

Reference No: 14/01152/S36

Proposal: Proposed Installation of 10MW Demonstration Tidal Array including cable landfall and sub-station – Consultation under Section 36 of the Electricity Act 1989

Site Address: Sound of Islay, Isle of Islay

A. SUMMARY

This is a consultation from Marine Scotland in respect of an application under the Electricity Act by Scottish Power to deploy and operate a tidal energy array in the Sound of Islay, with the installation of export cables and the construction of associated onshore infrastructure. The report recommends views to be conveyed to Marine Scotland on behalf of the Council as Planning Authority in respect of the consent sought under Section 36 of the Act, which if it were to be granted, would include a Direction that planning permission for the onshore development be deemed to be granted.

B. BACKGROUND

The Sound of Islay is a 21km passage of water separating Islay from Jura which at its narrowest point in the vicinity of Port Askaig is only 1.4km wide. It is scoured by tides of up to 5 knots but is generally well protected from wave action. It is 50m to 60m deep at its deepest point, which extends south from Port Askaig for about 1.5km. This location has been the subject of consideration for some time for a production scale developmental tidal energy project, which would provide the applicants with operating experience of devices which might then be deployed in less protected and more energetic waters elsewhere off the Scottish coast.

This is a revised proposal to one which was consented by the Scottish Government in 2010. The Council was a consultee at the time and no objection was raised to the marine elements of the proposal. Since that time development work has continued on the project, although no commencement of the development has taken place. Two principal changes to the project have arisen in the interim. Firstly, the type of device to be deployed has now changed as developmental work in this emergent sector has gathered pace, and secondly, the location of the proposed cable landfall, onshore infrastructure and grid connection has been changed from one which was intended to be on the Isle of Jura to one which is now to be located on Islay.

Since the original consent was granted there have also been changes to the consenting regime for major electricity generation projects. Due to the introduction of

amended regulations at the end of 2013, it is now open to developers to elect to apply to the Scottish Government for both onshore and offshore elements of a marine project, on the basis that this will include a deemed planning consent for those works which would otherwise have required separate planning consent for works on land. This is one of the first schemes being progressed on that basis.

The Electricity Act consent granted in 2010 provided for the installation of 10 No. 1MW tidal devices in the Sound of Islay for the purposes of capturing tidal energy and converting that to electricity. Each turbine was to be mounted on a tripod support structure and would host a 23m rotor diameter at a minimum water depth of 48m from the blade tip, so as to maintain navigation. The particular turbine model was designed so as to be capable of being installed without the need for specially designed vessels or installation equipment, or the use of divers, with a substructure held in place on the sea bed by ballast to secure it against overturning loads imposed by the tide or the rotation of the turbine blades.

The devices were to be installed in a north-south orientation parallel to the Islay coast in an area of deep water to the south of Port Askaig, and were envisaged to be operated during an initial 7 year lease period, with an option to extend. The cable landfall point was intended to be at the south end of the Array on the Jura coast, with a cable route along the edge of the public road on Jura to a proposed new substation inland, approx. 1.4km from the landfall point. No planning permission was sought at the time for the onshore works, and following a change in land ownership on Jura, the site originally envisaged is no longer available. Accordingly, approval is now being sought for the onshore element of the proposal at an alternative site on Islay, and by means of a composite Section 36 application addressing all the infrastructure required for the project.

In consenting the original scheme in 2010, the Scottish Ministers imposed conditions at the request of consultees, including the Council, which secured *inter alia* the following:

- An operational life of 14 years following commissioning;
- The implementation of an Environmental Monitoring Plan in respect of marine mammals, birds, basking sharks, migratory fish, shellfish and seals;
- The submission and approval of a Fishing Mitigation Plan in consultation with the Clyde Fishermen's Association.
- Mapping and avoidance of maerl (protected rocky seaweed);
- The submission and approval of a Construction Method Statement and a Waste Management Plan;
- Removal of equipment in the event electricity generation was to cease for more than 18 months;
- A requirement for a decommissioning programme at the end of the consent period.

C. DETAILS OF THE REVISED PROPOSAL

The purpose of this project is to gain experience in the operation of tidal devices in relatively sheltered waters. It will build on recent development work with the deployment of trial devices in Orkney and Norway which in turn will assist in the development of sites in more exposed locations such as the Pentland Firth.

The current proposal is to utilise an alternative model of turbine to that previously consented in the light of subsequent technical development and trial experience and to move the locations of the devices slightly from their consented positions. An amended means of device installation is also proposed (moored barge and tug rather than dynamic positioning vessel). This cannot be achieved in the context of the original Marine Licence so requires a further application.

It is also proposed that the cable landfall and sub-station site be location on Islay rather than Jura as originally envisaged, and the opportunity is being taken to seek consent for both the marine and terrestrial elements of the revised proposal by means of a single modified Marine Licence application. That application has been submitted to Marine Scotland and is accompanied by Supplementary Environmental Information to that which was produced as part of the Environmental Impact Assessment undertaken in 2010 in support of the original application.

The proposed turbine model is a fully submerged bottom mounted horizontal axis 3 bladed device, mounted on a gravity ballast tripod support structure. The ten turbines proposed will be located in pairs or groups of three in a north–south aligned pattern off the east coast of Islay to the south of Port Askaig. Each turbine has a 26m hub height and a 26m rotor diameter (compared with a previously consented 22m hub height and a 23m blade diameter). The revised tip height will be 39m (rather than 33.5m as consented) although given a slightly deeper deployment depth, the under keel clearance will still be a minimum of 13.6m. (Under keel clearance for the largest vessel known to use the Sound will be over 5m and over 9m for the Calmac ferry). The device locations are to move between 41m and 117m from their consented locations but will still be within the confines of the original application site. The anticipated life of the project is to be increased from 14 to 25 years. Construction is intended to be completed by April 2017.

In addition to the marine infrastructure, deemed planning consent is being sought as part of the Marine Licence for the onshore element of the proposal which comprises a substation compound accommodating a control building, transition pit, external transformers, current regulators and associated electrical infrastructure.

Marine works

The environmental consequences of the marine element of the revised proposal have been re-assessed in an addendum to the original Environmental Statement which concludes as follows:

Physical Processes – ‘negligible’ effect on hydrodynamic sedimentary regime.

Benthic Ecology - no species of conservation importance present and no implications beyond those identified in connection with the original proposal.

Water and sediment quality - no implications beyond those identified in connection with the original proposal.

Marine Mammals – primarily harbour seals and some grey seals. Collision risk impact considered ‘minor’ which is less than the original estimated impact given the result of modelling which was not available at the time of the previous application. Potential impacts unlikely to undermine the conservation objectives of the South-East Islay Skerries Special Area of Conservation.

Marine Fish and Shellfish, Anadromous (freshwater spawning) Fish, and Elasmobranchs (basking sharks) – ‘negligible’ adverse effects.

Ornithology – further seabird surveys carried out but no further implications identified beyond those identified in connection with the original proposal.

Commercial Fisheries and Navigation – commercial fishing limited in the Sound to use of static gear (creeling). Extensive consultation with fishing interests undertaken. Impacts on navigation with mitigation in place assessed to be ‘minor’ during construction phase and ‘negligible’ for the operational phase. Navigational Safety Risk Assessment undertaken with risks identified as being ‘tolerable with monitoring’ during both the construction and operational phases.

Onshore Works

Due to land ownership change, the originally envisaged sub-station site on Jura is no longer available, so an alternative on Islay is now proposed. Cables will be brought ashore close to the landfall of the existing Jura – Islay electricity interconnector and then will be laid underground for a short distance to a proposed sub-station compound and control building in a location adjacent to the overhead 33kv grid line providing Islay with its electricity supply.

The compound will include a control building, transformers and other electrical equipment. This would be accessed via an existing access track on the Dunlossit Estate from the public road network close to Ballygrant, which will require extending for about 300m to reach the sub-station site. The site itself is removed from habitation and the public road system. It is located on a level platform between 26 and 30m AOD behind a steep rocky raised beach. The land to the south and west rises up steeply to Beinn Dubh (267m) which provides a massive backdrop to the site. The site will be visible from the Sound of Islay and from ferries arriving at or departing from Port Askaig, as well as at greater distance from a section of the A846 Feolin-Craighouse road where it runs along the west coast of Jura.

The site has been selected for the following reasons:

- 1) It lies less than 2km from the south end of the array so will only require a short undersea cable route;
- 2) It is at the existing transition point from the undersea Islay – Jura interconnector to the overhead distribution line on Islay, which is the most preferable location for connection to the grid;
- 3) It is at a favourable landfall location and is sited close to the coast which will minimise the need for onshore underground cabling;
- 4) The landowner is willing to make the land and access available;
- 5) This is a topographically favourable location, being is one of the few areas of level ground on this coast, sheltered by trees to the north and back-dropped by rising land to the west;
- 6) Access from the public road is available along existing private ways almost up to the site itself. These are capable of improvement without the need for extensive road construction works ;
- 7) The site is not subject to any landscape, nature conservation or other designations and it avoids the need for development within the Jura National Scenic Area, as originally envisaged;
- 8) The site is well removed from any habitation or other noise sensitive receptors;

The principal issues with the development of the site are:

- 1) It lies relatively close to a Golden Eagle nest site so there is potential for disturbance during the construction period;
- 2) The site is removed from other development and will be visible from the ferry route to Port Askaig, from the coast road on Jura, and from some elevated locations within the NSA.

Onshore development comprises a cable landfall with a transition pit at the rear of the inter-tidal zone from where cable will be laid underground for 200m to reach the sub-station site, which will lie immediately south of the existing 33kv pole mounted overhead line. The sub-station will comprise a fenced compound including a transition pit, a control building, external transformers, a capacitor bank, 3 car parking spaces and a septic tank. The compound will measure 62m x 40m and the control building will measure 24.0m x 11.5m in area, and 5.9m to the ridge. The tallest external electrical equipment will be 4.6m high. Mesh security fencing which has an option of a powder coated paint finish is proposed. A temporary 40m x 20m construction compound will be formed abutting the south end of the compound site.

The site is located on a level plateau above a steep rocky raised beach at around 26 – 30m AOD, above which the land level then rises steeply to the west and south-west up to Beinn Dubh (267m). Land to the north of the site is covered by deciduous woodland with some conifer stands and it is within this area that the Golden Eagle nest site is situated. Further north, there is the development influencing the coast in the form of the estate house at Dunlossit, the harbour infrastructure and buildings at Port Askaig, houses fringing the coast at Freeport, and then the substantial distillery building at Coal Ila. The site itself is influenced by the presence of the existing electricity line land fall and the single and twin pole overhead line which runs up the contours inland. Land to the south of the site down to the lighthouse at McArthur's

Head is markedly different with an absence of any development or trees, a steeper and more rocky coastline with cliffs, and more of a wilderness character. This area to the south of the site is accordingly designated as an Area of Panoramic Quality. The coast of Jura on the opposite side of the Sound lies within a National Scenic Area.

The environmental consequences of the onshore element of the revised proposal have been re-assessed in an addendum to the original Environmental Statement which concludes as follows:

Ornithology – the substation site lies in proximity to a breeding nest site for Golden Eagles. No implications of significance during the operational phase of the development but short-term construction impact is considered to be 'major' adverse. Mitigation measures identified in consultation with Scottish Natural Heritage including restrictions on construction related activity during the January – August breeding season. Ecological Clerk of Works to be employed.

Terrestrial Ecology – no designations and land not of any particular conservation value, being mainly bracken acid grassland and wet heath. There are a number of minor watercourses nearby which attract otter to the wider area and will necessitate pre-construction surveys, but there is otherwise no protected species interest of importance within the site itself.

Landscape and Visual – The proposed site will not be visible from roads, properties or locations generally frequented by the public on Islay and will only be seen on the approach at close quarters from within the Dunlossit Estate. It will be primarily experienced from ferries transiting the Sound to and from Port Askaig, and at greater distance from the initial section of the coast road from Feolin to Craighouse on Jura. Distant views will also be available from elevated vantage points in the Jura NSA. Of these, views from the ferry will be transient and in the context of adjacent existing native woodland and a huge elevated landscape backdrop. The adjacent woodland, is intended to be extended along the final section of the extended access track and across the front of the sub-station compound in order to help assimilate the development into its landscape setting. Planting is proposed in stands of hardy native pioneer species suited to this location, including Alder, Ash, Birch and Hazel. A localised hill within the development site is to be removed and the foreground of the sub-station site is to be re-contoured with site won material and then planted in order to achieve an element of naturalistic screening. (The artificial appearance of more significant artificial bunding would be counter-productive in this location).

Nonetheless, the presence of development will be evident so care will be required in the selection and colour of materials for the building and fencing. The appearance of this landscape changes markedly from the greens of summer to the browns of winter, so the applicants have created montages of a range of nine sample colours, in order to inform the final choice. A branch from the access track serving the existing interconnector is proposed in order to avoid the use of the final section which passes close to the site of the eagle nest. This will be largely parallel to the coast running along the line of existing contours which will avoid the prospect of an unsightly access scar on the hillside.

D. POLICY CONTEXT

Consultation on the draft of Scotland's first 'National Marine Plan' has closed and it is expected to be adopted later this year. This seeks to support the sustainable development of wind, wave and tidal renewable energy, to facilitate joined-up marine planning and licencing processes, to contribute to national renewable energy targets, and to facilitate the development of offshore demonstration facilities.

The Argyll and Bute Renewable Energy Action Plan (REAP) – Powering Scotland's Future sets out a vision that “Argyll and Bute will be at the heart of renewable energy development in Scotland by taking full advantage of its unique and significant mix of indigenous renewable resources and maximising the opportunities for sustainable economic growth for the benefit of its communities and Scotland”.

The Argyll and Bute Economic Action Development Plan (EDAP) 2010 – 2013 recognises the potential in as yet untapped sources of renewable energy to create higher value jobs and incomes, to attract private and public inward investment, to result in sustainable economic benefits in more peripheral, remote and fragile communities, to generate community benefit funds that promote local development, and economic benefits to businesses and households through generation and consumption of renewable energy.

The provisions of Policy STRAT RE 2 of the 'Argyll and Bute Structure Plan' 2002 and Policy LP REN 3 of the 'Argyll and Bute Local Plan' 2009 set out general support for other (non-wind) forms of renewable energy and related development. Support is expressed for forms, scales and locations where it will promote the aim of sustainable development, where the servicing, electricity distribution and access impacts are acceptable, and all other material considerations including the Council's international and national obligations are satisfactorily addressed.

The site does not lie within any nature conservation, historic environment or landscape designations. There are, however, designated interests within influencing distance of the site, including an eagle breeding site, the SE Islay Skerries SAC, the Islay coast Area of Panoramic Quality and the Jura NSA. The site lies within local plan designated 'Very Sensitive Countryside' subject to the effect of Structure Plan Policy STRAT DC 6, which is tolerant of renewable energy related development in appropriate locations. The provisions of Policy STRAT DC 7 of the Structure Plan and Local Plan Policies LP ENV 1 - 6 set out the Council's position in respect to nature conservation and the protection of habitats and species. In summary, these set out a general presumption against development which would be likely to have a significant adverse impact upon nature conservation interests.

Overall, it is concluded that impacts upon protected species will be acceptable subject to identified mitigation measures. In particular, onshore works will require to avoid disturbance in the eagle breeding season. Despite landscape mitigation measures, including land re-contouring, tree planting, and careful use of colours, the proposal will extend the influence of development into a hitherto largely undeveloped location in 'Very Sensitive Countryside'. Accordingly, there will be an element of

intrusion in transient views from the ferry arriving at and departing from Port Askaig, although foreground ground modelling, extension of the adjacent tree cover and the presence of a massive backdrop will help reduce this. Views from within the NSA on Jura are more distant than the route of the ferry and tend to be more panoramic along the length of the Sound. They are also already influenced by the presence of significant development on the coast of Islay, including the group of buildings at Port Askaig and the distillery at Caol Ila.

E. CONSULTATIONS

The proposal has led to consultations with the following Council interests and their responses are detailed below:

Area Roads Engineer (02.06.14) – no objection but conditions recommended to address abnormal construction usage of the public road between the A846 at Ballygrant and the junction with the estate access serving the sub-station site.

Environmental Health Officer (03.06.14) – no anticipated problems associated with operational noise. Construction activities may have the potential to cause disturbance at unsocial hours along the access route so a condition controlling vehicle movements would be prudent. No anticipated issues with artificial lighting given the identified need to avoid this in the interests of not disturbing nearby eagles.

Marine & Coastal Manager (28.05.14) - The revised ES is a comprehensive investigation of the environmental impacts of the proposed development, and the assessments of individual impacts and the mitigation proposed are acceptable in relation to the both marine and coastal elements of the development. Despite an improved assessment on the predicted impacts on marine mammals there remains a degree of uncertainty. It is therefore considered appropriate that the applicants continue their commitment to employ a 'deploy and monitor' strategy in agreement with Marine Scotland and SNH to allow the significance of collision risk to be assessed and if required, appropriate collision mitigation implemented. In terms of shipping, although the clearance above the turbines has decreased slightly this will not have implications for predicted navigation requirements with the mitigation proposed. Onshore parts of the development are now out with the National Scenic Area and sited in a location with existing road access and overhead 33kV lines.

- Biodiversity Officer (04.06.14) - no objection subject to the provision of a Construction Method Statement for both onshore and offshore elements, the implementation of the Environmental and Mitigation Plan as set out in the Environmental Review Report and measures to avoid disturbance to nesting golden eagle .

In addition, to the above responses, Marine Scotland has consulted directly with a range of other bodies and the following have made initial comments available to the Council:

Scottish Natural Heritage (02.06.14) – In terms of the marine works Marine Scotland should undertake an ‘appropriate assessment’ of the likely effects of the proposal on the South-east Islay Skerries SAC, but with recommended conditions, the proposal is unlikely to affect the integrity of the site. In view of the relationship of the onshore works with an eagle nest site, a Construction Method Statement should be required by condition to address disturbance issues. In view of potential disturbance, displacement and collision risk for cetaceans, an Environmental Management Plan and a Vessel Management Plan should be required by condition. Predicted seal collision rates remain low and unlikely to have a significant effect on harbour or grey seals in the area management unit. However, given the uncertainty as to behaviour in response to the presence of the array it is recommended that a monitoring programme be implemented to improve understanding of the consequences of tidal energy developments. Collision risk for diving seabirds is unquantified but SNH has concluded that this is unlikely to be significant at the national level for black guillemot or shag. A pre-commencement survey for otter will be required in respect of the onshore works. In terms of landscape, the proposal introduces development into a sensitive and undeveloped area visible from the Sound and from the Jura NSA. A landscape assessment has been provided by the applicants which is a well-considered response to this context. In addition to its conclusions consideration should be given to the potential impact of lighting (which if inappropriate could significantly alter the assessment of development impact) and the finish of the compound fencing, in order to avoid reflectivity.

Royal Society for the Protection of Birds (02.06.14) - support the project in principle. Given the siting of the onshore works in the vicinity of an eagle nest it will be important to ensure that the mitigation identified by the applicants is required by way of condition. In particular restrictions on vehicle usage and construction activity during the breeding season will be important in order to avoid disturbance other than in circumstance where there has been an unsuccessful breeding attempt.

Scottish Environment Protection Agency (04.06.14) – have lodged a holding objection with Marine Scotland on the grounds of a lack of information on potential adverse impacts of the onshore development on peatland and/or wetland. They have indicated this could potentially be overcome by the submission of additional survey information and possible micro-siting to avoid areas of deep peat. In the event of an approval conditions requested in terms of water course crossings, flood risk and a requirement for a site specific construction environmental management plan.

F. CONCLUSION

This is an important project related to the development of a means of exploiting tidal energy in Scotland. It builds upon device development work carried out elsewhere and the relatively sheltered nature of the site enables device deployment which will provide a test bed from more ambitious offshore projects in more exposed locations. At 10MW installed capacity this is a significant renewables project in its own right, as well as providing production scale experience to further the development of the tidal energy sector.

The marine element of the proposal remains broadly similar to that consented in 2010 other than for the employment of a modified device, some repositioning and a different method of installation. The onshore element avoids the need for development in the Jura NSA but proposes a location set back from and up from the coast of Islay. This is one of the only practicable locations along this coastline given the rocky nature of the coast, the presence of watercourses and native woodland, and the general absence of level areas suited to development. Fortuitously, this coincides with location where the electricity supply reaches the island via Jura, which is a benefit to the proposal in terms of connection to the grid, lack of need for extensive underground cabling and availability of an existing access route capable of improvement.

With identified mitigation in place, the proposal will not significantly affect navigation, commercial fishing, benthic ecology, water quality, marine mammals, fish or seabirds. Potential eagle disturbance during the breeding season can be avoided by the timing of construction works. The only residual issue of concern is the visual intrusion of development in views from ferry traffic along the Sound, and to a lesser degree from more distant locations on Jura. It is considered that foreground land re-modelling, extension of the adjacent native woodland around the development and careful selection of colours for the building and fencing will mitigate this to a degree which is acceptable in the light of an infrastructure project of this importance. Although SEPA have indicated the potential requirement for micro-siting of the control building (suggested to be of the order of 25 -50 m) to avoid deep peat, should the prove necessary following further site investigation it could be achieved by some localised repositioning and reconfiguration of the layout of the compound without any significant consequences for the extent of the visual implications of the development.

G. RECOMMENDATION

It is recommended that:

- a) no objection be raised to the principle of the project as a whole or the details of the marine component of the scheme;
- b) no objection be raised to the issuing of a Direction that deemed planning permission be granted to the onshore elements of the proposal, subject to the imposition of suitably worded conditions (having regard also to views expressed by other consultees), in order to secure *inter alia* those matters listed in the appendix to this report;
- c) Marine Scotland be notified accordingly, with a request that draft conditions be the subject of further consultation with officers prior to the issuing of any consent, having regard to the fact that those conditions will become the responsibility of the Council to enforce.

Author of Report: Richard Kerr

Date: 5th June 2014

Angus Gilmour
Head of Planning and Regulatory Services

APPENDIX A

RECOMMENDED MATTERS TO BE SECURED BY CONDITION IN THE EVENT DEEMED PLANNING PERMISSION IS GRANTED

1. Development to be implemented in accordance with Mitigation and Monitoring measures identified in the applicant's Environmental Report April 2014.
2. Ecological Clerk of Works to be employed for the duration of the construction of the sub-station and the access thereto.
3. No access improvement or access construction, no vehicular access to the site, and no construction works in respect of the sub-station site to be undertaken between the beginning of January and the end of August in any year unless otherwise agreed in advance with Scottish Natural Heritage. Outwith this period access and construction works should be compliant with a Construction Method Statement.
4. Hours of any vehicular movements to and from the sub-station site to be limited to 0730 to 1800 hours Monday to Fridays and 0800 to 1300 hours Saturdays only (excluding public holidays), other than with the prior written agreement of the Planning Authority.
5. Removal and reinstatement of the temporary construction compound following the commissioning of the development.
6. Details of improvement works to the existing access route from the public road and construction of the extension thereto to be submitted and agreed in advance, including details of construction, surfacing, watercourse crossings and means of reinstatement of excavated margins.
7. Details of the proposed finished level of sub-station compound relative to an identifiable fixed datum outwith the application site, with verification to be supplied by a suitably qualified surveyor in advance of construction proceeding on the control building or the installation of any of the electrical equipment within the compound.
8. Details of the proposed design and colour of the proposed perimeter fencing to the compound.
9. Samples and or full details of the proposed external materials including the roofing material of the sub-station building.
10. Submission of proposed contours of the ground re-modelling along the front of the sub-station compound, including a cross-section(s) demonstrating the relationship with the proposed finished level of the sub-station compound and the height of the building and external structures within the compound.
11. Proposed tree planting scheme including species, sizes, numbers, locations, planting distances, ground preparation, timing of planting, monitoring during establishment period and replanting in the event of failures.
12. Details of the means for reinstating those areas disturbed by the laying of underground cabling.

13. No external lighting to be installed during the construction, operational or decommissioning phases of the development without prior approval.
14. Removal of the sub-station building and all external equipment and reinstatement of the land in the event electricity generation was to cease for more than 18 months.
15. A requirement for a decommissioning programme at the end of the consent period providing for removal of the sub-station building and all external equipment and reinstatement of the land.
16. Submission of a Traffic Management Plan and Method Statement indicating the means of delivery of components to and the construction traffic associated with the development, operation and decommissioning of the substation site.
17. A pre-commencement video/photographic survey of the section of public road between the A846 at Ballygrant and the estate road access to the sub-station site along with a report on areas vulnerable to traffic loading, including an assessment of culverts and other structures, and a programme of weekly inspections during the construction period to ensure that the carriageway remains in a safe condition.
18. Proposals for carriageway widening and the provision/improvement of passing places and the reinstatement of any temporary works required in respect of the section of public road between the A846 at Ballygrant and the estate road access to the sub-station site.