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FAO: Anna Rossington Ofgem Ofgem E-Serve 9 Millbank London SW1P 3GE

02/09/11

#### Dear Sir/Madam,

### Response to Ofgem E-Serve Northern Isles New Energy Solutions (NINES) Project Consultation

The Shetland Renewable Energy Forum would like to thank Ofgem for consulting stakeholders on developments around the Northern Isles New Energy Solutions project. Our forum is a membership organisation which acts to represent all those with an interest in renewable energy technology in Shetland.

Around Shetland there is genuine enthusiasm for what NINES may deliver and provide to our community and, in due course, the rest of the country. In NINES we see real technical innovation which ultimately has the potential to revolutionise domestic heating systems; increasing efficiency; reducing fossil fuel consumption, and allowing extra network capacity for intermittent renewable energy generation. However, and as always, this innovation must come at a cost – in this case a cost to the consumer at a difficult time. Despite this, we support NINES as an investment in the future, and are confident that the long term benefits of the project significantly outweigh the short term costs.

We're delighted to be offered the chance to share our views on NINES, and trust that you find our consultation response to be of value.

Yours Sincerely,

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Robin Sampson, Development Officer

02/09/11

#### **General Comments:**

We are glad to support NINES and the action plan suggested in Ofgem's Project Consultation document in general. Whilst we understand that the project is to be further informed by a pilot scheme and supplementary modelling work, and that the project is intended to provide valuable lessons in smart grid technology, we feel more transparency around it's implications for the overall supply and demand of energy in Shetland is needed – in particular, we believe a quantised estimate of the amount of intermittent renewable energy generation NINES will allow on the Shetland grid, directly and indirectly, should be provided. A fundamental output of the NINES project should be information on how to maximise intermittent renewable energy generation on this type of 'demand-side regulated' smart grid system – thus further reducing the requirement on base load and back-up power generation from fossil fuel sources. This should be a strategic objective of the project as we see this lesson as being fundamental in understanding the future value of this smart grid technology both locally and nationally.

We also suggest that, if successful, installation of NINES technology should be financially incentivised for home owners.

More detail on these points is given in response to the questions asked within Ofgem's project consultation document:

### Question 1: Do you agree that NINES can potentially reduce the cost of ensuring a secure, environmentally compliant electricity supply compared with the option of replacing LPS with a like –for–like power station?

The forum agrees that the NINES project can potentially reduce the cost to SHEPD users of a secure, environmentally compliant electricity supply for Shetland compared with the option of replacing LPS with a like–for–like power station. Whilst we understand NINES does entail a cost to the consumer, we believe this should be viewed as an investment in improved technology and efficiency which will financially benefit SHEPD users in the longer term (over the suggested 20 year lifetime of the NINES project and beyond). Our view is that to simply replace the current Lerwick Power Station with a newer model would be short-sighted, and would miss a valuable opportunity to make real, long-term progress in energy efficiency technology, and 'smarter' grid balancing.

Importantly, we feel that the NINES Proposal should include a publicly available estimate of the target amount of renewable energy generation capacity NINES would enable to be integrated into the local distribution network, as well as figures for the reduced fuel oil consumption at the future Lerwick Power Station as a result of the project. This information would allow better informed estimations of the overall carbon savings associated with this project, and would provide substantiation to **paragraph 2.30** of the consultation document's **Appendix 2 – Impact Assessment**.

Given Shetland's potential to host high-yield renewable energy generators, there is considerable demand for distribution network generation connections which are currently constrained by the local grid and power station limitations – our members would like a more detailed quantitative estimate of how much renewable energy generation capacity is likely to be able to be developed as a result of the NINES project. Due to the influence that a new power station will have on the existing

and potential growth of the local economy this group would seek the opportunity to influence the design of a new Lerwick Power Station, which should maximise local renewable power generation, and minimise the consumption of fossil fuels, whilst not constraining load connections

### Question 2: Do you agree with our proposal to change SHEPD's licence to enable the NINES proposal to be submitted as a part of the Integrated Plan?

We agree with the proposal to change SHEPD's licence to enable the NINES proposal to be submitted as a part of the Integrated Plan. Our view is that within reason, and given appropriately controlled consent, Ofgem and the regulatory system governing Distribution Network Operators should be flexible towards accommodating technology which enables more efficient energy consumption.

# Question 3: Do you agree with our proposal to finance NINES using a totex approach and to classify it as Integrated Plan Costs?

Yes, we agree with the proposal to finance NINES using a totex approach; this funding proposal appears to strike the balance of fairness over the burden of cost between SHEPD's users and SHEPD as an organisation. This shared cost is necessary in initiating progress and development.

# Question 4: Do you agree that the risks to the project have been mitigated, and that the potential benefits from the project outweigh the risks?

We partially agree that the risks to the project have been mitigated. It is proposed that the financial risks are shared 50/50 between SHEPD and the consumer, however we would expect that a ceiling would be applied to the potential cost of the project, and that this should be set relative to the cost to the consumer of a replacement LPS without NINES; we think that a 'stop price' should be added to the 'comprehensive risk assessment' mentioned in **3.20**.

Given the novelty of the project, we are satisfied that initial modelling through a trial phase is a suitably cautious approach to implementation, and affords a vitally important opportunity for multilateral stakeholder engagement between SHEPD and project partners – including SHEPD users exposed to prototype technology.

Regarding IQI Efficiency sharing mentioned in **3.22**, it's difficult to assess fully what shared benefit would be gained from unspent funds budgeted in the project as there is no detail on what the NINES costs are, and whether the costs levied on SHEPD users are general to the whole project or to meet discretely costed items within the project budget.

As from September 2012, it may be possible for the new, efficient, concept storage and water heaters to be available to private domestic homes, however there is not necessarily any incentive for domestic customers to participate in demand side management. Whilst through NINES local Social or Private landlords can expect to be grant funded to finance their participation in the project, outwith NINES there is no incentive for any other Social or Private landlords to install smart grid technology with this kind of 'demand side' management. Building on NINES, if such a scheme is to spread across the UK, better defined benefits for landlords are essential in the case where the landlord and tenants are not necessarily the same entities; there is a clear rationale for tenants to install highly efficient storage heaters – reduced fuel bills through more efficient consumption – but this is not necessarily the case for property owners. We believe this is flawed, and that consideration should be given to review the regulatory regime in order to allow suppliers to incentivise the domestic property owners to participate in providing demand responsive heating appliances – this should also apply to community and SME schemes. We suggest that an incentive scheme e.g. the use of favourable tariffs should be initiated to help cover the cost of installation.