

**MINUTES**

Attendees: Ed Rollings (ER) MeyGen  
 Dan Pearson (DP) MeyGen  
 Prof. Ian Bryden (IB) Chairman – UHI  
 David O’Sullivan (DOS) MSLOT  
 Kate Brookes (KB) MSS  
 Jared Wilson (JW) MSS  
 Finlay Bennet (FB) MSS  
 Ross Gardiner (RG) MSS  
 Chris Eastham (CE) SNH (video conference)  
 Erica Knott (EK) SNH  
 Elaine Tait (ET) MS Policy  
 Roger May (RM) MSLOT  
 Billy Harris (BH) MSLOT

Date: 27/11/2013

Chaired by: Prof. Ian Bryden

Time: 10:00

Location: MSLOT, Victoria Street,  
 Aberdeen

**SUBJECT: MeyGen Advisory Group (AG) Meeting 1**

**Agenda**

No.	Subject	Time (min)
1	Introductions	
2	MeyGen project update	
3	Terms of Reference	
4	Objectives of the monitoring	
5	Monitoring techniques – next steps	
6	Funding	
7	AOB	

No.	Subject	Action
<b>2</b>	<b>Project Update</b>	
<b>2.1</b>	<b>ER</b> Confirmed that MeyGen is now a 100% owned by Atlantis Resources Ltd. MeyGen will continue operating as a standalone business, maintaining its plan and its team's sole focus on the delivery of Phase 1a in 2015/16. The current plan is for an initial deployment of 4 turbines.	
<b>3</b>	<b>Terms of Reference (ToR)</b>	
<b>3.1</b>	<b>DOS</b> MSLOT has included a mark-up of the draft ToR, which was distributed at the meeting. MSLOT has made inclusions so that the AG also covers the Environmental Management Plan (EMP). This ensures compliance with condition 13 of the S36 Consent.	
<b>3.2</b>	<b>Management of Environmental Management Plan (EMP)/Project Environmental Monitoring Programme (PEMP)</b>	
	<b>EK</b> raised the question of how EMP and PEMP processes will be coordinated, implemented and managed between MSLOT and MeyGen. How is information to be provided on the EMP?	
	<b>ER</b> MeyGen and MSLOT have been working on a document structure for MeyGen to produce all the relevant documents required of the consent conditions. This includes the role of Environment Manager/Environmental Clerk of Works (ECoW) who is responsible for the dissemination of information to the correct bodies through the different phases of the EMP and PEMP. Principal Contractors on site will have their own management and communication structure for environmental compliance and communication to MeyGen, the Environment Manager/ECoW and the statutory authorities.	
	<b>ER</b> to send the document structure to the AG when complete	<b>ACTION 1 - ER</b>
<b>3.3</b>	<b>MAG timescales</b>	
	<b>EK</b> There is no timescale for the AG in the ToR. Should there be a review period for the function of the AG?	
	<b>RM</b> The AG is in place to answer the questions posed in the PEMP. Whilst every party hopes that monitoring will be able to answer these questions quickly, the AG must remain active as long as the monitoring does.	
	<b>All</b> Agreed there should be provision in the ToR for a review of the need for the AG to remain active. Suggested standing item on the AG agenda.	
	<b>ER</b> to add a provision for reviewing the need for and function of the AG to the ToR	<b>ACTION 2 – ER</b>
<b>3.4</b>	<b>Membership</b>	
	<b>EK</b> Should SMRU be a Lead Member?	
	<b>KB</b> Lead Members are allowed to invite their advisors to AG meetings if there is a particular need to have them present; it was felt that it was important to keep the AG to a small number.	
	<b>All</b> Further discussion required on the membership of the group (inclusion of a further independent scientific advisor) at the next AG meeting.	<b>ACTION 3 - ALL</b>
<b>3.5</b>	<b>Disputes and resolving issues in the AG</b>	
	<b>EK</b> How will disputes be managed by the AG?	
	The group must be considered the experts and able to provide a decision. There should be no need for parties to bring in an external advisor if it can be settled by the group. However, there should be the opportunity for the Chairman to bring in an arbitrator if there is no consensus on an issue.	
	<b>All</b> There needs to be provision in the ToR for the arbitration of disputes within the AG	<b>ACTION 4 -ALL</b>
<b>3.6</b>	<b>Consultation with Statutory Authorities</b>	
	<b>ER</b> The MeyGen conditions allow for the PEMP and EMP to be consulted on by statutory stakeholders, however there will be no representative of a number of these organisations on the AG.	
	<b>RM</b> MSLOT will take the responsibility for reporting back to the AG any comments from	

	statutory stakeholders. The statutory stakeholders would have 4 weeks to respond to any documents.	
	AG meetings need to be timed to allow for the review of statutory stakeholder comments. For example, the PEMP and EMP are required to be submitted 3 months prior to construction starting, a AG meeting must take place following the initial 4 weeks of that period to allow AG to discuss the documents with the comments received from statutory stakeholders.	
<b>3.7</b>	<b>Way of Working</b>	
	<b>CE</b> Suggested including a ‘Ways of Working’ section of the ToR. This would include the current Reporting and Meeting Frequency sections and ‘review of the AG function’, ‘information dissemination’ and ‘core agenda’.	
	This should include dates for documents to be released prior to the next meeting to give enough time for their review – suggested 2 weeks.	
	<b>ER</b> Suggest using MeyGen’s SeaPlanner to upload documents and reports to.	<b>ACTION 5 – ER</b>
<b>4</b>	<b>Objectives of the monitoring</b>	
	<b>ER</b> explained the Objectives discussion paper. Proposed to go through the objectives a – d in order and get feedback on these objectives. These should then provide a framework for the workshop which would be there to understand the capabilities of certain technologies to meet the required questions posed by the PEMP.	
	<b>RG</b> Concerned that there was not the same level of acknowledgement for migratory salmonids as there was for marine mammals and birds in the discussion paper.	
	<b>ER</b> There has been great discussion in the industry (in workshops etc.) about not burdening the developers with wider research on salmonids behaviour in the marine environment, which is not the responsibility of the developers. There are research programmes that are attempting to answer these key behavior questions, such as the Marine Scotland Science paper, however, if the MeyGen project can be used to help this research then it should be considered however it should not be the developers’ responsibility and not the primary aim of the AG.	
	<b>RG</b> There is probably a little less known about how we might monitor collisions and behavior around turbines with salmon than marine mammals and birds	
	<b>ER</b> Agreed, less work has been done on it so far and there might need to be a slightly different approach to it than other areas.	
	<b>ER</b> It is important in developing the objectives of the monitoring for MeyGen that other research is considered and how these overlap. AG members should be aware of other research in their area and be able to advice on this.	
	<b>ET</b> The Marine Scotland Demonstration Project is one of those wider research areas; it’s aim is to explore and trial the capabilities of certain technologies to detect potential encounters or collisions between marine mammals and marine energy devices. The scope and precursor report (SMRU 2013) can be distributed to the AG. ET will get a funding decision in the next few days.	<b>ACTION 6 - ET</b>
	It is important to understand the function of the AG and what is considered monitoring and wider research.	
	<b>RM and BH left the meeting</b>	
<b>4.1</b>	<b>a) Hydro dynamics / benthic surveys, export cable route and turbine locations and modeling to validate EIA predictions</b>	
	<b>ER</b> Proposed validation of the modeling used in the EIA by using ADCPs around the turbines	
	<b>CE</b> Will the objectives include the validation of other ES predictions? Noted that there is nothing covered for noise.	
	<b>ER</b> This is only based on the Section 36 conditions, which only has the 4 main objectives. However, it is a valid point that there is no provision for the Marine Licence conditions in the AG for which MeyGen has just received a draft version of (22 <sup>nd</sup> Nov).	

	EK SNH would like clarification from MSLOT on how the Marine Licence fits with the Section 36 conditions and the role of the AG.	<b>ACTION 7 – DOS</b>
<b>4.2</b>	<b>b) Collision / encounter interactions with the tidal turbines for diving birds, marine mammals and fish of conservation concern</b>	
	ER There are a number of research programmes in existence that should provide information for the development of monitoring under this objective. E.g. Strangford Lough/SMRU, FLOWBEC, ReDAPT, RESPONSE	
	All Agreement that the 2 questions in the discussion paper are correct to be taken forward to the technology workshop.	
	There needs to be a cost:risk approach to the decision on what technology to take forward. The cost and readiness of the technology versus the information that it will provide.	
	JW GPS tags should also be considered as these may provide the best opportunity to cover both objectives for encounters and disturbance and displacement on a wider scale.	
<b>4.3</b>	<b>c) Disturbance and displacement of birds, marine mammals and basking sharks during construction and operation. This must also link to the species protection plan for seals at haul outs</b>	
	ER noted that the current project plan (4 No. turbines on gravity base foundations and beach landing) does not include drilling works during construction so there is considered to be no disturbance impacts; however, any changes to the project plan would need to consider those impacts and a decision made on the requirement for monitoring (e.g. a beach landing at the Ness of Quoys).	
	FB ET There was a meeting earlier in the week on corkscrew injuries in relation to the Port of Ardersier development. Research on potential impacts (using wax dummies) and attraction behavior to thrusters is ongoing under a large SMRU project.	
	Port of Ardersier has agreed a more focused monitoring programme for seals and vessels	
	MSLOT to keep the AG up to date on corkscrew injury research	<b>ACTION 8 - DOS/ET</b>
<b>4.4</b>	<b>d) Migratory salmonids</b>	
	ER Covered under the first section of 4	
<b>4.5</b>	JW Is there a requirement for a baseline? If there is then this determines the timescales for developing the objectives and monitoring scopes of work – bird tagging during a breeding season would need to start in March.	
	ER Agree, need to consider timescales in the development of the scopes of work following the workshop.	
	EK How should we comment on the discussion paper?	
	All Agreed comments to be sent to ER in 2 weeks (11/12/2013) and the document can be revised and re-issued.	<b>ACTION 9 – ALL</b>
<b>5</b>	<b>Monitoring techniques – next steps</b>	
	All Agreed a workshop is required to understand the potential of technologies available to order to confirm the questions that will be asked under the MeyGen monitoring. The workshop should involve academics that have previous experience in those areas outlined in the discussion paper. Technology developers are not likely to be able to give us a better understanding of the capabilities at this stage.	
<b>6</b>	<b>Funding</b>	
	ER There needs to be a consideration with the AG of how the monitoring work may be funded. MeyGen has identified opportunities for funding such as Horizon 2020. There is a question mark over how the Scottish Government and other organisations such as The Crown Estate can be involved at this level to ensure that the monitoring has maximum benefit for the wider industry.	
<b>6.1</b>	ET MS Policy is anticipating confirmation on a request for funding for the Marine Scotland Demonstration Project in the next few days. This would fund the initial work, the project	

	would be up and running at the beginning of the next financial year (April 2014). They would be looking for partnerships to complete field trials.	
<b>6.2</b>	<b>ER</b> TCE have completed their gap analysis and project scoping work for monitoring activities to help enable marine energy, however they do not have a source for funding these projects at the moment.	
	<b>DP</b> TCE will have funds available for this work through the enabling actions, it will need an approach from MeyGen to open the door for this.	
<b>7</b>	<b>AOB</b>	
<b>7.1</b>	<b>Workshop</b>	
	List of attendees completed by the 11 <sup>th</sup> Dec	<b>ACTION 10 - ER</b>
	Dates – 27-29 <sup>th</sup> Jan 2014	
	Venue – Battleby (best option) otherwise, Aberdeen, Perth College	<b>ACTION 11 - EK</b>
<b>7.2</b>	<b>Date for next AG</b>	
	27-29 <sup>th</sup> Jan 2014 at the workshop; enable the AG to discuss the outcome of the workshop	
	Target: to agree the ToR and Objectives which can then be sent to the Minister	
	Requires 2 <sup>nd</sup> draft ToR, Objectives and Meeting Minutes to be distributed to the AG no later than 13 <sup>th</sup> Jan 2014	<b>ACTION 12 - ER</b>

## ACTION REGISTER

No.	Action	Responsibility	Complete
1	ER to send the document structure to the AG when complete	ER	
2	ER to add a provision for reviewing the need for and function of the AG to the ToR	ER	✓
3	<b>All</b> Further discussion required on the membership of the group (inclusion of a further independent scientific advisor) at the next AG meeting.	<b>ALL</b>	
4	All There needs to be provision in the ToR for the arbitration of disputes within the AG	<b>ALL</b>	
5	ER Suggest using MeyGen's SeaPlanner to upload documents and reports to.	ER	✓
6	ET The Marine Scotland Demonstration Project is one of those wider research areas; it's aim is to explore and trial the capabilities of certain technologies to detect potential encounters or collisions between marine mammals and marine energy devices. The scope and precursor report (SMRU 2013) can be distributed to the AG. ET will get a funding decision in the next few days.	ET	
7	EK SNH would like clarification from MSLOT on how the Marine Licence fits with the Section 36 conditions and the role of the AG..	<b>DOS</b>	
8	MSLOT to keep the AG up to date on corkscrew injury research	<b>DOS/ET</b>	
9	All Agreed comments to be sent to ER in 2 weeks (11/12/2013) and the document can be revised and re-issued.	<b>ALL</b>	
10	List of attendees completed by the 11 <sup>th</sup> Dec	ER	✓
11	Venue – Battleby (best option) otherwise, Aberdeen, Perth College	EK	✓
12	Requires 2 <sup>nd</sup> draft ToR, Objectives and Meeting Minutes to be distributed to the AG no later than 13 <sup>th</sup> Jan 2014	ER	