1 and SHE Transmission’s is SWW.</li> </ul>
<b>Renewable Energy Systems Ltd</b>	Yes	<ul style="list-style-type: none"> <li>• Link not the appropriate size (should be larger).</li> <li>• RES own two large onshore wind farms on the Kintyre peninsula near the Crossaig substation, and have initiated formal agreements with SHEPD and SHE Transmission. Through these discussions they know the project is already close to being fully utilised.</li> </ul>