Written submission from No Tiree Array

No Tiree Array (NTA) was formed in 2010 with the following Objectives and Aims, to use all reasonable means to:

- Conserve the Isle of Tiree’s natural heritage, culture, economy and landscape value.
- Resist the proposed construction of the Tiree (Argyll) Array or any ancillary development within 35km of the island’s coastline, to accord with the recognized protocol of visual significance.
- Protect the island’s fragile environment from any detrimental impact resulting from such development.

There are no changes to the DMP options, from these Nov 2013 options, other than the Tiree and Islay Array’s have been dropped by their respective developers.
Summary

- It is a welcome change in Scottish Government(SG)Renewables Planning, that a NMP will exist to dictate where future renewables sites may be located, as opposed to the 2009 Developer-driven site selection process.
- The **Offshore Wind and Marine Renewable Energy** section of the **DMP** is a planner’s fantasy. It is divorced from the technical reality of SG’s de facto dropping of Wave, and ignores the absence of required offshore wind technological advance, which SPR stated among its reasons for dropping the Tiree Array.
- There is little evidence of input, to the **DMP**, from the consultation process.
- The **Sustainability Appraisal Report** is a travesty of analysis and objectivity.
- **Deemed Consent**, and its possible implications, are not addressed.
- The **DMP**, as proposed, is rendered meaningless with Scottish Government’s de facto dropping of Wave.
- The **DMP**, as proposed, has to be put in the context of the **Offshore Wind Route Map**, which no longer has any credibility.
- **WW3**; there is inconsistency in the documentation of WW3 in the DMP planning process.
- **WW3** should be dropped. It is a significant catch-area for Tiree’s shell fishermen. The environmental data, which was part of SPR’s reasoning to drop the Tiree Array, has not been considered.
- **OWW2** should be dropped to accord with the technical reasoning offered by SPR in dropping the Tiree Array.
- **Marine aggregate dispersal** from possible renewable development is not addressed.
- **Marine Traffic**: Implications on routing arising from any renewables development in this NMP are not addressed.
- **Saltire Prize**; Should be dropped.
Background and Terms of Reference

Nov 2013. Following the 2013 consultation process submissions were made to the DMP.

Dec 2013. SPR dropped the Tiree (Argyll) Array. This is reflected in this amended DMP.

This sequence merits NTA making this additional submission.

NTA’s submission is governed by the Objectives and Aims of its constitution, consequently this response is limited to:

- A Tiree perspective of some of the policy issues of the NMP.
- Tiree-specific issues of the NMP.

This has lead to making recommendations to amend the NMP.

Introduction

Marine Scotland on the 12 Dec 2014:

- Advised that The National Marine Plan (NMP) was laid before Parliament on the 11 December 2014 for 40 sitting days; and
- Circulated the draft NMP, to stakeholders, with advice that the Rural Affairs, Climate Change and Environment Committee (RACCE) would be happy to accept written submissions from any stakeholders who wish to provide additional evidence following this publication of the draft NMP.

**In response to this invitation No Tiree Array (NTA) is making this submission.**

MS' 12 Dec advise stated that The Rural Affairs, Climate Change and Environment Committee (RACCE) would be “scrutinising the draft plan and referring to the written responses received by the Scottish Government during its recent consultation” but MS did not advise as to the modus operandi, and relevance, of such scrutiny and its possible consideration of any redrafting of the NMP, as published, prior to adoption.

This is put in further perspective by the fact that the 2013 Consultation process has yielded no substantive re-appraisal of the July Consultation draft DMP.

On 17th Dec 2014, the Sustainability Appraisal Report: Addendum to the NMP was published. This addendum is a travesty of analysis and objectivity. It is littered throughout with the self seeking conclusion that:

“Taken together with the general policies, we therefore anticipate that adverse effects of XXXX may be avoided”.

This would suggest, that some of the reasons for SPR and SSE dropping their respective proposed offshore wind farms, has made no impact on the planning process which has derived this NMP.

A contempt of process, and consultation, by Scottish Government may be suggested by requiring additional evidence submissions by the 5th Jan 2015 when the primary document, the DMP, was only published on the 11th Dec 2014, and its attendant the SA published a week later.

Adoption of the NMP has been a moving target since the outset of the process in Aug 2012.

The time-line to adoption has been revised on several occasions, from Spring-Summer 2013, to Spring 2014, and now to its current SPRING 2015.

In the interim SG has dropped WAVE and Scotland’s Offshore Wind Route Map – Developing Scotland’s Offshore Wind Industry to 2020 and Beyond has become a discredited document.

WAVE, a major sector of this DMP, was, to all intents and purposes, abandoned by Scottish Government, the week prior to publication of this DMP.

Initiation of any development of any of the DMP proposed sites is at least a decade away.

Under these circumstances a more generous time frame for these additional submissions should have been offered.
A Tiree Perspective of some the Policy Issues of the NMP

This submission is presented using the paragraph reference of the DMP.

1.8 The Sustainability Appraisal is a travesty of analysis and objectivity. It is littered throughout with the self seeking conclusion that “Taken together with the general policies, we therefore anticipate that adverse effects of XXXX may be avoided. Manifestly no lessons have been learnt from SPR's dropping the proposed Tiree(Argyll) Array. This is a cop-out. It defers addressing ‘avoidance' to the L&C process, which in turn can be rationalised by imposing consenting conditions. It is well documented that Developers are now resisting the cost implications of consenting conditions eg 'soft piling', 'sea mammal observation procedures' 2.17-2.20 Marine and Terrestrial Planning Processes: long on intent, but short on the reality of execution.

From Feb 2009, the outset of the Tiree(Argyll) Array, to it being dropped, in Dec 2013, there was no evidence of such activity other than the Scenario Mapping Exercise. There is no reference to Scenario Mapping in this section.
Scenario Mapping should be a mandatory procedure for offshore development. A reference to Scenario Mapping should be included in 2.17-2.20.

3.4. If this is the case, then why was the Tiree (Argyll) Array adopted in Mar 2011, only to be dropped in Dec 2013, when the developer conceded that its development could not be “carried out within environmental limits”?

Box D p18 Re “There are no specific concerns regarding whales and dolphins, although there are high levels of uncertainty in assessing this” This is a bizarre proposition. It suggests, yet again, the self-seeking agenda of the DMP.

Section 3 suggests a re-appraisal of the proposed sites is required. This will minimise resources to reach comparable outcomes to the dropping of the Tiree and Islay Arrays.

4 General Policies: long on aspiration. Once more the Tiree Array experience suggests major weaknesses in this section.

Deemed Consent. There is no reference to the implications Deemed Consent this is a major omission. It requires to be addressed in the final draft and Adoption Statement.

4.12 Scenario Mapping should be mandatory and not as stated:-‘may be helpful’.

4.16 Consideration of any cumulative impact. The fact that Map 9 P86 does not incl the current adopted sites suggests SG plays lips service to the concept of ‘Consideration of any cumulative impact’ This is why the cover sheet to this submission shows the full extent of proposed Argyll and Bute offshore renewable sites.

- **Scenario mapping** should be mandatory
- **Robust consultation**: Consultation to the DMP has not stimulated substantive changes. It is a comforting concept for planners. Nothing in the Tiree Array experience suggested this was anything other than a one-way process ie.

  a) Requested visualisations denied at the outset. Only presented 2 years after the original announcement.
  b) SPR’s community survey which failed any professional surveying standards. This prompted NTA to submit a detailed repudiation of SPR’s survey to MS-LOT.
  c) The failure by SPR to submit details of possible deemed consent outcomes eg onshore HVDC converter station into the Onshore Scenario Mapping Exercise.
  d) A reluctance to develop the Onshore Scenario Mapping exercise to examine in detail some of its outcomes.
  e) A failure to consult the Tiree public on any of the socio-economic studies prior to publication.
  f) SPR failure to address infrastructure requirements.
Marine Protected Areas:

Map 4 is a **serious misrepresentation** of current MPA work and study. The Skye to Mull search location must be included in the DMP.

The above approx de-lineates the SKYE-MULL Search Area with reference to the MP proposed Tiree sites.

Extract from SNH

"2014 SNH advice for completing the MPA network"
On the 24th July 2014, SNH submitted formal advice to Scottish Government recommending an additional four MPA proposals for designation as Nature Conservation MPAs.

The above approx de-lineates the SKYE-MULL Search Area with reference to the DMP proposed Tiree sites.

**MPA Search Locations and Demonstration & Research MPAs**

Work to identify the 4 remaining MPA search locations to complete the network is now complete.

These are primarily for mobile species, such as basking shark, sandeel and Risso’s dolphin.

SNH has now recommended these areas for designation and further work is required now to consider what the management implications of these pMPAs might be”.

**Re GEN 15 Planning alignment p57 Deemed Consent** should be addressed when stating: ‘Marine and terrestrial plans should align to support marine and land based components required by development and seek to facilitate appropriate access to the shore and sea.

### 4.84 Cumulative impact

The DMP as presented is deficient. Unlike the Draft Consultation document it excludes the currently consented projects.

### 4.88 Mitigation

What is meant by “Mitigation may be required depending on the significance of impacts. This should be evaluated in terms of whether there are any potential impacts the sustainability of the coastal and marine environment, or social well-being”? There is something missing here. It makes no sense whatsoever. Possibly further proof reading is required.

**Oil and Gas**

9.13 Re ‘There are three main elements of ensuring maximum economic return:

- **Maximise extraction:**

This contradicts

9.21 **CLIMATE CHANGE** when it states “As is recognised elsewhere in this Chapter, the Scottish Government supports a transition to a low carbon economy which involves the move away from fossil fuel based energy consumption towards investment in renewable energy and increased energy efficiency in recognition that this is necessary to meet emissions targets’

This contradiction needs to be addressed!!!

9.15 states: Key interactions of relevance to marine planning include:-
Renewables: It is not known how spatially compatible renewable energy arrays will be with oil and gas infrastructures as renewables technology is still developing. To date they have generally not been developed in the same area.

The same principle applies to the compatibility of a wave array located in an offshore wind farm.

This has not been recognised, nor conceded in the DMP. It is a technological nonsense, yet the DMP persists in peddling this nonsense.

Offshore Wind and Marine Renewable Energy

Offshore Wind

11.5 This statement borders on the delusional: As the global wind industry expands further offshore, Scotland is well placed to become a key hub for the design, development and deployment of the next generation of offshore wind technologies. In addition to the planned development sites detailed above for offshore wind, Scotland is also becoming a key location for test and demonstration facilities in renewable energy development. The Beatrice Project in the Moray Firth is the world’s first offshore wind deep-water demonstration project and other key projects include the Hunterston Test Centre for Offshore Wind and the virtual hub of test and demonstration facilities which make up the Scottish Energy Laboratory.

The accolade to Beatrice is a ‘nice’ use of English. England’s Blyth installation possibly could make a similar claim!!

Hunterston serves no purpose whatsoever.

a) The Siemens 6MW unit @ Hunterston received 12 months testing in Denmark prior to a similar unit being assembled @ Hunterston. Units of this Siemens model are generating in the N Sea.

b) The Mitsuibishi Sea Angel unit, currently being assembled, was delayed by 12 months due to further testing in Japan. It is is intended for the Fukushima Floater. Hunterston testing serves no tangible purpose.

c) Mitsubishi is not utilising Hunterston to test its MHVestas 8MW unit. It is being tested in DK. It has been selected by Dong for the Burbo Bank extention

d) The 3rd test site has no takers.

• Methil serves no purpose whatsoever

e) Samsung, owners of the the sole Methil tester, has withdrawn from offshore wind.

NTA submitted data to MS-Lot showing that the Methil and Hunterston sites did not replicate off shore wind conditions. Neither site offers any ‘test’ of new foundation technology, the absence of which SPR stated as a reason for dropping the Tiree Array.

The relevance of the Scottish Energy Laboratory would be assisted if the DMP offered an audit of its projects.

Marine Renewables
The ref to ‘Scotland’s Offshore Wind Route Map – Developing Scotland’s Offshore Wind Industry to 2020 and Beyond’ belies the fact that this route map is now utterly discredited. Its targets bear no relationship to actual development.

Its forecast of approx 1900 off-shore turbines installed offshore Scotland by 2020 is risible. This is a stark contrast to the inconvenient reality of:-

- Only SSE’s (Beatrice) out of Scotland’s five consented offshore wind projects has succeeded so far in the subsidy regime.
- It is unknown if the other 4 projects have applied to the current CfD round
- The current CfD round can only afford 1 project, and other UK projects will be competing in the same round.
- No Developer has committed to investment.
- Brent trading @ less than $60 having a negative impact on current investment decisions.

Either way you hack it, unless SSE invest in Beatrice, Scotland may not have any additional offshore wind capacity ie installed turbines, generating till after 2020.

11.7 Re ‘Scotland is a world-leading location in the development of marine renewable energy and has very significant wave and tidal energy resources. The UK Wave and Tidal Key Resource Areas Project found that Scottish waters offer the majority of the UK’s wave resources (46 TWh/year) and significant tidal stream resources (32 TWh/year). This statement must be put in the context of SG abandoning wave.

Re tidal, other countries have been generating from major tidal projects for some years. The current development trajectory suggests Wales ‘Swansea Bay Tidal Lagoon Project may be realised before any comparable Scottish Tidal project.

The estimate for wave and tidal resources confirms what has to be classic understatement:

11.12 ‘It is not expected that each Plan Option area will be fully developed’

The inconvenient reality of the redundancy of the Route Map and SG’s de facto dropping of WAVE, dictates that a major re-appraisal of Section 11 of the DMP is required.

Marine Aggregates

A major omission in the DMP is no reference to MARINE AGGREGATES, and their interface with offshore Renewables.

These are required for site preparation, scour protection, cable protection both for the export cable and inter array cabling. In addition most cabling requires seabed ploughing up to to 1.5/2m depth to bury cables.

This poses considerable environmental issues, which the DMP may consider it addresses, but the shear enormity of aggregate dispersal, which will arise from such offshore construction, is not addressed in the DMP.
NTA estimated the aggregate rock-fill extraction/dispersal for the proposed Tiree Array may have been in the range of 3-5mill cum (this includes the mainland HVDC connection). The cumulative aggregate extraction/dispersal for the WW4/WW3/OWW2 options may exceed 10mill cum.

The cumulative impact of such marine aggregate extraction/dispersal may destroy the ecosystem.

This aspect of offshore renewables development has not been addressed in the DMP.

The DMP, as proposed, is a flawed document.

**Tiree Specific Issues of the NMP**

**WIND (OWW2)**

NTA's objections to the Tiree (Argyll) Array were endorsed by SPR in its reasoning to drop the project, namely environmental, technical, and financial.

SSE subsequently dropped its Islay Array for broadly similar reasons.

The logic is self evident. The emergent trajectory of location of possible development of Scottish Offshore Wind is EC Scotland.

The current consented projects SG would appear to create EC Scotland’s seascape as an impenetrable phalanx of offshore windfarms stretching from N Berwick to Fraserburgh.
SG planners of this DMP have shown total disregard for cumulative impact.

A similar consequence will be the cumulative impact between Islay and Barra. The 5 yrs gestation of the Tiree (Argyll) Array did not yield the required/anticipated technological advances in foundation design. Other than aspirational floating turbines there is still no evidence of any advance in foundation technology.

NTA stated the foll in the Consultation Report to the Planning Scotland's Seas: Sectoral Marine Plans for Offshore Wind, Wave and Tidal Energy in Scottish Waters:

- 4.36 No Tiree Array commented that all options off Tiree should be dropped as the respondent felt they had no relation to current technological development. Specifically in relation to OWW2, they commented that with the Tiree Array on hold as there is no solution to its design that is fit for purpose this rendered OWW2 infeasible.

None of Developers of the five current adopted sites have made the investment decision. Only Beatrice has in place the pre-requisite for any investment decision ie a subsidy award. Assuming positives on both subsidy and investment decision, and these are not a ‘given’, development and generation of these current adopted sites will not be achieved, at the earliest, till the early 2020’s.

As the DMP is to be reviewed every 3/5 years, there is no logic for Adoption in 2015, when the current UK(incl Scotland) offshore wind trajectory confirms there will be no developer interest, for at least a decade, in any of the proposed sites.

SPR, Scottish Govt, and Argyll and Bute CC made every effort to ‘sell’ the Tiree (Argyll) Array as offering, as an outcome, some form of socio-economic development for Tiree. The Scenario Mapping Exercise confirmed that only one O&M option suggested any possibility of such an outcome. This was heavily qualified in the Final Report stating that Argyll and Bute would be the main beneficiary.

NTA expressed its view to the Scenario Mapping Exercise that the trajectory of O&M was to specialist O&M ships, operating within an offshore wind farm but from a mainland base.

NTA’s view was subsequently confirmed by Siemens ordering 4 of these vessels, one of which is committed to UK deployment.

O&M for OWW2 will be mainland based. It will be serviced by such specialised ships or, assuming a scaling up in the technology, more likely by jack-up rigs. Tiree does not have the required harbour or ancillary facilities.
Map 9 - Plan Options for Offshore Wind and Marine Renewable Energy

August 2010 - Current Offshore Wind Activity in Scotland

- Beatrice and Moray consented Spring 2014. Beatrice subsidy in place
  Moray yet to apply for subsidy
  No investment decision on either project

- Neart na Gaoithe, Inchcape, Seagreen Alba and Bravo all consented 10 Oct 2014.
  Still to apply to UK subsidy regime

- All W C Scotland projects either not adopted in Mar 2011 or dropped by the developer
WAVE( WW3)

WW3 appeared in the May 2013 Wave Energy in Scottish Waters Initial Plan Framework (Draft Plan Options), but WW3 was not included in the July 2013 Consultation draft for the DMP.

The May 2013 document made no reference to the fact that its proposed location was to be within SPR’s proposed Tiree (Argyll) Array. This contrasted with documentation for the Saltire Prize Tiree Wave site which made reference to the proposed Tiree (Argyll) Array.

In May 2013 SPR’s proposed Tiree (Argyll) Array was on hold. To propose WW3 in May 2013 suggests that Scottish Govt was confident that SPR would drop the Tiree (Argyll) Array SPR had an exclusive lease from the Crown Estates to develop the proposed Tiree (Argyll) Array.

SG’s suggesting a wave farm could be developed/operate within an offshore windfarm suggests an ignorance of the technology, or dysfunctional planning procedures.

SG’s de facto dropping of Wave just prior to publication of the DMP merited its publication being put on hold.

SG’s abandonment of Wave was no surprise following on as it did the abandonment earlier in 2014, of wave projects in the US and Australia.

A major wave research project was initiated in Germany, including Scottish Wave participation, with this statement by Bosch, a major provider of components to wave technology.

‘Currently, cost-effective transformation of the captured energy into electricity remains beyond the industry’s grasp’

SG’s creation of ‘Wave Energy Scotland’, to secure the intellectual property of Pelamis, may prove vacuous.

WW3 would lose the Tiree fishing Fleet a significant Tiree shell fishing ground. It would also impact negatively on Tiree water sports Tourism.

The environment impacts, offered as reasons for SPR to drop the Tiree Array, have the greatest relevance to not consider WW3 for adoption.

Has SG not read SMRU’s ARGYLL ARRAY WINDFARM BASKING SHARK DRAFT CHAPTER FOR SPR’s ENVIRONMENTAL STATEMENT’?

SMRU were environmental consultants appointed by SPR, to prepare SPR’s Environmental Statement to accompany SPR’s consent application to MS-LOT.

It offered the compelling environmental evidence to persuade SPR, in Oct 2012 to ‘consider’ reducing the area of the proposed Tiree Array.
SPR only put their consultant’s report in the public domain after SPR had dropped the Tiree Array.

**SG cannot ignore the SMRU report, nor its recommendation.**

**WW3 should not be Adopted.**

![Extract from SMRU report recommending reduction in proposed Tiree Array site.](image)

**Misc**

**Saltire Prize**: No application has been made for the Tiree Site. With 15 Jan 2015 as the dead line for any application, NTA is confident this site will not feature in any further possible development.

NTA is of the opinion that (1) such is the paucity and quality of applicants, (2) the development of any qualifying application and (3) Scottish Govt dropping wave, then the sole remaining credible applicant will be the MAYGEN project.
Maygen, has benefited from more than £30 mill of Government subsidy and financial support, to add a further £10 mill from the public purse would be unacceptable.

**SG should consider dropping the Saltire Prize.**

**Marine Traffic Routing**

The DMP has conceded that no offshore renewables development can occur within the Deep Water route off the Outer Hebrides.

The DMP ignores the implications for marine traffic routing in other areas proposed for offshore renewables development.

This will dictate a requirement to introduce a marine traffic routing system for entry to, and from, the Minch.

It will also dictate a marine traffic exclusion Zone off Tiree and Islay.

These have not been addressed in the DMP
Figure 4-2: Study Area with Routes

Figure 8-2: Revised Deep Water Route (RCO 11)

Traffic Routing in the Minches and West of Hebrides 14/150