Guernsey Renewable Energy Commission

Regional Environmental Assessment Report on the Scoping Report Consultation

February 2010

COMMERCE AND EMPLOYMENT
A STATES OF GUERNSEY GOVERNMENT DEPARTMENT

GRC
Guernsey Renewable Energy Commission

Guernsey Renewable Energy Commission

Regional Environmental Assessment of Marine Renewable Energy – Report on the Scoping Report Consultation

February 2010

Contents Amendment Record

This report has been issued and amended as follows:

Rev	Description	Date	Signed	Signed
1	Document for public release	10/02/10	N Day GREF Chairman	R Babbé GREC Chairman

Consultation Report

Regional Environmental Assessment Scoping Report

Table of Contents

1. Introduction

1.1 Background

Guernsey is undertaking a Regional Environmental Assessment of its coastal area out to 3nm with a view to identifying areas of potential energy resource and the environmental impact associated with the potential sighting of Renewable Energy devices. With some of the strongest tidal currents in the world and facing the Atlantic Ocean, the Bailiwick of Guernsey is well positioned to be a major contributor to the emerging marine renewable energy market and meeting the needs of the 21st century.

The States of Guernsey, through the Commerce and Employment department, set up the Guernsey Renewable Energy Commission (GREC) to investigate the potential for, facilitate and consent the development of marine macro renewable energy projects. Within this project brief an important stage is the identification of any potential environmental and social impacts and as such, in order to follow European best practice and to highlight any issues, it was decided that a Regional Environmental Assessment (REA) would be undertaken.

In parallel with the formation of GREC, a stakeholder group of local environmental specialists and interested parties was established, the Guernsey Renewable Energy Forum (GREF).The initial stage of the Environmental Assessment process was for GREC and GREF to prepare a Scoping Report, which outlines the area to be studied and looks at identifying how the full REA will be undertaken.

1.2 Overview of the Consultation Process (Methodology)

The document was released to the public for consultation on the 29th of October 2009. We invited responses from anyone who wished to comment on any aspect of the REA Scoping Report whether it was from a technical perspective or to highlight areas that may have been overlooked. The commencement of the consultation was advertised in the local paper, The Guernsey Press, with instructions for obtaining the Scoping Report and the associated 4 page Consultation Paper. They were both available from the Guernsey Renewable Energy website, http://www.guernseyrenewableenergy.com, for downloading by anyone in Guernsey, the Channel Islands, the UK or further afield. There were also paper copies available to view at the Guille Alles Library, Market Street, St Peter Port as well as the Commerce and Employment Building – Raymond Falla House, St Martins, and at the States Government Office at Sir Charles Frossard House.

Additionally, a copy of the Scoping Report and Consultation Paper was sent to members of GREC and GREF and was circulated to all other departments within the States of Guernsey. Copies were also sent to developers of wave and tidal devices for them to provide any comments that they had. Fishermen were sent a copy of

the Consultation Paper through their newsletter sent out from the Sea Fisheries department and advised how they could get a copy of the Scoping Report. Copies were also sent to environmental authorities in the UK such as DECC and RSPB.

Replies by e-mail and posted letter were received at an account created specifically for the consultation process (enquiries@guernseyrenewableenergy.com) and recorded in a register. Letter responses were received at Raymond Falla House and were also recorded in a register. A system was established for the recording of telephone conversations regarding the consultation, however none were received.

This consultation report has been prepared to describe the responses received. It is to be made available to the public and circulated to all those who responded to the consultation. The document outlines all of the issues raised in response to the scoping document and highlights the major issues. It also indicates GRECs response to the comments and what action will be taken.

2. Response

2.1 Overview of responses

In response to the public consultation GREC received 19 items from a variety of consultees. There was a consensus that the REA Scoping Report had been produced to a high standard, but there were a number of points of detail that should be addressed. The responses are summarised in the following table, which outlines all of the issues raised. Where chapter, paragraph, page and section numbers are mentioned they relate directly to the REA Scoping Report that was released at the start of the public consultation. As planned, the Scoping Report is now due to be redrafted to take into account the issues raised by the consultation as described in section 2.4 of this report.

2.2 List of Respondents

Respondent	Reference
Guernsey Police	REA001
Paul Luxon[1]	REA002
Jack Hardisty - Neptune Renewable Energy Ltd	REA003
Roger Cavill – UK Hydrographic Office	REA004
Steve Smith - Environment Department	REA005
Alex Fuller - Fuller Group Limited	REA006
Dr Alexander J Downie – Scottish Environmental Protection Agency (SEPA)	REA007
G Guille - Housing Department	REA008
Paul St Pierre - RSPB	REA009
Peter Hughes - Halcrow	REA010
Jamie Hooper	REA011
John Cannon - Navigation Services Officer – Trinity House	REA012
Deputy Peter Sirett - Environment Department	REA013
Richard Keen – Guernsey Diver/fisherman	REA014
Mat Desforges – Alderney Renewable Energy (ARE)	REA015
Sara Thomas - Tidal Energy Limited (TEL)	REA016
Blair Marnie - DP Energy Ireland Ltd	REA017
Chris Bale - Ocean Electric Power	REA018
Roger Olsen	REA019
Meeting with Steve Smith and Paul Veron	REA020

[1] Excluded from table below due to their comment not relating to the REA Scoping Report.

2.3 Summary of Responses

Table 1: Table of responses to consultation

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference
Renewable Energy	Guernsey Police	• Currently outside the expertise and responsibility of the Police, however keep informed as they may be able to advise on security in the future.	Maintain communications with the Police service.	REA001/1
Exchange of Links and update on status	Jack Hardisty – Neptune Renewable Energy Ltd	• Neptune Renewable Energy Ltd has a full scale demonstrator device to be deployed in the Humber in the New Year.	Update the Guernsey Renewable Energy Website to account for this and add link. Neptune RE Ltd to add link to Guernsey Renewable Energy Website.	REA003/1
Updating of Charts	Roger Cavill – UK Hydrographic Office	• Once proposals for devices are made the UKHO will need to be informed so as to keep their charts up to date	Keep UKHO informed of the progression of the project. UKHO to inform GREC of required information at appropriate time.	REA004/1
2.6 – Development Scenarios	Steve Smith – Environment Department	• Where do the maximum and minimum developments come from? Presume that the maximum is based on currents and assumed efficiencies, but why the minimum of 10MW? • Why limit to maximum and minimum scenarios via 6 sites, especially when potentially we could get the minimum scenario from 2 sites leaving the others undisturbed • Development scenarios don't include the scenario of meeting the minimum development requirement of 100MW with the least number of development sites or with the max number of development sites and min number of installations (turbines) in each site (two opposite ends of the spectrum for environmental impacts).	Clarify why nothing less than 10MW suggested and why 50MW is maximum. Link maximum and minimum developments to the suggested development scenarios. Clarify the development scenarios to reflect the different possible options.	REA005/1 REA005/2 REA005/3

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference
	Paul St Pierre - RSPB	• It appears that the location of the development sites is already determined and there is reference only to a limited number of scale options at each site. It does not look at how a mixture of options (i.e. fewer, larger options) could reach the minimum power target set: There is a range of further permutations, which could be explored.	Clarify the development scenarios to reflect the different possible options.	REA009/1
REA scoping/Price of Renewable energy	Alex Fuller - Fuller Group Limited	• Pleased to see progress in the area • With regards to the Consultation Document FAQ 9 asks 'Will Marine Renewable Energy be Expensive'? I think the question should be answered in a more complete context, acknowledging that fossil fuels currently cost less, but have an environmental cost.	N/A Bear in mind and report openly in all future releases.	REA006/2 REA006/1
Review of REA Scoping Document	Dr Alexander J Downie – Scottish Environmental Protection Agency (SEPA)	• A thorough piece of work • That I thought the section on the various devices was 'extremely useful' to the extent, it could be used as a separate 'very useful reference tool'! • That it was a more detailed scoping report than some I had seen before. • That adding the reasons why we were not considering certain areas, etc., at this stage was also very good and that I thought it was very useful to have detailed these areas right at the outset.	N/A Device section could be developed to create a separate reference tool. N/A N/A	REA007/2 REA007/1 REA007/3 REA007/4
Scoping Report	G Guille - Housing Department	• No Comments	N/A	REA008/1

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference
Regional Environmental Assessment overview	Paul St Pierre - RSPB	• The RSPB recommends that the policy context of the REA should be measured against those listed in table 4.1 and this extended to include the EU Birds Directive and the Convention on Biological Diversity 1991 to adequately assess the impacts on wildlife.	Include the EU Birds Directive, SEA/EIA regulations and the Convention on Biological Diversity 1991 in Table 4.1.	REA009/2
		• The RSPB supports the use of the REA to be used as the basis of a separate formal Marine Spatial Planning Project.	N/A	REA009/33
		• The RSPB recommends that the Guernsey Government uses the findings from the REA to help inform the creation of a network of Marine Protected Areas (MPAs).	Use data to create MPAs	REA009/3
		• The scope of the REA should be extended to terrestrial species and habitats.	Extend scope of REA to incorporate terrestrial issues.	REA009/4
		• The RSPB recommends that all "in-combination" cumulative effects are included within the REA.	Include all in combination cumulative effects in REA	REA009/5
		• The RSPB recommends that an Appropriate Assessment, reflecting the requirements of the European Union's Habitats Directive, be undertaken on all Important Bird Areas (IBAs) that fall within the geographic scope of the REA.	Identify IBAs and perform relevant assessment on them.	REA009/6
		• The RSPB supports the requirement for additional surveys to be undertaken to determine important marine areas for wildlife and inform suitable mitigation measures. These surveys should form part of the construction and post construction monitoring to assess and inform these mitigation measures.	N/A	REA009/34

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference
Scope of the REA	Paul St Pierre - RSPB	• Recommend including all possible offshore energy options within the assessment to provide better understanding of the resource and potential significance and for better informing of marine spatial planning. • The RSPB is concerned that the report will not consider the cumulative effects of existing activities on the marine environment (1.2). Whilst the scoping report suggests that current activities act as a baseline, there is still a need to understand the "synergistic" effects (e.g. stemming from reactions between effects that produce a total effect greater than the sum of its parts) to understand the implications of the projects within the REA. By carrying out this work, the value of the REA will be Further strengthened in informing spatial planning processes (section 4.2)	Include offshore wind and tidal range in the REA report. Assess the impacts of marine renewables in combination with the existing impacts.	REA009/7 REA009/8
Energy Use	Paul St Pierre - RSPB	• The document predicts that the island's energy consumption will increase by 188% by 2020. We recommend serious consideration is given to pegging energy use at the current level - if this could be achieved then this renewable resource could meet the Equivalent of 50% of current energy demands.	Look at ways to encourage people to save electricity	REA009/9
Production of the REA	Paul St Pierre - RSPB	• The value of the REA desktop study will be determined by how the data currently available are used. The RSPB would expect the best use of all sets of existing data to get the most complete picture available prior to the EIAs being undertaken. We are happy to discuss further • The RSPB welcomes the clear statement that REA is not prejudging the matter (2.4).	Use all existing data N/A	REA009/10 REA009/35

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference
Chapter 3 – Stages of the REA	Paul St Pierre - RSPB	• Other stakeholders with expertise who can contribute to the process should be included, e.g. NGOs. We recommend that they are included in the process at this stage (A7). • There will be a need to review the data collected and assess whether further data collection is required. This is likely to arise where one set of data highlights the need for further datasets, which should be included at the first available opportunity.(between A13 and 14) • It is unclear what would happen if further work were required because of consultation (D2). We recommend that the process is not just considered sequentially but includes feedback mechanisms to allow more work to be undertaken before proceeding to the next step.	Recommend including non government organisation in task A7 Insert a task between A13 and A14 for review of additional data. Allow for integration of feedback into the reports and show this in table 3.4	REA009/11 REA009/12 REA009/13
Site Selection	Paul St Pierre - RSPB	• Whilst the scoping report highlights the need for terrestrial infrastructure, it makes no mention of how this will be assessed. The criteria needs to consider both the marine and terrestrial components of the plan and therefore it is necessary to extend the scope of the selection criteria to include: Biological Factors ○ Avoidance and minimised disturbance of sensitive marine and terrestrial environmental areas; ○ Important breeding, mating and spawning areas ○ Important resting, roosting or loafing areas	Include in section 6.4 breeding, mating and spawning areas and resting, roosting or loafing areas.	REA009/14

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference
7.3 – Marine Biological Environment	Paul St Pierre - RSPB	• Data search requests should also be made of the JNCC, RSPB, BTO and universities that have carried out research within the marine environment. Data should also include WEBS counts and gull roost counts (low and high tide – if available) from the BTO to ensure that any potential issues around pollution effects are considered.	Include JNCC, RSPB, BTO and universities to the list of data sources.	REA009/15
		• The plan includes a review of the terrestrial development needs of the REA because of the land-based construction and distribution network requirements. The RSPB therefore recommends a section on the potential effects on terrestrial habitats and species is included in the REA.	Include a section on terrestrial environment	REA009/16
		• The following sites have been identified as Important Bird Areas (IBAs) (P K Veron (Ed) 1997) and therefore potentially qualify as internationally important and should be included: Guernsey Heathland IBA composed of: Pleinmont, Torteval; L'Ancresse, Vale; and South Coast Cliffs. Guernsey Shoreline IBA composed of: Guernsey Shoreline; Belle Greve Bay; Grande Havre, Vale; and Fort Le Crocq, St Saviour.	Include suggested sites in 7.3.1.2	REA009/17
		• We are concerned about the accuracy and reliability of only land based study (7.3.4.1).	Land and boat based surveys and satellite tracking	REA009/18
		• Potential Impacts - This section should also include: ○ Effects on roosting and loafing sites ○ Direct loss of feeding habitat ○ Potential collision risk ○ Pollution ○ loss of habitat through disturbance displacement Habitat change cased by reduced mixing of water resulting in loss or reduction in, or change of food supply	Incorporate the impacts into section 7.3.4.3	REA009/19

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference
Potential Risks	Paul St Pierre - RSPB	• Table 8.1. The table includes risks that are not mentioned in the topic sections and therefore it seems sensible to ensure that these correspond to each other.	Make the risks in table 8.1 match those in section 7	REA009/20

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference
Appendix D – REA Assessment Method	Paul St Pierre - RSPB	• The RSPB welcomes the methodology set out in paragraph one and recommends that second bullet point has the wording in italics inserted: ○ Assess the potential (*spatial, temporal, direct, indirect and cumulative*) environmental effects of wave and tidal devices based on the development scenarios;	Insert *spatial, temporal, direct, indirect and cumulative*	REA009/21
		• Whilst the REA is not expected to replace the need for a site-specific assessment once we have all the details of a proposal, it should identify the issues relating to a particular site with a view to identifying which ones should and should not be used.	Re-write second paragraph to better reflect this.	REA009/22
		• Stage 1 – This seems like a sensible approach but it would be helpful to expand on how this may be applied to make it clearer on the value of this approach. We support the approach of using the summary of generic effects set out in chapter 8.	Expand Paragraph on technology envelopes.	REA009/23
		• Stage 2 – The RSPB welcomes much of the approach set out in stage two but we have the following comments: There is an additional mitigation measure that needs to be considered and that is one of "avoidance", particularly in light of the following paragraph, which states, " it would be hard to know what measures to build into the device. The RSPB recommends the rewording of the third mitigation measure, as it is unclear what this means. Does this refer to operational and maintenance restrictions?	Include avoidance in mitigation types. Clarify what is meant by "recognised mitigation methods".	REA009/24 REA009/25
		• The RSPB is concerned with the following statement. "As well as this, the REA does not know the types of mitigation measures that would be derived from more detailed assessments, such as a targeted EIS. As such, these two mitigation methods cannot be used to inform the assessment". If the generic types of mitigation measures available are known then it is also known which effects from the plan can be mitigated by them (in principle at least). However, if there are effects for which there are no known mitigation measures then a targeted EIS is unlikely to be able to help overcome those.	Rewrite/explain paragraph 3 in stage 2.	REA009/26

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference
Appendix D – REA Assessment Method	Paul St Pierre - RSPB	• The RSPB agree with the first recognised mitigation measure but it is unclear what the second one means. Is this referring to 500m avoidance by pipelines and cables on important features e.g. biodiversity hotspots?	Clarify bullet 2 of the recognised mitigation measures	REA009/27
		• Stage 3 – Whilst there are likely to be some data gaps, it is important that these are highlighted in the REA to ensure that they are picked up by the individual EIAs.	Reflect that areas where data is scarce will be highlighted	REA009/28
		• With the presence of significant amounts of leisure and navigation data there is an opportunity to start considering in-combination effects and also identifying areas within the broad area of search that may be "no go" zones due to navigation or fishing issues.	Identify no go areas	REA009/29
		• Marine mammals 1st paragraph: Because there may not be an existing data set that covers all of the above information to a consistent level it is important that all the information presently available is utilised and that further work is undertaken in certain areas if considered necessary.	Use all presently available information and undertake further work.	REA009/30
		• Commercial fisheries paragraph 3: The RSPB recommends that more detailed, location-specific studies should be undertaken for individual developments for all issues through the project EIA process, providing that this is simply to reflect the most up-to-date information.	Detailed site specific studies to be under taken for individual developments for all issues.	REA009/31
		• There should be scope within the REA to look at some mixed scenarios dealing with the different technologies applied in differing areas. We recommend starting by looking at each site alone, considering the best technologies to be used there, and then aggregating different permutations of the sites.	Look at potential sites individually	REA009/32

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference
REA Scoping report and full Regional Environmental Assessment	Peter Hughes - Halcrow	• The statement that you will tackle cumulative impacts (top of p2) but not in combination impacts may be a bit confusing. In my mind, cumulative impacts are the impacts of lots of devices in the water, in-combination impacts are those from the devices and traffic and fishing etc. This is clear. You are right to consider the existing impacts as part of the baseline, but I think you should consider the in-combination effects of all of the other activities that are happening in the area or are planned to happen. Perhaps you do but I didn't get that from a quick read. What you don't want to do is provide an holistic REA - i.e. the full range of in combination effects - sewage outfalls on fishing, sailing/traffic on beach amenity. Think this could do with being stated more clearly	Need to clarify 1.2 paragraph 4 to include in combination effects of marine renewables and all other identified receptors.	REA010/1
		• Programme - it's not clear what the timeframe is for the REA - possibly my poor speed reading?	Clarify what the timeframe for the REA is.	REA010/2
Responding to RSPB comments	Jamie Hooper – La Société Guernesiaise	• The proposed areas are not Important Bird Areas under the EU Directive. Neither do they qualify as local IBAs. However, part of the reason for that is because we know little about how birds use our seas.	N/A	REA011/1
		• I do not see much value in incorporating terrestrial habitats and species. Any effects onshore would be expected to be limited to the immediate area at which cables come ashore and some possible minor effects during any construction works. This would be picked up by a project-specific EIA.	Maintain current REA scope for just marine areas.	REA011/2
		• I accept that the cumulative impacts should be considered. These can be difficult to assess but there's nothing wrong with saying we don't know because we can recommend monitoring programmes to find out.	Incorporate Cumulative impacts into REA.	REA011/3

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference
Navigation	John Cannon - Navigation Services Officer – Trinity House	• We would suggest that it is important to ensure that whatever licensing or consenting regime is established in your area to authorise any developments, provisions should be made for marine navigational marking required for in the interests of safety of navigation to be considered and specified by the local authorities (presumable the Guernsey Harbour Master).	At deployment navigational marking should be up to date to show the presence of arrays.	REA012/1
		• We would also suggest that an appropriate regime be set up to ensure that any marine marking that is specified as being required is actually being provided by the developer/Operator.	Developer should be responsible for marine marking.	REA012/2
		• In case you are not aware, the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) has agreed a recommendation O-139 on the marking of man-made offshore structures. This includes at section 2.4 the requirements for the marking of wave and tidal energy devices, some of which may be submerged or semi submerged.	Need to ensure submerged and semi submerged devices are marked with navigation aids.	REA012/3
		• You may wish to include in the REA the impact of the provision of the aids to navigation potentially being required to mark offshore renewable energy installations.	Include in the navigation section the impacts of navigation aids.	REA012/4
		• The use of AIS derived information is clearly a very important tool to inform decision making. It should however also be borne in mind when assessing such information that currently only vessels over 300 grt are required to carry AIS and that whilst many leisure craft and smaller fishing vessels do carry such equipment, they are not required to do so, and would not therefore necessarily be included in plots of vessel track derived from AIS. It should also be borne in mind that information obtained from shore based AIS receiving stations may be limited by range.	Understand and illustrate the limitations of the AIS information.	REA012/5
		• Trinity House maintains the Hanois and Sark Lighthouses. As I am sure you will appreciate, we would be concerned if any wave or tidal energy development was allowed in the immediate vicinity of these lighthouses, if it had the potential to adversely obstruct or obscure either the light exhibited or the day mark of the station. Whilst this is thought unlikely, we are aware that some wave and tidal devices currently being developed do have a significant structure above the surface of the sea and that afield of devices may require offshore substation structures to be erected.	Ensure that tidal and wave devices do not interfere with aids to navigation.	REA012/6

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference
REA Scoping Report overview	Deputy Peter Sirett - Environment Department	• A perception that can be gleaned from a particular interpretation of the scoping document is that the leaning of the project is towards chasing the economic gain by adopting a starting point of extracting the maximum amount of resource from the territorial waters and only moving back from that maximum extraction scenario as, and when, unacceptable environmental impacts are identified in relation to any one specific site.	Need to make clearer in the document that this is not the case.	REA013/1
		• The Environment department is of the view that the appropriate approach to selecting sites for renewable energy should be: ○ A spatial map incorporating all potentially viable sites ○ A similar spatial map of constraints ○ A coarse screening exercise comparing the above ○ Detailed Environmental Sensitivity Assessment on priority sites ○ Sites presenting both best economical and least environmentally impacting be prioritised ○ Further sites to point 5 would be considered only should islands needs require it. From meeting with GREC it is apparent that this is the intention, however it needs to be made clearer.	Clarify that this is the intended methodology.	REA013/2

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference
Chapter 1 – Introduction	Deputy Peter Sirett - Environment Department	• 1.2 – Main Objectives of REA – bullet 1, it is possible to interpret this statement as implying that there is a presumption that all technically feasible generation activities up to the maximum development scenario do not result in unacceptable environmental impacts.	Need to ensure there is no leading of the REA or future EIA	REA013/3
		• 1.3 – last paragraph, reference is made in the second Line to "REA" and in the fifth line to "potential affects of the marine devices". There is perhaps a degree of confusion between the scoping document and the REA. The REA has not yet been drafted but the consultation report refers to chapters 7 and 9 as being part of "this REA".	Clarify REA and REA scoping report	REA013/4
		• Further, the description of the "potential affects of the marine devices" is perhaps more appropriately confined to the REA rather than presented with associated presumptions, as part of the scoping report.	Remove potential effects of marine devices from scoping report	REA013/5
		• 1.4.1 – fifth bullet – this objective/drive, whilst laudable, potentially introduces new and additional impacts beyond those of extracting renewable energy from our territorial waters.	Highlight in the REA scoping the potential impacts from increased facilities, and need to be incorporated into full REA.	REA013/6

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference
Chapter 2 – Project Description	Deputy Peter Sirett - Environment Department	• 2.1 – 4th paragraph – this statement in the project overview does not specifically highlight the need and/or intention to balance the generation capacity of the identified sites against the various constraints layers and the environmental sensitivity of the sites. The department appreciates, following discussion and clarification of the intended approach to the REA, that this balancing exercise will be carried out.	Clarify this point in the project overview.	REA013/7
		• 2.6 – the content set out in this section and especially in pages 13 and 14 is the area of the scoping report that lacks greatest clarity. ○ The section sets out maximum and minimum development, why the minimum development has been set as such, i.e. is any lesser development economically unviable whilst at the same time is the maximum development is indeed maximum amount of resource that can be extracted.	Clarify where the maximum and minimum developments come from/reasoning	REA013/8
		○ 6 development scenarios listed (page 14), emphasis appears to be focused on economic return.	Include scenarios including, but not limited to: (a) Development of those sites where there is no perceived conflict, (b) Development of fewest number of sites to give minimum target (c) Development of a number of sites to the minimum adverse impacts to minimum target.	REA013/9
		• 2.7 – the robustness of not assessing the impact of increased marine traffic is questionable – presents a misleading picture.	Either adopt the position that no development will take place or remain open and outline if not possible at the moment	REA013/10

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference
REA Framework	Deputy Peter Sirett - Environment Department	• The environment department believes that the REA framework should specifically refer to: ○ Assessing the installation, maintenance and decommissioning impacts including dredging, concrete pouring etc. ○ Assessing land- use impacts ○ Assessing port/labour etc impacts	Potentially contained in (b), clarify if this is the case	REA013/11
Marine Spatial Planning	Deputy Peter Sirett - Environment Department	• This section, specifically last sentence of penultimate paragraph, potentially addresses many of the concerns raised, however it is a concern it is not given greater prominence.	Highlight earlier in the document	REA013/12
Site selection	Deputy Peter Sirett - Environment Department	• The Environment Department is pleased with this section as it further allays concerns. However, we wish to be assured that not all sites would be assessed, only those which pass through a coarse screening as suggested before.	Outline that only areas which are not covered by big no go zones would be looked at.	REA013/13

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference
Chapter 7 – REA Topics, Baseline Data and Predicted Effects	Richard Keen – Fisherman/diver	• 7.2.1.2 – I would expect there to be little impact as the most likely areas for placement of devices would be free of sediments due to the speed of the tide and no installer of equipment wants to be near sand or gravel for fear of damage to seals or turbines.	N/A	REA014/7
		• 7.2.3.2 – The only impact I see is from the possible use of anti-fouling treatments and oil escaping from damaged gearboxes. There are several settlements per year of things such as barnacles and marine worms which will adhere to almost any object. Seaweed growth may also be problematic.	Be aware of the risks of oil and antifouling treatments	REA014/8
		• 7.3.5.3 – do not see any great worries in this area the seals seem very content even when there are a lot of vessels in their area.	N/A	REA014/9
		• 7.4.1.2 – displacement of fishing activity is a problem but most of the fishermen seem keen on harnessing the power of the sea. Providing the stakeholders are consulted, do not see major problems. There should be some form of compensation on a yearly basis for a defined period. o Fishermen do not fish exactly the same spot all the time.	Consult with fishermen Provide some mitigation for lost grounds	REA014/1 REA014/2
		• Have seen no interference from electromagnetic disturbance	Need to convince fishermen	REA014/3
		• Have not noticed much disturbance to fish in the Little Russel with the constant noise of ferries and traffic in and out of the harbour.	N/A	REA014/10
		• 7.4.2.3 – possible undeclared wreck in the Percee passage between Jethou and Herm.	If found to be there, need to evaluate.	REA014/4
		• 7.4.4.3 – collision risk may be a problem as it is not uncommon for boat to hit well marked buoys!	Be in contact with French and UK chart makers to inform them of progress	REA014/5

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference
Spatial planning	Richard Keen – Fisherman/diver	• Someone should produce a chart of the area with transparent overlays where permission would not be granted, would be considered and would almost certainly be given permission.	Create a chart of areas of likely development.	REA014/6
REA	Mat Desforges – Alderney Renewable Energy (ARE)	• No comments.	Please maintain contact	REA015/1
Appendix C	Sara Thomas - Tidal Energy Limited (TEL)	• Update on TEL DeltaStream	Include update in Appendix C	REA016/1
Socio economic	Sara Thomas - Tidal Energy Limited (TEL)	• TEL believes that marine renewable energy can provide a sustainable source of employment – not just during installation but, more importantly, local jobs during the operational phase carrying out monitoring and maintenance.	TEL considers that the regeneration opportunities of marine renewables should be included in the socioeconomic assessment of the REA.	REA016/2
		• We also consider the amount of power available and the benefits of renewable energy including the effects carbon dioxide reduction and social issues should be addressed.	Include effects of reducing CO_2	REA016/3
		• We also consider the effects of decommissioning of the site and the long term impacts following reinstatement of the seabed should be considered.	Consider long term effects	REA016/4

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference
Chapter 1 – Introduction	Blair Marnie - DP Energy Ireland Ltd	• 1.2 - In addition to data collected being used to inform the scoping opinion, it would be useful if this data could be made available to support the project specific EIA as required. This could potentially accelerate the process by providing key baseline assessment information.	Make data available for entire specific EIA process	REA017/1
		• 1.3 - There may be merit in including an onshore section in the scoping report to highlight the potential impacts of cable landfall and connection to the transmission network whether by underground or overhead cabling. In addition, some form of onshore monitoring/service area will be required. In addition, given the proximity of the development area to land, a landscape/seascape assessment is likely to be required for any surface piercing elements of the development	Include an onshore section in the REA	REA017/2
		• 1.4.2 - The Atlas of UK Marine Renewable Resources predicts a mean spring peak velocity of up to 2.5m/s. It would be useful to better understand how 200GWh can be supplied from a 100MW tidal development with a relatively low tidal speed. Given the relative immaturity of device technology there is undoubtedly some uncertainty with capacity factor prediction which may result in a lower than predicted electrical output from a given installed capacity.	Explain how 200GWh can be provided from the currents predicted in the Bailiwick	REA017/3

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference
Chapter 2 – Project Description	Blair Marnie - DP Energy Ireland Ltd	• 2.1 - Although not specifically part of the REA it would be useful to better understand the mechanics of the competitive selection process especially if a tender were to be submitted based on a 2.5m/s tidal speed without a feed in or ROC equivalent support mechanism in place.	Outline the tender process	REA017/4
		• 2.3.1 - It is recommended that the party responsible for seabed outside Guernsey and Sark`s jurisdiction is consulted and that parties responsible for European designated areas for sea birds up to 60km are also consulted.	Consult with the body governing the seabed in the 3-12 nm limits.	REA017/5
		• This is true (cost of cabling), however, experience gained on our Islay project is that the major cost for sub-sea cabling is the mobilisation and demobilisation of the cable laying vessel. Beyond this the incremental cost is more related to the material cost of the cable.	Better reflect the costs of sub marine cabling in the REA Scoping Report	REA017/6
		• 2.3.2 - Although it is important to confirm tidal speed over a given area it is also important to verify the velocity distribution in the water column due to sea-bed and wave generated turbulence plus directionality. Given that current tidal resource predictions are based on modelled data shouldn't an ADCP programme be initiated? In addition, given the importance of shipping, shouldn't a full navigational risk assessment be undertaken? A grid study initiated to assess the capacity and likely levels of deep reinforcement required to accommodate wave and tidal development projects would enable a more accurate prediction of cost versus return.	Need to utilise ADCP devices to measure tidal flow Undertake a full navigational risk assessment.	REA017/7 REA017/8
		• 2.4 - Noted and we would expand on this comment with our view that a 'technology neutral' developer led, rather than manufacturer led approach ensures that the best technology and most appropriate device is selected on a site by site basis.	Clarify the position on developer led approach	REA017/9

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference
Development Scenarios	Blair Marnie - DP Energy Ireland Ltd	• From our observations of the two industries over the past few years we would observe that technical validation for commercial deployment of wave devices sits some 5 years behind tidal technology. • A potential problem with focusing on a minimum development to meet targets is that invariably, during the EIA process, the scale of the development diminishes as potential sensitivities and mitigation measures are applied. • Whilst modelling provides some important information some form of verification will be required by ADCP. • Little is known on the potential losses due to array effects and no verification has been done to date. We have worked on 50 – 70 MW/km2 and indications on array spacing is that this may be optimistic, especially with low tidal speed.	Review section that says wave technology is further advanced Need to account for unknown potential reductions in production capacity at given sites Need to use ADCP devices to measure currents Show a more cautious approach to potential power	REA017/10 REA017/11 REA017/12 REA017/13
Licensing	Blair Marnie - DP Energy Ireland Ltd	• 4.3 - There doesn't appear to be a reference to an equivalent decommissioning license from DECC to ensure that proper decommissioning is undertaken	Highlight equivalent decommissioning license	REA017/14

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference
REA Topics	Blair Marnie - DP Energy Ireland Ltd	• 7.3 - It is noted that there is no reference to landfall otters or intertidal assessment. It is also noted that there is no reference to basking sharks who's feeding habits may make them prone to environmental impact • 7.4.4 - It may be valuable to include MCA Guidelines MGN 371 and 372 plus DTI "Guidelines on the Assessment of the Impact of Offshore Wind Farms – Methodology for Assessing the Marine Navigational Safety Risks of Offshore Wind Farms." Plus RYA cruising routes.	Need to cover all marine environmental receptors Include these in shipping and navigation data sources	REA017/15 REA017/16
Marine spatial planning	Chris Bale - Ocean Electric Power	• The issue of marine spatial planning is of profound importance to the prospects of creating commercially viable projects. We would strongly advise that the environmental assessment work be considered separately from spatial planning issues. This is because a number of the factors that affect commercial viability of projects, such as grid connections, navigation and other marine users may all have potential to be subject to management plans which can mitigate any undesirable effects. This could enable projects that might otherwise be ruled out.	Have marine spatial planning separate to environmental assessment	REA018/1
Shared approach for the channel islands	Chris Bale - Ocean Electric Power	• The sequencing of project developments will be a key issue in the creation of multiple financially viable projects in the Channel Islands. We believe that commercial deployments of tidal stream technology will not occur until 2014 at the earliest; however OEP has identified possible ways in which inter-island cooperation could accelerate subsequent renewable energy deployments to the advantage of all the islands.	N/A	REA018/2
Sark Response	Roger Olsen	• GP&A met last night and all agreed that the Scoping report is very professionally presented -- thorough, concise and well based.	N/A	REA019/1

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference
Spatial Planning	Steve Smith and Paul Veron – Face to face Meeting	• There needs to be an overlapping of data for the spatial planning and no go areas should be identified.	Overlapping of effects on charts	REA020/1
		• Coarse screening needs to be done first.	Identify big no go areas now	REA020/2
Development Scenarios		• Need to ensure that the development scenarios are not leading and, to this end, that the areas identified are currently assumed areas only.	Reword the development scenarios	REA020/3
		• Incorporate paragraph 2 on page 21, or a similar statement, into the development scenarios section.	Incorporate into development scenarios	REA020/4
Centre of Excellence		• Need to explain what is meant by "centre of excellence". Does the report simply mean intellectual property rights, in which case no further environmental issues need be considered, or does it mean industry and university ties?	Clarify what is meant by centre of excellence.	REA020/5
		• If industry and university ties, the impacts would have to be considered	Outline environmental impacts of a centre of excellence.	REA020/6
7.3.4.2 – Baseline Description (Birds)		• Guernsey is not alone in this. There is now technology available for data logging and there has been a French study using this that highlights French gannets feeding off the North West coast of Guernsey. It may prove that we need to do this to fill in data gaps.	Study Guernsey birds using data loggers.	REA020/7

2.4 Integration of Responses into the REA and Scoping Report

2.4.1 Development Scenarios

REA005/1
REA013/8
The reason for setting the minimum development scenario is to reflect the perceived commercial viability issues with smaller developments. As was raised in the comments, the maximum is based on predicted currents and efficiencies, plus the potential areas required to accommodate such arrays. This information will be clarified and explained in Section 2.6 of the REA Scoping Report

REA005/2
REA005/3
REA013/9
REA009/1
REA020/3
The development scenarios in the REA Scoping Report will be changed in order to reflect the need to link the maximum and minimum development sizes and to the development scenarios and the different options. It will also be stressed that the environment, not economic return, is the driving factor in site selection and that the sites have not yet been formally identified, just provisionally identified in the areas of best apparent resource.

REA009/7
For the reasons stated in the REA Scoping Report, offshore wind and tidal range are to remain absent from the 2010 REA. As also stated, should either become a desirable option then they can be evaluated later.

REA017/3
The calculation of electricity generation comes from the (preliminary) assessment of the tidal stream velocities linked to currently understood load factors for tidal and wave devices. This can then be used to give GWh per annum (taking into account the times during the ebb and flow tides that electricity can be generated).

REA017/13
Resource information indicated by DP Energy Ireland Ltd will be incorporated into the REA Scoping Report.

2.4.2 Spatial Planning/Zoning

REA009/3
All information collated as part of this REA will be available to be used for spatial planning, and this may include the creation of Marine Protected Areas at a later date, but this is not part of the REA.

REA009/29
REA013/12
REA013/13
REA014/6
REA020/2
It is our intention that the REA itself will not prejudge or exclude any aspect or site and, to this end, prior to the completion of the data gathering “no-go zones” will not be highlighted. However once the data is collected, overlaying of constraint areas can be undertaken and once this initial zoning is completed “no-go zones” will then be highlighted as well as areas that appear favourable for development. This will be explained and reaffirmed in chapters 1 and 2 of the REA Scoping Report.

REA018/1
REA020/1
The REA takes the spatial planning aspects into account and the chapters will offer suggestions for mitigation of environmental impacts. The spatial planning, or

zoning, will be completed after the chapters are written so that all aspects, including mitigated and residual impacts are understood.

REA013/2 Regarding the Environment Department's comments on the identification of deployment zones, this is, in fact, the proposed methodology, and this will be illustrated in 1.2.

2.4.3 Navigation

REA012/3 The need for navigation aids for submerged devices will be included in table 7.2.

REA012/5 The limitation of AIS is understood and will be made clear in the REA. AIS is only one of the data sources that are planned to be exploited in the preparation of the REA, and will be part on a range of technologies and procedures that may be used to promote navigation safety in the implementation of any projects.

REA013/10 REA013/11 GREC has outlined that there is potential for port expansion and associated increased marine traffic, however it is unknown whether either shall go ahead. Currently Guernsey does not have sufficient port facilities to support marine renewable energy operations, and only if it were decided that the industry would operate out of Guernsey then upgrading would be required. As there are no plans for this at present, and it is anticipated that the industry can be served from remote ports, we will not give resources to investigating this potential impact at this time. The impact of increased traffic can be revisited should port upgrades become a priority.

REA014/5 As well as marking with visual aids, chart makers will be kept informed and we welcome the recommendation to inform the French as well as UK chart makers.

REA017/8 Should it emerge from the REA navigation chapter that a full navigational assessment, or any other additional study, is required then this would be specified as an action for prospective developers in the production of their Environmental Statements.

REA017/16 GREC is aware of the importance of the MCA Guidelines on Offshore Renewable Energy Installations (OREIs) and the DTI guidelines on offshore wind farms, and this information is already contained in table 7.2.

2.4.4 Chapter 7 – REA Topics

2.4.4.1 Terrestrial Impacts

REA009/4 REA009/16 REA011/2 REA017/2 An additional Section shall be inserted into the REA Scoping Report and into the full REA entitled "Terrestrial Impacts". This shall come under section 7.3 of the Scoping Report and shall be primarily concerned with the area between potential landfall points and grid connections as well as any land areas that can be directly affected by the devices.

2.4.4.2 Birds

REA009/17 The locations of potentially important bird sites were raised in discussions with Paul Veron (Guernsey ornithologist) and these will be highlighted in section 7.3.1.2 of the Scoping Report and in the full REA in the chapter on birds.

REA009/18 REA020/7 With regard to the accuracy and reliability of land based studies, Paul Veron (Guernsey ornithologist) suggested that an offshore or tracking study might be required. He also highlighted a French tracking study which covered gannet feeding off Guernsey's NW coast, which will be included. However at this time the REA is aiming to use currently available data and highlight any gaps. Once the gaps are identified further required work will be identified and satellite tracking may then form part of the work.

2.4.4.3 Benthic Ecology

REA017/15 Littoral ecology is to be included in the benthic ecology section, otters (which have not been recorded on Guernsey) and basking sharks are already covered by their encompassing chapters.

2.4.4.4 Commercial Fisheries

REA014/1 REA014/2 Regarding impacts on fisheries, GREC already plans to utilise the fishermen's expertise and this will be recorded in the fisheries Chapter in the full REA. It is also foreseen that the developers will liaise directly with fishermen as part of their more focused Environmental Assessment. Potential mitigation measures are to be considered as part of the REA, and again further work will be done by developers prior to deployment.

2.4.4.5 *Marine Coastal and Historic Environment*

REA014/4 Should the existence of the undeclared wreck in the Percee passage be corroborated then, as stated in the Scoping Report, it will be dealt with in line with Guernsey law.

2.4.4.6 Electro-Magnetic Fields

REA014/3 Regarding the impact of EMFs on pelagic ecology, including marine mammals, GREC is not going to prejudge the issue. The Chapter covering electromagnetic

fields will assess all available data and draw conclusions from this (including if more information is required) and this information will be available to all interested parties.

2.4.4.7 Social Aspects

REA016/2 REA016/3 GREC appreciates the potential social impacts on Guernsey of marine renewable energy and so has devoted a chapter to it in the REA. The points raised relating to employment and the social benefits of reducing CO2 and other pollution will be assessed as part of this chapter.

2.4.4.8 References

REA009/15 With reference to the groups that should be consulted, JNCC is already listed as a consultee in table 7.2. The RSPB and BTO will be added to table 7.2 as sources of information and consultees.

2.4.5 Methodology

REA010/2 The timeframe for the REA will be clarified in Section 1.2.

REA009/22 With reference to Appendix D – REA Assessment Method, the REA will identify environmental issues associated with specific resource areas. However it will not seek to complete a detailed assessment, which will be covered by prospective developers during site specific targeted studies.

REA009/24 REA009/25 With reference to RSPB comments on mitigation, avoidance is mentioned both in the main document and further on in Appendix D. However, avoidance will also be included in Stage 2 of Appendix D in order to clarify the point. Some recognised mitigation methods are listed in Stage 2, and these will be clarified.

REA009/26 The statement in Appendix D - Stage 2, regarding knowledge of mitigation methods will be reworded to better reflect its meaning, that a more targeted study would reveal further impacts (or their absence), and also ways to mitigate previously identified impacts as, at this stage, the developer would know what measures could be built into their device.

REA009/27 The bullet point regarding exclusion zones in Stage 2 of Appendix D shall be clarified and brought in line with the text in the Scoping Report as it refers to the avoidance of pipelines and cables by the devices.

REA009/32 The potential resource areas will be assessed on their own and in-combination. As deployment zones have not, as of yet, been finalised and identified, the REA cannot limit itself to development of specific areas.

2.4.6 Philosophy

REA009/5 GREC does not have the time or the resources to look into all cumulative effects
REA009/8 in-combination with existing uses of the marine environment. This is especially true
REA010/1 with regards to pre-existing effects such as marine traffic and sewage outlets.
REA011/3 Additionally there would be no way to effect a change in some existing factors through the Marine Renewable Energy Project, and this is why these are to be taken as a baseline environment for the REA. However it should be noted that the intention is to look at the cumulative impacts of marine renewable developments that may be established in a number of adjacent resource areas and this is to be made clearer in the REA Scoping Report.

REA009/9 GREC agrees with the need to encourage reducing/maintaining levels of electricity consumption on Guernsey, however the report also needs to be aware of current trends. On Guernsey, there are organisations already involved with trying to encourage people to save electricity, so GREC does not see this as its role at present.

REA013/1 REA is not setting out to attempt to maximise the economic gain from renewable.
REA013/7 energy. The aim is to outline the potential impacts on the environment, both human and natural (as stated in2.1). Only areas that will not be subject to significant impacts, either pre or post mitigation, would be considered for development. Paragraph 4 in section 2.1will be reworked in order to clarify the position that only sites without unacceptable environmental impacts will be made available for development.

REA013/3 Regarding the main objectives of the REA listed in Section 1.2, in order to remove the potential to mislead, the second sentence of the first bullet will be reworded.

REA013/4 The final paragraph in section 1.3 is to be reworded to remove any confusion regarding the roles of the REA Scoping Document and the REA itself and the relationship between the two.

REA013/6 The REA is not assessing the potential impacts of becoming a centre of excellence
REA020/5 in the production and maintenance of devices as this is deemed to be secondary
REA020/6 and something that can be assessed by the developer. Any shore-based infrastructure, including buildings, would need to be the subject of a planning application. Additionally, to incorporate this would be beyond the resources available to complete the REA

REA013/5 The potential effects outlined in the REA Scoping Document are there to provide an overview of the provisionally identified issues and a starting point. They were provided by the chapter writers for their area of specialism and so allow an insight into what will be considered in the full REA.

REA013/11 It is not necessary to include specific impacts such as “dredging, concrete pouring, etc” and “land-use impact” in the REA framework as this already encompasses all impacts.

REA016/4 Regarding Tidal Energy Ltd's comments on decommissioning, the entire lifecycle events of installation, operation, maintenance and decommissioning are to be considered, and this will include long term effects of decommissioning on the surrounding area.

REA017/7 REA017/12 The REA is a strategic study of currently available information. However part of this is also to highlight areas where further research is required, and may be done within the scope of the REA. To this end GREC is already aware of the need for ADCP (or other) verification of the tidal model and the different layers in the water column and is already looking into obtaining this information.

2.4.7 Other matters

2.4.7.1 Costings

REA006/1 Comments received on the pricing of renewable energy are noted and will be born in mind for any future reporting, and in the production of the chapter on social aspects.

REA017/6 Costs of cabling are discussed in the pre-feasibility document made available to chapter-writers. It is considered that the level of detail in the REA Scoping Report is sufficient.

2.4.7.2 Legislation

REA009/2 REA009/6 The relevant directives and conventions on bird habitat will be incorporated into table 4.1 of the REA Scoping Document. However, it is noted that currently there are no IBAs within the scope of the REA.

REA017/4 REA017/9 As the competitive tender process is not part of the REA and does not affect the environment it does not need to be reported in the REA. Further information will be given to prospective developers and interested parties when the tender process has been formulated.

REA017/14 An equivalent to the DECC decommissioning licences will be prepared as part of the consents and licensing regime. However this does not form part of the REA.

2.5 Accepted Actions from the Consultation

The following is a list of actions that are accepted and to be inserted into the Scoping Report as suggested from Table 1. They do not require any further discussion as the comments will be fully taken into the Scoping Report.

REA001/1 With regards to Stakeholder Communication, a Stakeholder list is to be created.
REA003/1 This will contain a communications plan containing company names, contact
REA004/1 names, contact details and what information the party would like to be kept up to
REA015/1 date with, from the whole process to just one section. This will ensure a structured method of maintaining contact with interested parties.

REA007/1 Create reference tool from section on devices.

REA009/10 All existing data will be used.

REA009/12 A Review of additional data shall be inserted between A13 and A14 in table 3.1.

REA009/13 Integration of feedback will be incorporated into table 3.4.

REA009/14 Biological factors in 6.4 shall be updated to Include breeding, mating and spawning areas and resting, roosting or loafing areas.

REA009/19 The Potential Impacts on Birds section will incorporate the suggested additional impacts.

REA009/20 The risks listed in Table 8.1 shall be incorporated into the relevant section in Chapter 7 and Table 8.1 shall incorporate any risks from Chapter 7 not already included.

REA009/21 ”Spatial, temporal, direct, indirect and cumulative” to be inserted into the methodology in Appendix D.

REA009/23 Paragraph on technology envelopes is to be expanded.

REA009/28 It will be reflected in the Scoping Report the intention to highlight data gaps as part of the REA.

REA012/1 Marine navigational markings to be updated for devices, under the responsibility of
REA012/2 the developer.

REA012/4 The impacts of navigational aids are to be included in section 7.4.4 (Navigation) of the Scoping Report and in the full REA.

REA012/6 Aids to navigation will not be obstructed by marine renewable energy devices.

REA016/1 TEL’s information is to be updated in Appendix C of the REA Scoping Report.

REA017/1 It has always been the intention to make all data widely available for any further studies and this will be clarified in the Scoping Report.

REA017/5 Guernsey is already in consultation with the crown regarding the 3-12 nm area outside the 3nm limit of the study.

REA017/10 The comments regarding the states of Wave and Tidal devices and their relative advancements will be taken on board and the relevant section in the REA Scoping Report reviewed.

REA020/4 The development Scenarios section will be updated to highlight the overall approach..

Appendix A

Comments Not Leading to a Specific Action

Appendix A

Regional Environmental Assessment of Marine Renewable Energy – Consultation Report on the Scoping Report

Appendix A – Comments Not Leading to a Specific Action

Table 2 below illustrates the issues not covered in section 2.4 and 2.5. For comments with N/A listed in the suggested action column there was no suggested action from the consultee. These are listed below but do not have an explanation after them. Explanations are provided for the comments with suggested actions that were not included in sections 2.4 and 2.5

Table 2 – Table identifying comments not addressed in section 2.4 and 2.5

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference	Reasons
REA scoping/Price of Renewable energy	Alex Fuller - Fuller Group Limited	• Pleased to see progress in the area	N/A	REA006/2	

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference	Reasons
Review of REA Scoping Document	Dr Alexander J Downie – (SEPA)	• A thorough piece of work • That it was a more detailed scoping report than some I had seen before. • That adding the reasons why we were not considering certain areas, etc., at this stage was also very good and that I thought it was very useful to have detailed these areas right at the outset.	N/A N/A N/A	REA007/2 REA007/3 REA007/4	
Scoping Report	G Guille - Housing Department	• No Comments	N/A	REA008/1	
Regional Environmental Assessment overview	Paul St Pierre - RSPB	• The RSPB supports the use of the REA to be used as the basis of a separate formal Marine Spatial Planning Project.	N/A	REA009/33	

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference	Reasons
		• The RSPB supports the requirement for additional surveys to be undertaken to determine important marine areas for wildlife and inform suitable mitigation measures. These surveys should form part of the construction and post construction monitoring to assess and inform these mitigation measures.	N/A	REA009/34	
		• The RSPB welcomes the clear statement that REA is not prejudging the matter (2.4).	N/A	REA009/35	
		• Other stakeholders with expertise who can contribute to the process should be included, e.g. NGOs. We recommend that they are included in the process at this stage (A7).	Recommend including non government organisation in task A7	REA009/11	We believe that NGOs are already covered in the process and so this does not need to be changed in the document.

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference	Reasons
Appendix D	Paul St Pierre - RSPB	• Marine mammals 1st paragraph: Because there may not be an existing data set that covers all of the above information to a consistent level it is important that all the information presently available is utilised and that further work is undertaken in certain areas if considered necessary.	Use all presently available information and undertake further work.	REA009/30	The use of all available information is already the expressed aim of the REA and therefore does not lead to any changes with regard to the REA process or the Scoping Report
		• Commercial fisheries paragraph 3: The RSPB recommends that more detailed, location-specific studies should be undertaken for individual developments for all issues through the project EIA process, providing that this is simply to reflect the most up-to-date information.	Detailed site specific studies to be under taken for individual developments for all issues.	REA009/31	Site specific studies at sites identified as areas of development are to be undertaken prior to deployment of any devices. This will allow the most up to date information to be presented, and will identify in more detail the issues of the area of interest.

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference	Reasons
Responding to RSPB comments	Jamie Hooper – La Société Guernesiaise	• The proposed areas are not Important Bird Areas under the EU Directive. Neither do they qualify as local IBAs. However, part of the reason for that is because we know little about how birds use our seas.	N/A	REA011/1	
Chapter 7 – REA Topics, Baseline Data and Predicted Effects	Richard Keen – Fisherman/ diver	• 7.2.1.2 – I would expect there to be little impact as the most likely areas for placement of devices would be free of sediments due to the speed of the tide and no installer of equipment wants to be near sand or gravel for fear of damage to seals or turbines.	N/A	REA014/7	

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference	Reasons
		• 7.2.3.2 – The only impact I see is from the possible use of anti-fouling treatments and oil escaping from damaged gearboxes. There are several settlements per year of things such as barnacles and marine worms which will adhere to almost any object. Seaweed growth may also be problematic.	Be aware of the risks of oil and antifouling treatments	REA014/8	The potential impacts of oil and antifouling treatments will be assessed as part of the REA as will all other foreseen potential impacts.
		• 7.3.5.3 – do not see any great worries in this area the seals seem very content even when there are a lot of vessels in their area.	N/A	REA014/9	
		• I have not noticed much disturbance to fish in the Little Russel with the constant noise of ferries and traffic in and out of the harbour.	N/A	REA014/10	

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference	Reasons
Development Scenarios	Blair Marnie - DP Energy Ireland Ltd	• A potential problem with focusing on a minimum development to meet targets is that invariably, during the EIA process, the scale of the development diminishes as potential sensitivities and mitigation measures are applied.	Need to account for unknown potential reductions in production capacity at given sites	REA017/11	GREC is aware of the potential of change, however is maintaining the minimum development. Should the reductions prove to be a large issue, the REA and Scoping Report can be updated to incorporate this.
Shared approach for the channel islands	Chris Bale - Ocean Electric Power	• The sequencing of project developments will be a key issue in the creation of multiple financially viable projects in the Channel Islands. We believe that commercial deployments of tidal stream technology will not occur until 2014 at the earliest; however OEP has identified possible ways in which inter-island cooperation could accelerate subsequent renewable energy deployments to the advantage of all the islands.	N/A	REA018/2	

Subject/Area	Organisation	Comment	Suggested Action	Comment Reference	Reasons
Sark Response	Roger Olsen	• GP&A met last night and all agreed that the Scoping report is very professionally presented -- thorough, concise and well based.	N/A	REA019/1	

Appendix B

Summary of Responses

Appendix B

Regional Environmental Assessment of Marine Renewable Energy – Consultation Report on the Scoping Report

Appendix B - Summary of Responses

Table 3 – Index of Accepted and Disputed actions

Subject / Area	Organisation	Comment	Suggested Action	Comment Reference	Accept/Not Accept	Page REF
Renewable Energy	Guernsey Police	• Currently outside the expertise and responsibility of the Police, however keep informed as they may be able to advise on security in the future.	Maintain communications with the Police service.	REA001/1	Accept	P34
Exchange of Links and update on status	Jack Hardisty – Neptune Renewable Energy Ltd	• Neptune Renewable Energy Ltd has a full scale demonstrator device to be deployed in the Humber in the New Year.	Update the Guernsey Renewable Energy Website to account for this and add link. Neptune RE Ltd to add link to Guernsey Renewable Energy Website.	REA003/1	Accept	P34
Updating of Charts	Roger Cavill – UK Hydrographic Office	• Once proposals for devices are made the UKHO will need to be informed so as to keep their charts up to date	Keep UKHO informed of the progression of the project. UKHO to inform GREC of required information at appropriate time.	REA004/1	Accept	P34

Subject / Area	Organisation	Comment	Suggested Action	Comment Reference	Accept/Not Accept	Page REF
2.6 – Development Scenarios	Steve Smith – Environment Department	• Where do the maximum and minimum developments come from? Presume that the maximum is based on currents and assumed efficiencies, but why the minimum of 10MW? • Why limit to maximum and minimum scenarios via 6 sites, especially when potentially we could get the minimum scenario from 2 sites leaving the others undisturbed • Development scenarios don't include the scenario of meeting the minimum development requirement of 100MW with the least number of development sites or with the max number of development sites and min number of installations (turbines) in each site (two opposite ends of the spectrum for environmental impacts).	Clarify why nothing less than 10MW suggested and why 50MW is maximum. Link maximum and minimum developments to the suggested development scenarios. Clarify the development scenarios to reflect the different possible options.	REA005/1 REA005/2 REA005/3	Accept Accept Accept	P28 P28 P28
	Paul St Pierre - RSPB	• It appears that the location of the development sites is already determined and there is reference only to a limited number of scale options at each site. It does not look at how a mixture of options (i.e. fewer, larger options) could reach the minimum power target set: There is a range of further permutations, which could be explored.	Clarify the development scenarios to reflect the different possible options.	REA009/1	Accept	P28
REA scoping/Price of Renewable energy	Alex Fuller - Fuller Group Limited	• Pleased to see progress in the area • With regards to the Consultation Document FAQ 9 asks 'Will Marine Renewable Energy be Expensive'? I think the question should be answered in a more complete context, acknowledging that fossil fuels currently cost less, but have an environmental cost.	N/A Bear in mind and report openly in all future releases.	REA006/2 REA006/1	Accept	P33

Subject / Area	Organisation	Comment	Suggested Action	Comment Reference	Accept/Not Accept	Page REF
Review of REA Scoping Document	Dr Alexander J Downie – Scottish Environmental Protection Agency (SEPA)	• A thorough piece of work • That I thought the section on the various devices was 'extremely useful' to the extent, it could be used as a separate 'very useful reference tool'! • That it was a more detailed scoping report than some I had seen before. • That adding the reasons why we were not considering certain areas, etc., at this stage was also very good and that I thought it was very useful to have detailed these areas right at the outset.	N/A Device section could be developed to create a separate reference tool. N/A N/A	REA007/2 REA007/1 REA007/3 REA007/4	Accept	P34
Scoping Report	G Guille - Housing Department	• No Comments	N/A	REA008/1		

Subject / Area	Organisation	Comment	Suggested Action	Comment Reference	Accept/Not Accept	Page REF
Regional Environmental Assessment overview	Paul St Pierre - RSPB	• The RSPB recommends that the policy context of the REA should be measured against those listed in table 4.1 and this extended to include the EU Birds Directive and the Convention on Biological Diversity 1991 to adequately assess the impacts on wildlife.	Include the EU Birds Directive, SEA/EIA regulations and the Convention on Biological Diversity 1991 in Table 4.1.	REA009/2	Accept	P33
		• The RSPB supports the use of the REA to be used as the basis of a separate formal Marine Spatial Planning Project.	N/A	REA009/33		
		• The RSPB recommends that the Guernsey Government uses the findings from the REA to help inform the creation of a network of Marine Protected Areas (MPAs).	Use data to create MPAs	REA009/3	Not Accept	P28
		• The scope of the REA should be extended to terrestrial species and habitats.	Extend scope of REA to incorporate terrestrial issues.	REA009/4	Accept	P30
		• The RSPB recommends that all “in-combination” cumulative effects are included within the REA.	Include all in combination cumulative effects in REA	REA009/5	Not Accept	P32
		• The RSPB recommends that an Appropriate Assessment, reflecting the requirements of the European Union’s Habitats Directive, be undertaken on all Important Bird Areas (IBAs) that fall within the geographic scope of the REA.	Identify IBAs and perform relevant assessment on them.	REA009/6	Accept	P33
		• The RSPB supports the requirement for additional surveys to be undertaken to determine important marine areas for wildlife and inform suitable mitigation measures. These surveys should form part of the construction and post construction monitoring to assess and inform these mitigation measures.	N/A	REA009/34		

Subject / Area	Organisation	Comment	Suggested Action	Comment Reference	Accept/Not Accept	Page REF
Scope of the REA	Paul St Pierre - RSPB	• Recommend including all possible offshore energy options within the assessment to provide better understanding of the resource and potential significance and for better informing of marine spatial planning. • The RSPB is concerned that the report will not consider the cumulative effects of existing activities on the marine environment (1.2). Whilst the scoping report suggests that current activities act as a baseline, there is still a need to understand the "synergistic" effects (e.g. stemming from reactions between effects that produce a total effect greater than the sum of its parts) to understand the implications of the projects within the REA. By carrying out this work, the value of the REA will be Further strengthened in informing spatial planning processes (section 4.2)	Include offshore wind and tidal range in the REA report. Assess the impacts of marine renewables in combination with the existing impacts.	REA009/7 REA009/8	Not Accept Not Accept	P28 P32
Energy Use	Paul St Pierre - RSPB	• The document predicts that the island's energy consumption will increase by 188% by 2020. We recommend serious consideration is given to pegging energy use at the current level - if this could be achieved then this renewable resource could meet the Equivalent of 50% of current energy demands.	Look at ways to encourage people to save electricity	REA009/9	Not Accept	P32
Production of the REA	Paul St Pierre - RSPB	• The value of the REA desktop study will be determined by how the data currently available are used. The RSPB would expect the best use of all sets of existing data to get the most complete picture available prior to the EIAs being undertaken. We are happy to discuss further • The RSPB welcomes the clear statement that REA is not prejudging the matter (2.4).	Use all existing data N/A	REA009/10 REA009/35	Accept	P34

Subject / Area	Organisation	Comment	Suggested Action	Comment Reference	Accept/Not Accept	Page REF
Chapter 3 – Stages of the REA	Paul St Pierre - RSPB	• Other stakeholders with expertise who can contribute to the process should be included, e.g. NGOs. We recommend that they are included in the process at this stage (A7).	Recommend including non government organisation in task A7	REA009/11	Not Accept	P A-3
		• There will be a need to review of the data collected and assessment as to whether further data collection is required. This is likely to arise where one set of data highlights the need for further datasets, which should be included at the first available opportunity.(between A13 and 14)	Insert a task between A13 and A14 for review of additional data.	REA009/12	Accept	P34
		• It is unclear what would happen if further work were required because of consultation (D2). We recommend that the process is not just considered sequentially but includes feedback mechanisms to allow more work to be undertaken before proceeding to the next step.	Allow for integration of feedback into the reports and show this in table 3.4	REA009/13	Accept	P34
Site Selection	Paul St Pierre - RSPB	• Whilst the scoping report highlights the need for terrestrial infrastructure, it makes no mention of how this will be assessed. The criteria needs to consider both the marine and terrestrial components of the plan and therefore it is necessary to extend the scope of the selection criteria to include: Biological Factors ○ Avoidance and minimised disturbance of sensitive marine and terrestrial environmental areas; ○ Important breeding, mating and spawning areas ○ Important resting, roosting or loafing areas	Include in section 6.4 breeding, mating and spawning areas and resting, roosting or loafing areas.	REA009/14	Accept	P34

Subject / Area	Organisation	Comment	Suggested Action	Comment Reference	Accept/Not Accept	Page REF
7.3 – Marine Biological Environment	Paul St Pierre - RSPB	• Data search requests should also be made of the JNCC, RSPB, BTO and universities that have carried out research within the marine environment. Data should also include WEBS counts and gull roost counts (low and high tide – if available) from the BTO to ensure that any potential issues around pollution effects are considered.	Include JNCC, RSPB, BTO and universities to the list of data sources.	REA009/15	Accept	P31
		• The plan includes a review of the terrestrial development needs of the REA because of the land-based construction and distribution network requirements. The RSPB therefore recommends a section on the potential effects on terrestrial habitats and species is included in the REA.	Include a section on terrestrial environment	REA009/16	Accept	P30
		• The following sites have been identified as Important Bird Areas (IBAs) (P K Veron (Ed) 1997) and therefore potentially qualify as internationally important and should be included: Guernsey Heathland IBA composed of: Pleinmont, Torteval; L'Ancresse, Vale; and South Coast Cliffs. Guernsey Shoreline IBA composed of: Guernsey Shoreline; Belle Greve Bay; Grande Havre, Vale; and Fort Le Crocq, St Saviour.	Include suggested sites in 7.3.1.2	REA009/17	Accept	P30
		• We are concerned about the accuracy and reliability of only land based study (7.3.4.1).	Land and boat based surveys and satellite tracking	REA009/18	Not Accept	P30
		• Potential Impacts - This section should also include: ○ Effects on roosting and loafing sites ○ Direct loss of feeding habitat ○ Potential collision risk ○ Pollution ○ loss of habitat through disturbance displacement ○ Habitat change cased by reduced mixing of water resulting in loss or reduction in, or change of food supply	Incorporate the impacts into section 7.3.4.3	REA009/19	Accept	P34

Subject / Area	Organisation	Comment	Suggested Action	Comment Reference	Accept/Not Accept	Page REF
Potential Risks	Paul St Pierre - RSPB	• Table 8.1. The table includes risks that are not mentioned in the topic sections and therefore it seems sensible to ensure that these correspond to each other.	Make the risks in table 8.1 match those in section 7	REA009/20	Accept	P34

Subject / Area	Organisation	Comment	Suggested Action	Comment Reference	Accept/Not Accept	Page REF
Appendix D – REA Assessment Method	Paul St Pierre - RSPB	• The RSPB welcomes the methodology set out in paragraph one and recommends that second bullet point has the wording in italics inserted: ○ Assess the potential (*spatial, temporal, direct, indirect and cumulative*) environmental effects of wave and tidal devices based on the development scenarios;	Insert *spatial, temporal, direct, indirect and cumulative*	REA009/21	Accept	P34
		• Whilst the REA is not expected to replace the need for a site-specific assessment once we have all the details of a proposal, it should identify the issues relating to a particular site with a view to identifying which ones should and should not be used.	Re-write second paragraph to better reflect this.	REA009/22	Not Accept	P31
		• Stage 1 – This seems like a sensible approach but it would be helpful to expand on how this may be applied to make it clearer on the value of this approach. We support the approach of using the summary of generic effects set out in chapter 8.	Expand Paragraph on technology envelopes.	REA009/23	Accept	P34
		• Stage 2 – The RSPB welcomes much of the approach set out in stage two but we have the following comments: There is an additional mitigation measure that needs to be considered and that is one of "avoidance", particularly in light of the following paragraph, which states, " it would be hard to know what measures to build into the device. The RSPB recommends the rewording of the third mitigation measure, as it is unclear what this means. Does this refer to operational and maintenance restrictions?	Include avoidance in mitigation types.	REA009/24	Accept	P31
			Clarify what is meant by "recognised mitigation methods".	REA009/25	Accept	P31
		• The RSPB is concerned with the following statement. "As well as this, the REA does not know the types of mitigation measures that would be derived from more detailed assessments, such as a targeted EIS. As such, these two mitigation methods cannot be used to inform the assessment". If the generic types of mitigation measures available are known then it is also known which effects from the plan can be mitigated by them (in principle at least). However, if there are effects for which there are no known mitigation measures then a targeted EIS is unlikely to be able to help overcome those.	Rewrite/explain paragraph 3 in stage 2.	REA009/26	Accept	P31

Subject / Area	Organisation	Comment	Suggested Action	Comment Reference	Accept/Not Accept	Page REF
Appendix D – REA Assessment Method	Paul St Pierre - RSPB	• The RSPB agree with the first recognised mitigation measure but it is unclear what the second one means. Is this referring to 500m avoidance by pipelines and cables on important features e.g. biodiversity hotspots?	Clarify bullet 2 of the recognised mitigation measures	REA009/27	Accept	P31
		• Stage 3 – Whilst there are likely to be some data gaps, it is important that these are highlighted in the REA to ensure that they are picked up by the individual EIAs.	Reflect that areas where data is scarce will be highlighted	REA009/28	Accept	P34
		• With the presence of significant amounts of leisure and navigation data there is an opportunity to start considering in-combination effects and also identifying areas within the broad area of search that may be "no go" zones due to navigation or fishing issues.	Identify no go areas	REA009/29	Not Accept	P28
		• Marine mammals 1st paragraph: Because there may not be an existing data set that covers all of the above information to a consistent level it is important that all the information presently available is utilised and that further work is undertaken in certain areas if considered necessary.	Use all presently available information and undertake further work.	REA009/30	Accept	P A-3
		• Commercial fisheries paragraph 3: The RSPB recommends that more detailed, location-specific studies should be undertaken for individual developments for all issues through the project EIA process, providing that this is simply to reflect the most up-to-date information.	Detailed site specific studies to be under taken for individual developments for all issues.	REA009/31	Accept	P A-4
		• There should be scope within the REA to look at some mixed scenarios dealing with the different technologies applied in differing areas. We recommend starting by looking at each site alone, considering the best technologies to be used there, and then aggregating different permutations of the sites.	Look at potential sites individually	REA009/32	Not Accept	P31

Subject / Area	Organisation	Comment	Suggested Action	Comment Reference	Accept/Not Accept	Page REF
REA Scoping report and full Regional Environmental Assessment	Peter Hughes - Halcrow	• The statement that you will tackle cumulative impacts (top of p2) but not in combination impacts may be a bit confusing. In my mind, cumulative impacts are the impacts of lots of devices in the water, in-combination impacts are those from the devices and traffic and fishing etc. This is clear. You are right to consider the existing impacts as part of the baseline, but I think you should consider the in-combination effects of all of the other activities that are happening in the area or are planned to happen. Perhaps you do but I didn't get that from a quick read. What you don't want to do is provide an holistic REA - i.e. the full range of in combination effects - sewage outfalls on fishing, sailing/traffic on beach amenity. Think this could do with being stated more clearly	Need to clarify 1.2 paragraph 4 to include in combination effects of marine renewables and all other identified receptors.	REA010/1	Accept	P32
		• Programme - it's not clear what is the timeframe for the REA - possibly my poor speed reading?	Clarify what the timeframe for the REA is.	REA010/2	Accept	P31
Responding to RSPB comments	Jamie Hooper – La Société Guernesiaise	• The proposed areas are not Important Bird Areas under the EU Directive. Neither do they qualify as local IBAs. However, part of the reason for that is because we know little about how birds use our seas.	N/A	REA011/1		
		• I do not see much value in incorporating terrestrial habitats and species. Any effects onshore would be expected to be limited to the immediate area at which cables come ashore and some possible minor effects during any construction works. This would be picked up by a project-specific EIA.	Maintain current REA scope for just marine areas.	REA011/2	Not Accept	P30
		• I accept that the cumulative impacts should be considered. These can be difficult to assess but there's nothing wrong with saying we don't know because we can recommend monitoring programmes to find out.	Incorporate Cumulative impacts into REA.	REA011/3	Accept	P32

Subject / Area	Organisation	Comment	Suggested Action	Comment Reference	Accept/Not Accept	Page REF
Navigation	John Cannon - Navigation Services Officer – Trinity House	• We would suggest that it is important to ensure that whatever licensing or consenting regime is established in your area to authorise any developments, provisions should be made for marine navigational marking required for in the interests of safety of navigation to be considered and specified by the local authorities (presumable the Guernsey Harbour Master).	At deployment navigational marking should be up to date to show the presence of arrays.	REA012/1	Accept	P34
		• We would also suggest that an appropriate regime be set up to ensure that any marine marking that is specified as being required is actually being provided by the developer/Operator.	Developer should be responsible for marine marking.	REA012/2	Accept	P34
		• In case you are not aware, the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) has agreed a recommendation O-139 on the marking of man-made offshore structures. This includes at section 2.4 the requirements for the marking of wave and tidal energy devices, some of which may be submerged or semi submerged.	Need to ensure submerged and semi submerged devices are marked with navigation aids.	REA012/3	Accept	P29
		• You may wish to include in the REA the impact of the provision of the aids to navigation potentially being required to mark offshore renewable energy installations.	Include in the navigation section the impacts of navigation aids.	REA012/4	Accept	P34
		• The use of AIS derived information is clearly a very important tool to inform decision making. It should however also be borne in mind when assessing such information that currently only vessels over 300 grt are required to carry AIS and that whilst many leisure craft and smaller fishing vessels do carry such equipment, they are not required to do so, and would not therefore necessarily be included in plots of vessel track derived from AIS. It should also be borne in mind that information obtained from shore based AIS receiving stations may be limited by range.	Understand and illustrate the limitations of the AIS information.	REA012/5	Accept	P29
		• Trinity House maintains the Hanois and Sark Lighthouses. As I am sure you will appreciate, we would be concerned if any wave or tidal energy development was allowed in the immediate vicinity of these lighthouses, if it had the potential to adversely obstruct or obscure either the light exhibited or the day mark of the station. Whilst this is thought unlikely, we are aware that some wave and tidal devices currently being developed do have a significant structure above the surface of the sea and that afield of devices may require offshore substation structures to be erected.	Ensure that tidal and wave devices do not interfere with aids to navigation.	REA012/6	Accept	P34

Subject / Area	Organisation	Comment	Suggested Action	Comment Reference	Accept/Not Accept	Page REF
REA Scoping Report overview	Deputy Peter Sirett - Environment Department	• A perception that can be gleaned from a particular interpretation of the scoping document is that the leaning of the project is towards chasing the economic gain by adopting a starting point of extracting the maximum amount of resource from the territorial waters and only moving back from that maximum extraction scenario as, and when, unacceptable environmental impacts are identified in relation to any one specific site.	Need to make clearer in the document that this is not the case.	REA013/1	Accept	P32
		• The Environment department is of the view that the appropriate approach to selecting sites for renewable energy should be: ○ A spatial map incorporating all potentially viable sites ○ A similar spatial map of constraints ○ A coarse screening exercise comparing the above ○ Detailed Environmental Sensitivity Assessment on priority sites ○ Sites presenting both best economical and least environmentally impacting be prioritised ○ Further sites to point 5 would be considered only should islands needs require it. From meeting with GREC it is apparent that this is the intention, however it needs to be made clearer.	Clarify that this is the intended methodology.	REA013/2	Accept	P29

Subject / Area	Organisation	Comment	Suggested Action	Comment Reference	Accept/Not Accept	Page REF
Chapter 1 – Introduction	Deputy Peter Sirett - Environment Department	• 1.2 – Main Objectives of REA – bullet 1, it is possible to interpret this statement as implying that there is a presumption that all technically feasible generation activities up to the maximum development scenario do not result in unacceptable environmental impacts.	Need to ensure there is no leading of the REA or future EIA	REA013/3	Accept	P32
		• 1.3 – last paragraph, reference is made in the second Line to "REA" and in the fifth line to "potential affects of the marine devices". There is perhaps a degree of confusion between the scoping document and the REA. The REA has not yet been drafted but the consultation report refers to chapters 7 and 9 as being part of "this REA".	Clarify REA and REA scoping report	REA013/4	Accept	P32
		• Further, the description of the "potential affects of the marine devices" is perhaps more appropriately confined to the REA rather than presented with associated presumptions, as part of the scoping report.	Remove potential effects of marine devices from scoping report	REA013/5	Not Accept	P32
		• 1.4.1 – Fifth bullet – this objective/drive, whilst laudable, potentially introduces new and additional impacts beyond those of extracting renewable energy from our territorial waters.	Highlight in the REA scoping the potential impacts from increased facilities, and need to be incorporated into full REA.	REA013/6	Not Accept	P32

Subject / Area	Organisation	Comment	Suggested Action	Comment Reference	Accept/Not Accept	Page REF
Chapter 2 – Project Description	Deputy Peter Sirett - Environment Department	• 2.1 – 4th paragraph – this statement in the project overview does not specifically highlight the need and/or intention to balance the generation capacity of the identified sites against the various constraints layers and the environmental sensitivity of the sites. The department appreciates, following discussion and clarification of the intended approach to the REA, that this balancing exercise will be carried out.	Clarify this point in the project overview.	REA013/7	Accept	P32
		• 2.6 – the content set out in this section and especially in pages 13 and 14 is the area of the scoping report that lacks greatest clarity. ○ The section sets out maximum and minimum development, why the minimum development has been set as such, i.e. is any lesser development economically unviable whilst at the same time is the maximum development is indeed maximum amount of resource that can be extracted. ○ 6 development scenarios listed (page 14), emphasis appears to be focused on economic return.	Clarify where the maximum and minimum developments come from/reasoning Include scenarios including, but not limited to: (d) Development of those sites where there is no perceived conflict, (e) Development of fewest number of sites to give minimum target (f) Development of a number of sites to the minimum adverse impacts to minimum target.	REA013/8 REA013/9	Accept Accept	P28 P28
		• 2.7 – the robustness of not assessing the impact of increased marine traffic is questionable – presents a misleading picture.	Either adopt the position that no development will take place or remain open and outline if not possible at the moment	REA013/10	Not Accept	P29

Subject / Area	Organisation	Comment	Suggested Action	Comment Reference	Accept/Not Accept	Page REF
REA Framework	Deputy Peter Sirett - Environment Department	• The environment department believes that the REA framework should specifically refer to: ○ Assessing the installation, maintenance and decommissioning impacts including dredging, concrete pouring etc. ○ Assessing land- use impacts ○ Assessing port/labour etc impacts	Potentially contained in (b), clarify if this is the case	REA013/11	Not Accept	P29 & 33
Marine Spatial Planning	Deputy Peter Sirett - Environment Department	• This section, specifically last sentence of penultimate paragraph, potentially addresses many of the concerns raised, however it is a concern it is not given greater prominence.	Highlight earlier in the document	REA013/12	Accept	P28
Site selection	Deputy Peter Sirett - Environment Department	• The Environment Department is pleased with this section as it further allays concerns. However, we wish to be assured that not all sites would be assessed, only those which pass through a coarse screening as suggested before.	Outline that only areas which are not covered by big no go zones would be looked at.	REA013/13	Not Accept	P28

Subject / Area	Organisation	Comment	Suggested Action	Comment Reference	Accept/Not Accept	Page REF
Chapter 7 – REA Topics, Baseline Data and Predicted Effects	Richard Keen – Fisherman /diver	• 7.2.1.2 – I would expect there to be little impact as the most likely areas for placement of devices would be free of sediments due to the speed of the tide and no installer of equipment wants to be near sand or gravel for fear of damage to seals or turbines.	N/A	REA014/7		
		• 7.2.3.2 – The only impact I see is from the possible use of anti-fouling treatments and oil escaping from damaged gearboxes. There are several settlements per year of things such as barnacles and marine worms which will adhere to almost any object. Seaweed growth may also be problematic.	Be aware of the risks of oil and antifouling treatments	REA014/8	Accept	P A-5
		• 7.3.5.3 – do not see any great worries in this area the seals seem very content even when there are a lot of vessels in their area.	N/A	REA014/9		
		• 7.4.1.2 – displacement of fishing activity is a problem but most of the fishermen seem keen on harnessing the power of the sea. Providing the stakeholders are consulted, do not see major problems. There should be some form of compensation on a yearly basis for a defined period.	Consult with fishermen	REA014/1	Accept	P30
			Provide some mitigation for lost grounds	REA014/2	Not Accept	P30
		○ Fishermen do not fish exactly the same spot all the time.				
		• Have seen no interference from electromagnetic disturbance	Need to convince fishermen	REA014/3	Investi-gating	P31
		• Have not noticed much disturbance to fish in the Little Russel with the constant noise of ferries and traffic in and out of the harbour.	N/A	REA014/10		
		• 7.4.2.3 – possible undeclared wreck in the Percee passage between Jethou and Herm.	If found to be there, need to evaluate.	REA014/4	Accept	P30
		• 7.4.4.3 – collision risk may be a problem as it is not uncommon for boat to hit well marked buoys!	Be in contact with French and UK chart makers to inform them of progress	REA014/5	Accept	P29

Subject / Area	Organisation	Comment	Suggested Action	Comment Reference	Accept/Not Accept	Page REF
Spatial planning	Richard Keen – Fisherman /diver	• Someone should produce a chart of the area with transparent overlays where permission would not be granted, would be considered and would almost certainly be given permission.	Create a chart of areas of likely development.	REA014/6	Accept (in REA)	P28
REA	Mat Desforges – Alderney Renewable Energy (ARE)	• No comments.	Please maintain contact	REA015/1	Accept	P34
Appendix C – Devices in Development	Sara Thomas - Tidal Energy Limited (TEL)	• Update on TEL DeltaStream	Include update in Appendix C	REA016/1	Accept	P34
Socio economic	Sara Thomas - Tidal Energy Limited (TEL)	• TEL believes that marine renewable energy can provide a sustainable source of employment – not just during installation but, more importantly, local jobs during the operational phase carrying out monitoring and maintenance.	TEL considers that the regeneration opportunities of marine renewables should be included in the socioeconomic assessment of the REA.	REA016/2	Accept	P31
		• We also consider the amount of power available and the benefits of renewable energy including the effects carbon dioxide reduction and social issues should be addressed.	Include effects of reducing CO_2	REA016/3	Accept	P31
		• We also consider the effects of decommissioning of the site and the long term impacts following reinstatement of the seabed should be considered.	Consider long term effects	REA016/4	Accept	P33

Subject / Area	Organisation	Comment	Suggested Action	Comment Reference	Accept/Not Accept	Page REF
Chapter 1 - Introduction	Blair Marnie - DP Energy Ireland Ltd	• 1.2 - In addition to data collected being used to inform the scoping opinion, it would be useful if this data could be made available to support the project specific EIA as required. This could potentially accelerate the process by providing key baseline assessment information.	Make data available for entire specific EIA process	REA017/1	Accept	P34
		• 1.3 - There may be merit in including an onshore section in the scoping report to highlight the potential impacts of cable landfall and connection to the transmission network whether by underground or overhead cabling. In addition, some form of onshore monitoring/service area will be required. In addition, given the proximity of the development area to land, a landscape/seascape assessment is likely to be required for any surface piercing elements of the development	Include an onshore section in the REA	REA017/2	Accept	P30
		• 1.4.2 - The Atlas of UK Marine Renewable Resources predicts a mean spring peak velocity of up to 2.5m/s. It would be useful to better understand how 200GWh can be supplied from a 100MW tidal development with a relatively low tidal speed. Given the relative immaturity of device technology there is undoubtedly some uncertainty with capacity factor prediction which may result in a lower than predicted electrical output from a given installed capacity.	Explain how 200GWh can be provided from the currents predicted in the Bailiwick	REA017/3	Accept	P28

Subject / Area	Organisation	Comment	Suggested Action	Comment Reference	Accept/Not Accept	Page REF
Chapter 2 – Project Description	Blair Marnie - DP Energy Ireland Ltd	• 2.1 - Although not specifically part of the REA it would be useful to better understand the mechanics of the competitive selection process especially if a tender were to be submitted based on a 2.5m/s tidal speed without a feed in or ROC equivalent support mechanism in place.	Outline the tender process	REA017/4	Not Accept	P33
		• 2.3.1 - It is recommended that the party responsible for seabed outside Guernsey and Sark`s jurisdiction is consulted and that parties responsible for European designated areas for sea birds up to 60km are also consulted.	Consult with the body governing the seabed in the 3-12 nm limits.	REA017/5	Accept	P35
		• This is true (cost of cabling), however, experience gained on our Islay project is that the major cost for sub-sea cabling is the mobilisation and demobilisation of the cable laying vessel. Beyond this the incremental cost is more related to the material cost of the cable.	Better reflect the costs of sub marine cabling in the REA Scoping Report	REA017/6	Not Accept	P33
		• 2.3.2 - Although it is important to confirm tidal speed over a given area it is also important to verify the velocity distribution in the water column due to sea-bed and wave generated turbulence plus directionality. Given that current tidal resource predictions are based on modelled data shouldn't an ADCP programme be initiated? In addition, given the importance of shipping, shouldn't a full navigational risk assessment be undertaken? A grid study initiated to assess the capacity and likely levels of deep reinforcement required to accommodate wave and tidal development projects would enable a more accurate prediction of cost versus return.	Need to utilise ADCP devices to measure tidal flow	REA017/7	Accept	P33
			Undertake a full navigational risk assessment.	REA017/8	Not Accept (for now)	P29
		• 2.4 - Noted and we would expand on this comment with our view that a 'technology neutral' developer led, rather than manufacturer led approach ensures that the best technology and most appropriate device is selected on a site by site basis.	Clarify the position on developer led approach	REA017/9	Not Accept	P33

Subject / Area	Organisation	Comment	Suggested Action	Comment Reference	Accept/Not Accept	Page REF
Development Scenarios	Blair Marnie - DP Energy Ireland Ltd	• From our observations of the two industries over the past few years we would observe that technical validation for commercial deployment of wave devices sits some 5 years behind tidal technology.	Review section that says wave technology is further advanced	REA017/10	Accept	P35
		• A potential problem with focusing on a minimum development to meet targets is that invariably, during the EIA process, the scale of the development diminishes as potential sensitivities and mitigation measures are applied.	Need to account for unknown potential reductions in production capacity at given sites	REA017/11	Not Accept	P A-6
		• Whilst modelling provides some important information some form of verification will be required by ADCP.	Need to use ADCP devices to measure currents	REA017/12	Accept	P33
		• Little is known on the potential losses due to array effects and no verification has been done to date. We have worked on 50 – 70 MW/km2 and indications on array spacing is that this may be optimistic, especially with low tidal speed.	Show a more cautious approach to potential power	REA017/13	Accept	P28
Licensing	Blair Marnie - DP Energy Ireland Ltd	• 4.3 - There doesn't appear to be a reference to an equivalent decommissioning license from DECC to ensure that proper decommissioning is undertaken	Highlight equivalent decommissioning license	REA017/14	Not Accept	P33

Subject / Area	Organisation	Comment	Suggested Action	Comment Reference	Accept/Not Accept	Page REF
REA Topics	Blair Marnie - DP Energy Ireland Ltd	• 7.3 - It is noted that there is no reference to landfall otters or intertidal assessment. It is also noted that there is no reference to basking sharks who's feeding habits may make them prone to environmental impact • 7.4.4 - It may be valuable to include MCA Guidelines MGN 371 and 372 plus DTI "Guidelines on the Assessment of the Impact of Offshore Wind Farms – Methodology for Assessing the Marine Navigational Safety Risks of Offshore Wind Farms." Plus RYA cruising routes.	Need to cover all marine environmental receptors Include these in shipping and navigation data sources	REA017/15 REA017/16	Accept Accept	P30 P29
Marine spatial planning	Chris Bale - Ocean Electric Power	• The issue of marine spatial planning is of profound importance to the prospects of creating commercially viable projects. We would strongly advise that the environmental assessment work be considered separately from spatial planning issues. This is because a number of the factors that affect commercial viability of projects, such as grid connections, navigation and other marine users may all have potential to be subject to management plans which can mitigate any undesirable effects. This could enable projects that might otherwise be ruled out.	Have marine spatial planning separate to environmental assessment	REA018/1	Accept	P28
Shared approach for the channel islands	Chris Bale - Ocean Electric Power	• The sequencing of project developments will be a key issue in the creation of multiple financially viable projects in the Channel Islands. We believe that commercial deployments of tidal stream technology will not occur until 2014 at the earliest; however OEP has identified possible ways in which inter-island cooperation could accelerate subsequent renewable energy deployments to the advantage of all the islands.	N/A	REA018/2		

Subject / Area	Organisation	Comment	Suggested Action	Comment Reference	Accept/Not Accept	Page REF
Sark Response	Roger Olsen	• GP&A met last night and all agreed that the Scoping report is very professionally presented -- thorough, concise and well based.	N/A	REA019/1		
Spatial Planning	Steve Smith and Paul Veron – Face to face Meeting	• There needs to be an overlapping of data for the spatial planning and no go areas should be identified.	Overlapping of effects on charts	REA020/1	Accept	P28
		• Coarse screening needs to be done first.	Identify big no go areas now	REA020/2	Not Accept	P28
Development Scenarios		• Need to ensure that the development scenarios are not leading and, to this end, that the areas identified are currently assumed areas only.	Reword the development scenarios	REA020/3	Accept	P28
		• Incorporate paragraph 2 on page 21, or a similar statement, into the development scenarios section.	Incorporate into development scenarios	REA020/4	Accept	P35
Centre of Excellence		• Need to explain what is meant by "centre of excellence". Does the report simply mean intellectual property rights, in which case no further environmental issues need be considered, or does it mean industry and university ties?	Clarify what is meant by centre of excellence.	REA020/5	Not Accept	P32
		• If industry and university ties, the impacts would have to be considered	Outline environmental impacts of a centre of excellence.	REA020/6	Not Accept	P32
7.3.4.2 – Baseline Description (Birds)		• Guernsey is not alone in this. There is now technology available for data logging and there has been a French study using this that highlights French gannets feeding off the North West coast of Guernsey. It may prove that we need to do this to fill in data gaps.	Study Guernsey birds using data loggers.	REA020/7	Not Accept (for now)	P30