

Meeting Minutes – Moray Firth Working Group Discussion 150914

Meeting Minutes/Action
Meeting Title: Meeting Minutes – Moray Firth Working Group Discussion 15092014
Date / Time / Venue: 15/09/2014 11:00am – 3:30pm Mercure Inverness Hotel
Attendees: Marc Browne (BOWL), Peter Moore (MORL), Jonathan Wilson (BOWL), Steve Wilson (BOWL), Sarah Pirie (MORL), Rebecca Radford (BMM), Malcolm Morrison (SFF), John Hermse (FIR), Jay Mackay (FIR), John Alexander (Fraserburgh static gear), Peter Smith (Buckie static gear), James Reid (nephrops fishery) Roger May (Marine Scotland), Andronikos Kafas (Marine Scotland Science), Bruce Buchanan (Marine Scotland), Adam Morrison (MORL, RES)
Minutes taken by: BMM
Apologies: John Watt Jnr (FIR), Neil Sutherland (squid fishery), Colin Warwick (The Crown Estate)

Item	Action	Action on	Close out date
Meeting Objectives:			
<ul style="list-style-type: none"> To provide an update on both MORL & BOWL projects and work completed since consent To discuss changes to the MORL cable route 			
1.0 – 4.0	<p>Welcome, apologies and sign off meeting minutes.</p> <p>All agreed that the minutes from the previous Working Group meeting were correct and could be signed off.</p> <p>RR went through the actions from the previous meeting:</p> <ul style="list-style-type: none"> RR distributed the thermal heating paper to the group The development team have noted that fishing representatives need to be informed of survey activity a minimum of two weeks prior to the survey commencing The development team are working towards obtaining the UKFIM data for the Moray Firth from the Crown Estate Plotter data has been provided by the SFF to help with identifying snagging risks SP has sent the location of the met mast to JH RR has set up drop box and given all members access Meetings have been ongoing with the SFF to discuss turbine layout The development teams have forwarded coordinates to JW GJ requested a representative from MSLOT to attend the meetings <p>JH mentioned that he had been unable to access Dropbox. RR to check access</p> <p>AK noted that 2013 VMS data is now available and will forward it to RR</p> <p>SP to contact The Crown Estate to see if a representative can attend the next meeting as CW has been unable to attend any Moray Firth Working Group meetings.</p>	<p>RR to ensure all members can access Dropbox</p> <p>AK to forward VMS data to RR</p> <p>SP to contact TCE</p>	<p>29th October 2014</p> <p>29th October 2014</p> <p>29th October 2014</p>
6.0 – 8.0 & 10.0	<p>BOWL and MORL project updates</p> <p>BOWL</p> <p>The BOWL team are working towards discharging their consent conditions over the next couple of months. BOWL provided an</p>		

overview of their offshore consent:

- Section 36 Consent received from Marine Scotland (MS) on 19th March 2014
- Detailed review, development of forward programme (in conjunction with MS and Project Team) and communication of conditions with Project Team and key Stakeholders
- Offshore Transmission Works (OfTW) and Wind Farm (WF) Marine License received and work has begun in managing relevant consent conditions
- A number of work streams are being progressed to discharge conditions including Marine Mammal Monitoring Programme, Gull research, Fish surveys (recently completed cod and sandeel, herring surveys proceeding and engagement with UHI to look at salmon monitoring)

BOWL had been successful in securing the Contract for Difference (CFD), the revenue support mechanism (investment contract), it was noted that this had been a major project achievement;

SSE is currently working on the economics of the project to reduce costs, improve the Internal Rate of Return and finalise the business case for passing Gate 2 in order to achieve the next round of internal project funding;

- Key dates:
 - Commence Front End Engineering & Design – August 2014
 - Gate 2 – October 2014
 - FID – 31st January 2016
 - Milestone Delivery Date – 31st March 2016
 - Grid Connection – 31st January 2018
 - Phase 1 Target Commissioning Date – 31st March 2018
 - Phase 1 Target Commissioning Window Ends – 31st March 2019
 - Phase 1 Target Commissioning Date – 31st March 2019
 - Phase 1 Target Commissioning Window Ends – 31st March 2020
 - Handover to Generation Team – April 2020

As part of BOWLs Investment Contract, the maximum capacity of the wind farm is 664MW. The Final Investment Decision (FID) date as to whether or not the project will go ahead is end of January 2016. The next Milestone Delivery Date in March 2016 requires BOWL to have spent a proportion of the projects budget in line with the Contract For Difference requirements.

Onshore construction will commence in Q1 2016, with offshore construction commencing in Q1 2017. The project will be connected to the Blackhillock grid connection 31st January 2018.

BOWL are planning to undertake further geophysical and geotechnical surveys both along the cable route and in the wind farm site before the end of the year. Work in the wind farm is due to commence late September/early October, with approximately 8 boreholes being sampled and the remaining boreholes to be sampled in December.

As BOWL are most likely to opt for pile foundations, a condition of

Meeting Minutes – Moray Firth Working Group Discussion 150914

<p>the consent is to submit a Piling Strategy (condition 12 of the Section 36 consent condition). This requires the undertaking herring spawning surveys to determine key spawning times in the vicinity of the wind farm in order for BOWL to develop and proposed relevant mitigation measures in line the piling strategy.</p> <p>BOWL are also required to continue to participate in the MFOWDG Commercial Fisheries Working Group and are committed to continue to listen to concerns through this forum and mitigate potential impacts on commercial fishing activities using the Working Group.</p> <p>JW discussed another relevant consent condition, namely the Cable Plan (CaP). JW stated that the CaP is in development and will detail where cables will be located taking into account environmental and anthropogenic receptors and engineering concerns. An Electro-Magnetic Field (EMF) assessment will also be undertaken. A full burial risk assessment will identify the maximum depth of burial of cables and the probability of successful burial. Where burial is not possible, BOWL are committed to suitable protection methods.</p> <p>Agreement on over-trawlability trials will commence once it is clear where cables will be buried or protected. Potential exposure of cables has to be addressed in the CaP due to potential health and safety concerns.</p> <p>JH requested that a copy of the CaP be provided to members of the Working Group.</p> <p>JW - Once the CaP is completed, stakeholders will be consulted.</p> <p>JR asked if there was an alternative to rock dumping as it can lead to rocks being caught in nets.</p> <p>SW responded that an alternative is concrete mattresses although the priority is to bury the cable. By mid-2015, BOWL will have a good understanding of what percentage of cables will be buried (or protected). It is unlikely that rock dumping will be used in the wind farm site on inter-array cables. It is possible that rock dumping will be used along the export cable route, particularly where the cable cannot be buried due to a rocky outcrop.</p> <p>SP highlighted that consultation is ongoing by the Scottish Government to assess different types of cable protection and that rock dumping is appropriate in some circumstances. MM noted that the SFF have not been consulted on this and SP will send MM information relating to the consultations.</p> <p>MM noted that large rocks used in rock dumping are not appropriate for over-fishing due to steep gradients.</p> <p>SW noted that it's possible that mattresses will be at the base of the jacket foundations at the end of the J-Tube.</p> <p>PS raised that the seabed can move and therefore erode any protection that is put in place.</p> <p>JR queried whether the export cables will be laid in straight lines or will detour around obstacles</p>	<p>SP to send MM information on Scottish Government consultations on cable protection methods</p>	<p>29th October 2014</p>
---	---	-------------------------------------

Meeting Minutes – Moray Firth Working Group Discussion 150914

<p>SW stated that there is a defined cable corridor which allows some ability to deviate from a straight line. The Crown Estate defined the area of the export cable route corridor.</p> <p>JR asked if there were rocks that would make burial difficult in inshore areas.</p> <p>SW said that the main issues with regard to burial are approaching the landfall area. There is another cable coming into the same area (the Caithness HVDC cable). As the HVDC cable does not yet have a confirmed route, liaison needs to be ongoing to coexist and minimise disruption to stakeholders.</p> <p>JH asked if cables could be buried together to reduce the space required for the cable corridor.</p> <p>JW replied that burying cables separately is primarily a health and safety requirement.</p> <p>SW also added that the cable corridor varies in width along its route as it has to avoid various infrastructure already in place in the Moray Firth.</p> <p>JW showed the plotter data that had been provided by John Watt. John had sent BOWL screenshots of potential snagging risks, however the resolution of the data made it difficult to georeference using GIS. BOWL have requested the backing data (i.e. coordinates of the snags, information regarding what the snags are etc.) if possible. The data provided can be correlated with information obtained through surveys used to identify magnetic anomalies.</p> <p>AK asked whether the plotter data is sensitive information. It would be useful for Marine Scotland to access as they are currently looking into potential displacement risks.</p> <p>MM replied that most fishermen share their data with each other so it is not sensitive.</p> <p>JW explained the concept layouts and that discussion has been ongoing with the SFF. The first concept layout has 2 smaller offshore transformer modules which in theory would act as the substations. There would also be an inter connector cable between the two modules. The second concept layout has a central substation platform acting as a collector with the export cable route running from the platform to the shore.</p> <p>MB highlighted that these are currently concept layouts only and work is ongoing to define the actual layout.</p> <p>SW added that there is a buildable area of approximately 90km² and, due to buffers around other infrastructure, a maximum of 83 turbines can be built (which is less than originally indicated). Spacing between turbines is approximately 1.1km.</p> <p>PS asked if the fewer number of turbines would still generate the maximum capacity of the wind farm site.</p> <p>SW replied that there are different sized turbines which can be used</p>	<p>BOWL to discuss plotter data with SFF</p>	<p>Ongoing</p>
---	--	----------------

to generate more power.

AK asked how flexible the layout of the inter-array cables is.

SW replied that the MCA require a uniform grid. Micrositing could potentially occur within a 50m radius however this had to be agreed with the MCA.

AK enquired as to how often the data regarding cable layout will be updated and whether it would be available for Marine Scotland to use in the displacement study.

MB replied that the layouts are currently concept and not available for distribution, however once positions and coordinates are available, they will be distributed as part of the Design, Specification and Layout Plan.

JM asked if once the final surveys are completed and the final concept is known, would the information be shared with the Working Group.

SW confirmed that it would. The final routes will be based on the survey data. Turbines cannot be too close as they can cause damage to each other.

AK asked whether the fishing industry would fish over cables.

JM replied that fishermen can fish both along and over cables, but the preference is always for cables to be buried. Weather also plays an important role in determining which direction fishermen are able to tow in.

MB noted that changing the cable route would be difficult and BOWL are showing the concept layouts to look at potential snagging risks. BOWLS aim is to minimise risks to both vessels and the cables.

JR said that once the cable routes are defined, the fishing industry could identify where snagging risks could occur.

MB said that part of the consent condition allowed flexibility within the cable corridor so that BOWL can consider fishing and environmental aspects.

JH added that Kingfisher have information on snags.

MORL

MORL have a modified export cable route with a landfall at Inverboyndie and connection into the grid at New Deer in Aberdeenshire. The new route is shorter than the older route by approximately 50km.

There were two possible new landfall points considered during the route refinement stage (Sandend and Inverboyndie), with the selected route (Inverboyndie) being the shorter of the two.

The new route also allows AC cables to be used rather than DC, resulting in fewer OSPs (8 have been reduced to 2).

	<p>First generation is planned for October 2018.</p> <p>The existing marine licence was granted for the previously applied-for cable route, making landfall at Fraserburgh. The application for the modified cable route was submitted in June 2014 and discussions have been ongoing with the SFF. The two OSPs are of the same dimensions as the original assessment, with jacket foundations, the main difference being that there are now only two OSPs proposed as opposed to the previous application for up to eight. The spacing between cables will be 4x the water depth. The cables will be buried to a target depth of 1m within a 1200m corridor. The cable comes ashore in a sandy bay area, allowing the cable to be buried.</p> <p>Construction commences offshore in late 2017, with onshore construction starting in 2015.</p> <p>MORL received consent for three wind farms (Telford, Stevenson and MacColl) within the Eastern Development Area of their Zone. Each wind farm can be up to 372MW will be generated per site, with a maximum of 62 turbines (6-8MW) turbines in each site. This is significantly fewer turbines than originally applied for (maximum of 339 across the three sites). Spacing between turbines will be 1.05 km crosswind and 1.2 km downwind.</p> <p>Further geotechnical and geophysical surveys along the modified cable route and within the wind farms were undertaken earlier this summer which will provide a higher resolution of information.</p> <p>The met mast is currently being installed within the MORL Zone. The met mast has a suction caisson foundation and installation is due to be complete on 12th November. NtMs are being distributed which provide updates on the progress of the met mast installation.</p> <p>MORL's wind farm consent conditions are almost identical to BOWL's. The main difference is that MORL undertook the cod and sandeel surveys in 2012 and 2013, respectively. In line with the consent conditions, these surveys will need to be updated if construction does not commence within 5 years of these surveys taking place. MORL are not yet undertaking herring surveys as these surveys are targeted at potential impacts associated with piling and MORL still have 2 foundation types in their envelope, jackets and gravity bases, the latter of which does not require piling. A decision will be taken at the end of this year/beginning of next year as to what sort of foundation will be used and therefore whether or not surveys will be required. If jackets are selected, then a herring survey will be undertaken in 2015.</p> <p>MORL's export cable route mitigation strategy is currently in development. Concerns in relation to commercial fisheries will be addressed through the MORL Commercial Fisheries Mitigation Strategy.</p> <p>MM asked if the infrastructure will have scour protection.</p> <p>AM answered that scour will be placed around foundations at a number of locations, depending on ground conditions.</p> <p>PM added that the metocean studies assessed potential scour</p>		
--	---	--	--

Meeting Minutes – Moray Firth Working Group Discussion 150914

	<p>effects in the ES. It is standard to have scour protection around turbines and other structures.</p> <p>SW added that the seabed type dictates whether or not scour protection is used. BOWL are not currently seeing any scour in the site.</p> <p>RR highlighted that due to the new MORL export cable route, a new representative is required to sit on the Working Group to represent the interests of the fishermen at the landfall point at Inverboynie. There were no objections to a new representative being requested.</p>	<p>RR and MORL to progress requesting a new representative</p>	<p>Before the next meeting (expected early 2015)</p>
<p>9.0</p>	<p>Scallop gear trial updates</p> <p>PM gave an update on the scallop dredge gear trials which MORL is currently investigating. MORL has commissioned Mike Kaiser and a team from Bangor University to undertake a review of gear options available and to design gear trials to test the gear.</p> <p>The scallop fishing industry was originally consulted in 2013. Bangor University has put a report together on seabed type and a meeting is to be held with the industry on 19th September to discuss the findings. The desktop survey looked at previous studies and legislation. The report reviewed gear types and assembled a draft methodology for the trials. The report also looks at turbine spacing and interaction with scallop gear. After the meeting on the 19th September, MORL will meet with MSS and MS-LOT to discuss the findings of the report.</p> <p>Phase 1 of the trials is to test the gear for fishing capabilities, with phase 2 testing the penetration depth of the different gears. Phase 2 will be expensive and therefore MORL are looking for funding options. Funding for Phase 1 has been secured.</p>		
<p>11.0</p>	<p>AOB</p> <p>MM raised monitoring surveys as something that he considered should be undertaken in the Moray Firth. The surveys being undertaken as part of the consent conditions (sandeel, cod and herring) are not the primary commercial species in the Moray Firth.</p> <p>AK highlighted the MSS currently collect data in the area and a representative will give a presentation at the next meeting.</p> <p>RM added that Marine Scotland felt there is sufficient information on key species (i.e. scallops) and extra studies would not necessarily add any additional information.</p> <p>MM indicated that the industry must prove it has been negatively impacted in order to get mitigation.</p> <p>JH asked why cod and herring have been selected for surveys.</p> <p>RM replied that when the species are spawning, potential impacts need to be mitigated.</p> <p>MB added that cod and herring are the biological receptors that BOWL are required to monitor for under its PEMP condition and that also have to be considered in the piling strategy in order for potential mitigation to be identified. Other receptors to be included were marine mammals and salmon.</p>	<p>AK to arrange for presentation at next Working Group meeting</p>	<p>Before the next meeting (expected early 2015)</p>

Meeting Minutes – Moray Firth Working Group Discussion 150914

<p>SP added that there is natural variation in the fisheries and therefore how would this be addressed in any monitoring surveys.</p> <p>RM said that stocks may increase in the area due to decreased scallop activity. The best way to monitor any impacts on the commercial fishing industry is to look at effort against catches and not stocks. This can be done using the data already available through Marine Scotland and MMO.</p> <p>JH added that recruitment of scallops in the North Sea is variable compared to other fisheries.</p> <p>MB added that the variability of the fishery makes it difficult to determine cause and effect.</p> <p>SP added that the scallop gear trials are commercial fisheries driven and not driven by environmental receptors. The issues need to be kept separate.</p>		
---	--	--

Date of next meeting: TBC

Minutes prepared by: Rebecca Radford

Appended Documents: Presentation Slides

Internal Distribution: Marc Browne, Sarah Pirie, Peter Moore, Jonathan Wilson, Steve Wilson

External Distribution: Malcolm Morrison, John Watt, John Hermse, John Alexander, Peter Smith, Neil Sutherland, Roger May, Colin Warwick, Jay Mackay, James Reid, Bruce Buchanan, Andronikos Kafas, Adam Morrison