

State Ocean Planning and Offshore Wind Development:  
Summary of Efforts in Maine, Massachusetts, and Rhode Island  
DRAFT

Jennifer L. Edwards and Lawrence Susskind  
MIT-USGS Science Impact Collaborative

## Introduction

In 2003 the Pew Oceans Commission released a report on the dire ecological health of America's oceans, urging a rethinking of existing federal and state piecemeal ocean management strategies (Pew Oceans Commission 2003). The report states that U.S. ocean policy has largely been created on a "crisis-by-crisis, sector-by-sector basis" which no longer serves the current challenges (Pew Oceans Commission 2003, vii). The overall message of the report is that a future governance strategy needs to take a much more integrated approach to ocean management, "with the entire ecosystem in mind, embracing the whole as well as the parts" (p. 26). An approach that segments individual interests, such as fisheries, navigation, and coastal development, will not solve problems, but simply shift them from one sector to another, creating conflict and delay.

Within this context, policymakers and renewable energy developers have intensified the push to develop offshore "renewables" in the U.S., most notably offshore wind energy, but also tidal energy and other emerging technologies. The first U.S. attempt to build a large scale offshore wind farm is the proposed Cape Wind project, in federal waters off Massachusetts' Nantucket Sound. This project, proposed in 2001, triggered staunch opposition from certain local residents, mostly on environmental, aesthetic, and cultural

grounds (cite). In contrast to the integrated approach advocated by the Pew Commission, the questions generated by this contentious case have been sequestered within the federal environmental review requirements under NEPA (The National Environmental Policy Act). The debate over offshore wind energy has, therefore been separated from the larger, overarching question of how our oceans should be managed.

Some policymakers have recognized this problem. They have tried to get past this siloed approach to offshore energy development and ocean utilization. States have jurisdiction over waters that extend up to three miles out from shore. Several states, mostly in the Northeast, are in the process of crafting integrated ocean (and coastal) management plans. In many ways, these processes, at least on the east coast, have been triggered by proposed offshore wind projects. Some states are now trying to figure out how to meet the goal they set of generating 20% of their electric energy by 2020. Efforts to meet these Renewable Portfolio Standards (RPSs), especially in the Northeast, need to take account of the most promising large-scale technologies like offshore wind. [FOOTNOTE MIKE HOGAN'S THESIS] Furthermore, the Northeast states have signed the regional Greenhouse Gas Initiative, or RGGI, which offers financial incentives to states that move quickly to invest in renewable energy. ,[ADD A FOOT NOTE – EXPLAIN THE HISTORY OF REGI AND HOW IT WILL WORK states will be able to trade excess credits throughout the region.]

Some of the state coastal planning initiatives also encompass wider efforts to address concerns about poorly planned coastal development, fisheries depletion, and the need to adapt to the risks posed by climate change, especially sea-level

rise.[FOOTNOTE SOME EXAMPLES] . All in all, the Northeast states are under substantial pressure to develop offshore renewable energy, address these myriad coastal planning challenges, and avoid that public backlash that has surrounded the proposed Cape Wind project. [CITE SEVERAL OF THE BOOKS ON CAPE WIND THAT GAUGE THE PUBLIC REACTION] A state-level integrated ocean management plan may provide the only context in which these interlocking issues can be addressed effectively.

This paper reviews the ocean planning efforts of Maine, Massachusetts, and Rhode Island. Each of these states has valuable coastal resources (both financially and culturally), a long history of coast-related activity, and is actively pursuing offshore wind development. (In fact, there is something of a race among the northeast states to build the first U.S. offshore wind project.) These three states have all initiated an integrated approach to ocean planning, and are soliciting public input. The variations in the way the three states are approaching the task reflects their different coastal makeup, renewable energy goals, and governance structures, and offers some insight into the complexities faced by ocean planners and renewable energy policymakers.

### **The Role of the States in Offshore Wind Resource Management**

State jurisdiction extends three miles into coastal waters, at which point federal jurisdiction begins and runs until the end of the 200 nautical mile exclusive economic zone. [CITE LAW OF THE SEA] Under federal law, the states have significant legal authority over actions within their territorial waters, provided they don't interfere with

“commerce, navigation, national defense, and international affairs” (Van 2008, 3).

States also have some authority over federal waters as well, through the Coastal Zone Management (CZM) Act of 1972. Under the CZM Act, an individual coastal or Great Lakes state can adopt an approved coastal management plan that sets access, hazard mitigation, preservation, environmental protection, and other standards (NOAA xxxx). The rules regarding “federal consistency” allow states to enforce their CZM requirements, even in federal waters, if actions in those areas are likely to impact the state’s ability to implement an approval CZM plan.

In 2005, as part of the National Energy Policy Act (CITE) THE federal Minerals and Mining Service (MMS) was given authority over energy development on the Outer Continental Shelf. The Agency has been moving ahead with its rulemaking on “Alternative Energy and Alternate Uses of Existing Facilities on the Outer Continental Shelf.” These regulations will clarify and standardize the permitting process for offshore wind (and other renewable energy) facilities in U.S. federal waters. A final version of the rule is expected before the end of 2009 (Bornholdt 2009). In the meantime, many states have approved offshore wind development projects. {PLEASE ADD A TABLE WITH A LIST OF ALL PROJECTS UNDER ALL NEW ENGLAND STATES – INDICATE THE SCALE/SCOPE OF THE PROJECT, THE DEVELOPER, THE STATUS OF THE PROPOSAL]

There are many advantages to planning for renewable energy at the state level, including the possibility of organizing a process that can address the full range of

localized costs, benefits, and resource potential. The federal government has never successfully passed a national renewable portfolio standard, despite efforts to do so since 1997 (IN THIS NOTE, EXPLAIN WHAT THIS WOULD BE AND HOW IT WOULD DIFFER FROM OR AUGMENT THE 26 STATE RPS PROGRAMS THAT ARE ALREADY IN PLACE Kaplan xxxx). At the federal level, renewable energy mandates have been politically delicate. They effectively transfer money from resource-poor to resource-rich states (depending on the types of energy being encouraged or discouraged) to meet national objectives. The localized benefits of renewable energy, such as emissions reductions and price stability, would effectively be subsidized by other states. [GIVE AN EXAMPLE USING REAL NUMBERS].

Just over half of all states have enacted Renewable Portfolio Standards, with varying degrees of stringency, and many have tailored the goals they have set to regionally appropriate solutions (Postelwait 2009). The motivations are often economic , encouraging development and fostering “home grown” industries (Rabe 2006). Of course, environmental concerns have also come into play.

Many states have highly aggressive RPS timelines. These tend to favor large-scale projects and more mature rather than emerging technologies that might offer better long-term solutions for certain regions (Hogan 2008). An important question is whether an integrated ocean management planning effort will serve each state’s long-term energy, environmental, and economic interests in an appropriate way.

## **Summary of Individual State Efforts to Date**

Most coastal states in the Northeast are encouraging offshore wind development in state waters. They are also participating as actively in the federal Minerals Mining Service rulemaking effort. Currently, Rhode Island, Delaware, and Massachusetts are locked in a race to see who will have the first offshore wind project. Projects are being developed by Deepwater Wind, Bluewater Wind, and Cape Wind, respectively. [IN A FOOTNOTE ADD A SHORT PARAGRAPH ABOUT EACH COMPANY – WHERE IT IS HEADQUARTERS, WHAT IS ITS OVERALL MISSION, HOW AND TO WHAT EXTENT IS IT CAPITALIZED, WHAT ELSE HAS IT DONE SO FAR]. New York and New Jersey are also considering offshore wind installations at specific sites. Below, we examine in more detail the status of wind energy development in Rhode Island, Massachusetts, and Maine. All three states are pursuing offshore wind in the context of larger integrated ocean management efforts.

### ***Rhode Island***

In September 2008 Rhode Island's Governor Carcieri announced that Deepwater Wind had been selected to develop an offshore wind project near Block Island. [CITE SEVERAL SOURCES FOR ANYONE WHO WANTS DETAILS.] The proposed project will contain 100 turbines and produce 385 MW. This would supply 15 percent of Rhode Island's electricity needs. [cite source] . The Governor is committed to renewable energy development. The state's integrated coastal zone planning initiative preceded the state's effort to promote offshore wind. [cite sources]. The state used an RFP process to solicit proposals from developers willing to meet a variety of state

specifications, including [ ADD THE KEY ELEMENTS OF THE RFP ; also say something about how many responses they got within a specific period of time; also say how they went about evaluating the responses – who was involved and what did they say about the winning proposal].

### Background on Rhode Island Renewable Energy Development

Rhode Island's Renewable Portfolio Standard was set in 2004 as part of the state's Clean Energy Act. [cite] The RPS mandates that 16 percent of the state's electricity come from renewable sources by 2019. Eligible technologies are limited to new renewable energy projects installed after 1997 including solar, wind, geothermal, ocean, biomass, and hydroelectric facilities under 30 MW. In 2006 Governor Carcieri announced a broad energy reform agenda for the state, including a more aggressive plan to provide 20 percent of the state's electricity from renewable sources by 2012 (Carcieri 2006). State efforts to develop offshore wind were already underway at the time.

### Overall Timeline of Offshore Wind Development in Rhode Island

- January 2006: Governor Carcieri announces an ambitious state energy reform agenda, including a target of providing 20 percent of the state's electricity from renewable sources.
- 2006 – 2007: Rhode Island commissions a technical study of offshore wind potential. In June 2007 the State Coastal Resources Management Council releases the *RI WINDS* final report designating the 10 best offshore sites, based on wind speed, cost of development, visibility, and tradeoffs with other ocean uses. In particular, the study looks at favorable sites that are in state waters.
- Summer 2007: The Governor's office initiates a series of four stakeholder meetings to identify the major issues with offshore wind development and to

- discuss the preferred sites. [HOW MANY PEOPLE PARTICIPATE?]
- April 2008: Governor Carcieri announces that the state will issue an RFP for the Block Island Site. Seven companies submit proposals.
- May 2008: The Rhode Island Coastal Resources Management Council delivers its proposal to [?????conduct] an Ocean Special Area Management Plan (Ocean SAMP). WHAT IS THIS AND WHY IS IT RELEVANT?
- September 2008: Deepwater Wind is selected to develop the Block Island site. They propose to construct approximately 100 turbines and meet 15 percent of the state's electricity demand. The projected cost of the project is [????]. The state offers [??\$\$\$] in direct subsidies.

### Ocean Special Area Management Plan

In the summer of 2007 The Rhode Island Coastal Resources Management Council released the results of its "Phase I" wind site screening analysis, RI WINDS., Up until that point, the ocean study in the state had been focused entirely on scientific and technical considerations. Grover Fugate, executive director of the Coastal Resources Management Council, emphasizes that one of the reasons the project has been successful is that "he is keeping a wall between the scientists and all the other interests involved in the siting process" (Lord 2008).

The map below shows the most favorable wind sites identified by the Phase I study. The most preferable sites are the red areas labeled J and K, which are within state waters off the coast of Block Island.

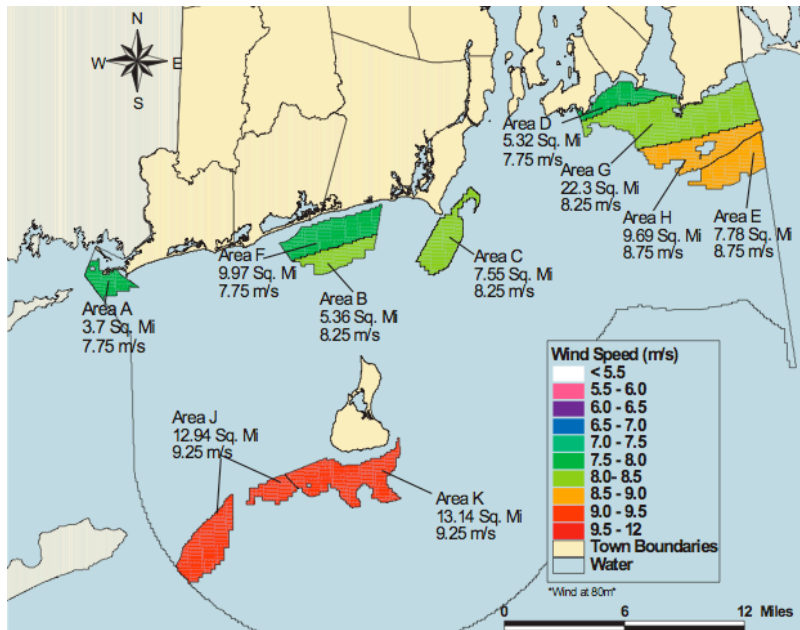


Figure 1. Map showing promising wind development areas from the RI WINDS Phase I study. (Source: Applied Technology and Management Inc, RI WINDS Final Report)

After the release of the RI WINDS report, the state moved to create an Ocean Special Area Management Plan. This Plan was intended to [PLEASE EXPLAIN AND CITE THE REPORT} . Governor Carcieri announced an RFP for wind development in the favorable sites off Block Island. That winner (in 2008) was Deepwater Wind. The company is actively working with the state to advance the project. One problem is that numerous turbines (as mandated by the RFP) would be tightly clustered near Block Island. An alternative, favored by Deepwater Wind, would be to build a small project near Block Island and a larger scale installation in federal waters farther from shore (Wissemann 2009). [PLEASE EXPLAIN THE OPPOSITION FROM BLOCK ISLAND RESIDENTS AND CITE A SOURCE.]

The Ocean SAMP, proposed in 2008, will create a state general plan to manage competing uses of ocean waters off the coast. This plan will try to balance concerns

about fisheries, navigation, environmental protection, and recreation and identify the best areas for each use. It will create an aquatic analogy to land-use zoning. [EXPLAIN FURTHER IN A FOOTNOTE HOW THIS WOULD WORK. IT IS NOT OBVIOUS.]

However, the effort to draw up the SAMP is focused on energy development. According to the state Office of Energy Resources: “the goal of the SAMP is to facilitate Rhode Island’s entry into the exploration and development of offshore energy resources to help achieve the Governor’s 15 percent renewable energy resources goal” (CRMC 2008, 1). The Coastal Resources Management Council, a state agency that provides technical support, and the University of Rhode Island are developing the plan.

Rhode Island has several other SAMPs (i.e. designated coastal regions) in mind for other purposes. Overall, they want to develop a comprehensive plan for natural resource management and ecosystem protection while allowing for reasonable development of coastal economic resources (Fugate 2009). The present focus on renewable energy development is just one step in the larger Rhode Island Ocean SAMP process. Analysts are currently conducting a “Tier 1” analysis that covers the hard constraints of ocean wind development, such as resource availability and geologic barriers to construction. A “Tier 2” study will consider use conflicts and environmental impacts (Fugate 2009).

### Stakeholder Engagement

Two distinct stakeholder consultations have been convened around offshore wind development in Rhode Island, and many of the same parties have been represented in

both. The first is specific to the Governor's RFP for the Block Island offshore wind project. The second was designed to gather input into the state's Ocean Special Area Management Plan.

The first series of meetings was convened by the governor's office after the Coastal Resource Management Council released the RI WINDS report in June 2007, and preceded the Governor's RFP for the Block Island site. About 40 people attended, including city representatives, environmental organizations, local economic development organizations, commercial and recreational fishing interests, state government agencies, the U.S. Coast Guard, area university representatives, and National Grid officials. Attendees agreed that none of the sites identified by the Coastal Resource Management Council were inappropriate, but urged that any formal EIS should compare and contrast different sites. The possible environmental impacts on fisheries and wildlife were acknowledged, but decisions were deferred until the EIS was completed.

The second consultation was convened as part of the Ocean SAMP process, and includes many of the same participants. These meetings have had a broader focus on planning for all uses in Rhode Island's offshore waters, not just wind development, (although wind development has been the near term focus). The goal of the SAMP is to produce a zoning map for the ocean designating allowable uses at various sites. Stakeholders met for the first time in October 2008, and will hold a series of meetings

through the summer of 2009. All meetings are open to the public. [IS THERE A WEB SITE???)

One interesting feature of Rhode Island's offshore wind planning effort is that the Ocean SAMP and the development agreement between the State and Deepwater Wind are progressing simultaneously. If the Deepwater Wind project is actually built, it will fulfill most of Rhode Island's wind energy objectives. While the ocean SAMP is being conducted with an eye towards future wind projects, it is unclear how many additional turbines would actually fit within the boundaries of Rhode Island waters.

### ***Massachusetts***

Massachusetts was one of the first states confronted with an offshore wind energy development proposal. Cape Wind was announced in 2001. Although that project is in federal waters off Nantucket, the state has been considering comprehensive ocean planning as one approach to renewable energy development. A process initiated by Governor Romney culminated in the Massachusetts Oceans Act of 2008. The Act, signed by Governor Patrick, mandated that the state Office of Energy and Environmental Affairs produce an integrated ocean management plan by the end of 2009. The office is currently engaged in that effort, and a draft of the plan is expected in the summer of 2009.

### **Background on Massachusetts Renewable Energy Legislation**

Massachusetts initiated a state RPS as part of its electricity restructuring legislation in 1997. In 2002 the Department of Energy Resources set the terms, which mandated that all electricity providers generate one percent of their power from renewables by 2003, increasing to four percent by 2009 (DSIRE 2009). In July 2008 the state RPS was expanded as part of the Green Communities Act, which doubled the rate of adoption, and mandated that 15 percent of sales be from renewable sources by 2020.<sup>1</sup> The Act also expanded the range of eligible renewables to include some emerging technologies (especially bio-based energy) and to ensure continued support for older technologies that were put in place before 1998 (North American Windpower 2009). [YOU NEED TO ADD THE PUBLIC CONSULTATION EFFORTS OF THE MASSACHUSETTS TECHNOLOGY COLLABORATIVE TO THE TIMETABLE. ASK JONATHAN RAAB FOR DETAILS]

#### Overall Timeline of Offshore Wind Development in Massachusetts

- November 2001 The Cape Wind project is proposed for federal waters off Nantucket Sound, and the Army Corps of Engineers begins its environmental review. Numerous lawsuits delay the process throughout subsequent years.
- March 2004: The Massachusetts Ocean Management Task Force releases *Waves of Change*, a comprehensive report including recommendations regarding the need for integrated ocean management in Massachusetts. This report sets the groundwork for future legislation, which was eventually competed under the Patrick Administration.
- August 2005 The federal Energy Policy Act of 2005 transfers offshore wind permitting to the Minerals Management Service and clarifies certain federal jurisdictional uncertainties. MMS proceeds to review Cape Wind under existing rules, but is soon required to develop new rules for reviewing future projects.

<sup>1</sup> SB 2768. Text is available at <http://www.mass.gov/legis/laws/seslaw08/sl080169.htm>

- January 2008: The Minerals Management Service releases its Draft Environmental Review for Cape Wind.
- May 2008: Governor Patrick signs the Massachusetts Ocean Management Act into law. This law mandates a very condensed timeframe for the state to develop an Integrated Ocean Management Plan for state waters by the end of 2009.
- August 2008: A 17-member Ocean Advisory Commission council holds its first meeting. The group is the core advisory body to the Secretary of Energy and Environmental Affairs regarding the ocean plan.
- January 2009: Minerals Management Service releases the final environmental impact statement for Cape Wind.
- Summer 2009: Draft Ocean Management Plan is due to be released by the Secretary.
- December 2009: Final Ocean Management Plan is due.

### Massachusetts Comprehensive Ocean Management Plan

The Massachusetts Comprehensive Ocean Management Plan was mandated as a result of the 2008 Ocean Management Act, and was the culmination of a multi-year process initiated by Governor Romney and signed into law by Governor Patrick. The plan is being touted as a “first-in-the-nation” effort to comprehensively manage coastal waters through an integrated planning approach (Governor Deval Patrick 2008). The law stipulates that the integrated plan uphold 15 basic principles, informally referred to as the “Ocean’s 15.”<sup>2</sup> These include an ecosystem-based planning approach, integrating plans for climate change and sea-level rise, adaptation to the evolving knowledge of the ocean environment, and public engagement in the decision-making process (Oceans Management Act 2008).

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<sup>2</sup> Stephanie Moura, EPP Green Edge Speaker Series, Massachusetts Institute of Technology, March 31 2009.

While offshore wind development is ostensibly covered by this plan, it is only one focus of the integrated planning effort, which will seek to balance numerous ocean uses including recreation, shipping, scientific research, and other types of coastal or ocean energy development, such as the siting of liquefied natural gas facilities. Fishing is explicitly excluded from the plan's jurisdiction, but should be integrated to the "maximum extent practicable" (cite mgmt act). The plan is also expected to set goals, specify siting priorities, and enumerate standards for specific uses, including "appropriately-scaled" renewable energy facilities. The current working interpretation is that renewables will be incorporated at a scale that addresses climate change, i.e., at a scale that moves "beyond municipal scale installations" (Babb-Brott 2009).

The map below shows the study area for the Massachusetts Ocean Management Plan. Currently, the state has mapped several individual uses within these waters, but has not yet produced a composite map for public release. Some of the individual map layers already in hand cover wind speed, navigation routes, existing infrastructure, habitat areas for key species, and "underwater archeological resources" such as shipwrecks (Babb-Brott 2009). One unusual approach is an effort to include a map of commercial fishing effort *and value*, shown in Figure (3) below. The plan will consider not just the abundance of species in certain locations, but their economic value to the region. The planning group has tried to integrated "local knowledge" into its mapping efforts, for example, by asking commercial fishers to map their activities.<sup>3</sup>

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<sup>3</sup> Ibid.

The task force is expected to produce a draft Ocean Management Plan by the summer of 2009. The current status of the project has been described as “somewhere between the whiteboard and draft internal review” (Babb-Brott 2009). The draft product will include a map of all Massachusetts ocean waters indicating appropriate uses. The use standards will be both spatial and performance-based. Thus, the final map will designate appropriate (and inappropriate) uses in certain areas, given that they do or don’t meet given performance criteria.

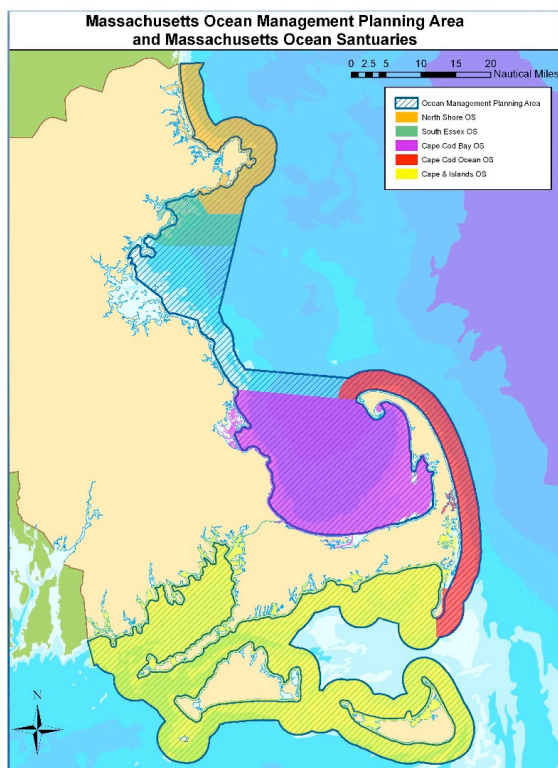


Figure 2. Massachusetts Ocean Management Study Area. (Source: Massachusetts Office of Coastal Zone Management)

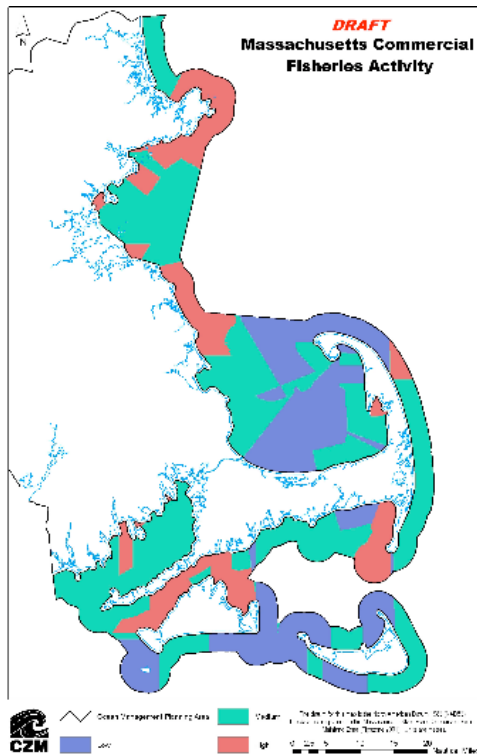


Figure 3. Commercial Fisheries Activity and Value (High, Medium, Low). (Source: Babb-Brott 2009).

### Summary of the Stakeholder Engagement Process

The Oceans Act of 2008 states that the Ocean Management Plan shall “encourage public participation in decision-making” (MA General Law Ch21A §4C). However, the incredibly condensed timeline has limited the possibility of a thorough, and some would say adequate, stakeholder engagement process. The Consensus Building Institute held eighteen listening sessions throughout Massachusetts in September and October of 2008, at which over 350 people participated (Consensus Building Institute 2008). The Office of Energy and Environmental Affairs conducted interviews with targeted stakeholders who have professional, livelihood, or environmental interests in ocean management. [source/]

The Massachusetts Ocean Partnership, an independent body, is advising the state on the planning process. The group is self-described as “a broadly representative, independent public-private partnership created specifically to advance ecosystem-based integrated multi-use management of the Commonwealth’s coastal ocean waters” (cite MOP website). The group consists of [HOW MANY??] interested partners, and serves as a formal advisory body with regard to public engagement, but not for technical aspects of the plan.<sup>4</sup>

One open question in Massachusetts is what impact the Ocean Partnership will have on the content of the final map. The compressed timeline makes it impossible for stakeholders to comment on multiple versions of the plan, or to engage in some of the more technical considerations. The Ocean Partnership might still be able to push back against the time constraints mandated by the legislation.

### ***Maine***

Maine is a relative newcomer to the offshore wind development arena, but is taking steps to integrate ocean energy into its overall coastal economic development plan. Maine’s Governor Baldacci has promoted wind energy as a response to climate change and as a form of economic development. In 2008, the state passed a law setting a goal of 3 GW of installed wind power by 2020. The expectation is that this ought to include

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<sup>4</sup> Stephanie Moura, EPP Green Edge Speaker Series, Massachusetts Institute of Technology, March 31 2009.

300 MW of offshore wind. The Governor has named an Ocean Energy Task Force to prepare recommendations and address the possible barriers to achieving that goal.

### Background on Maine Renewable Energy Legislation

As mandated by the State's electricity restructuring legislation, the Maine Public Utilities Commission finalized a "Renewable Resource Portfolio Requirement" in 1999. The requirement set a goal for electricity retailers to provide 30 percent of their electricity from renewable resources in 2000 [CHECK DATE] . This was easily attainable, since renewable systems were defined in a way that included hydropower and cogeneration facilities under 100 MW. Maine already had enough installed capacity to meet the requirement (DSIRE 2009). In 2006 the state passed a more stringent target aimed at achieving a 10 percent goal by 2017.<sup>5</sup> In this instance, new renewables excluded facilities that existed prior to September 2005, as well as cogeneration facilities. In addition, eligible hydropower must meet strict state laws regarding fisheries access. Wind installations are also now exempt from the 100 MW capacity limit.

### Overall Timeline of Offshore Wind Development in Maine

- |                |   |
|----------------|---|
| May 2007       | The Governor's Task Force on Wind Power Development was established by Executive Order 31 FY 06/07. The task force recommended that Maine set a goal of 2,000 MW of installed wind power by 2015, and 3,000 MW by 2020. They suggest that at least 300 MW of that capacity might be generated offshore. |
| April 2008     | The Task Force's recommendations were passed into law with S.P. 908, "An Act To Implement Recommendations of the Governor's Task Force on Wind Power Development."  |
| November 2008: | The Ocean Energy Task Force was established by Executive Order  |

<sup>5</sup> Maine Legislative Document 2041, April 27 2006.

20 FY 08/09.

November 2008: The Ocean Energy Institute proposed a 5 GW offshore wind installation, the “Manhattan Project for Maine” (Gies 2008).

April 2009: The first OETF [WHAT IS THIS?] report scheduled for release.

### Maine Ocean Energy Task Force

The goal of the Maine Ocean Energy Task Force (OETF) is to “meet or exceed” the target of 300 MW of offshore wind energy by 2020 set by the Governor’s Task Force on Wind Power and subsequent legislation. One of their near-term goals is to identify existing laws or policies that might hinder wind development. The state is also pursuing the possibility of designating research and demonstration sites that would familiarize local residents with various wind generating technologies and give developers and opportunity to test local conditions. [IMPORTANT – CITE] The OETF is not only focused on offshore wind, it is also supposed to encourage other ocean energy sources like ocean-based tidal or wave energy, and to update information on Maine’s offshore oil and gas resources.

Unlike Rhode Island and Massachusetts, Maine is not focusing on offshore wind development as part of an integrated ocean planning effort. Just the same, however, its planning approach treats the ocean as a consolidated resource. The OETF hopes to identify geographic areas that are suitable for offshore energy development, based on resource availability, as well as other use restrictions (CITE). Also, in contrast to the other states, Maine is examining offshore wind more explicitly in the context of overall renewable energy development. Since Maine has many more options for terrestrial wind

development than its denser New England counterparts, this approach to priority setting is important.

The OETF held its first meeting in December of 2008, and the group's work is still in its early stages. There are seven subcommittees, including groups focused on economic development, regulatory barriers, and environmental and human impacts of ocean energy. The task of the environment and human impact subcommittee is to "identify competing human uses and ecosystem functions of the gulf of Maine" that may conflict with energy development, including fisheries, recreation, viewshed, and transportation and shipping (Maine State Planning Office 2008). Part of the larger effort is aimed at building a GIS system for mapping competing uses, resource availability, and access, and visually identifying the most favorable development areas. A preliminary report is expected in April 2009, with final recommendations for the Governor expected in October 2009 (Perkins 2009).

#### Summary of the Stakeholder Engagement Process

One goal of the OETF is to develop statewide consensus on future offshore wind development plans. One of the near-term tasks of each OETF subcommittee is to compile a list of stakeholders in each area so that they can solicit the participation of all these groups. They also hope to issue permits for areas in which temporary turbine demonstrations could be mounted. These demonstration projects would allow developers to test and monitor new technologies within Maine's coastal environment.

They would also allow residents to gain familiarity with offshore wind technologies and provide feedback in response to tangible experience (cite MUSIC demonstration paper).

Maine's recent push for offshore wind development has come largely from the top, out of the Governor's concerns for high energy prices, climate change, and regional economic development (Perkins 2009). However, political decision-making in Maine revolves primarily around local townships, and like other areas in New England, there is a long history of decisionmaking based on town meetings and informal, personal contacts among residents. Also, the Maine coast has many seasonal residents from other parts of New England whose interaction with the region is primarily recreational. In this context, state planners are proceeding with a keen awareness that involvement at the local level is fundamental to any coastal planning effort in Maine.

OETF members are encouraged by the success of the Fox Islands Electric Cooperative wind project on the islands of Vinalhaven and North Haven in Penobscott Bay. Local interest in wind energy began in this location in 2001. A comprehensive community planning process involving both year-round and seasonal residents produced almost unanimous support for a 3.5 MW project (Reuters 2008). The scale of the Fox Islands project, however, is small (both in terms of turbine size and the size of the affected local population). But the diversity of interests offers a microcosm of coastal Maine culture. The OETF hopes that this process of public conversation can be repeated in different communities up and down the coast (Perkins 2009).

### Comparison of State Ocean Planning Efforts for Offshore Wind

Rhode Island, Massachusetts, and Maine are all trying to promote offshore wind development in the context of a more integrated ocean planning effort. However, the states differ in the way they are going about it. Massachusetts is moving very quickly to develop an integrated ocean management plan with clear directives regarding multiple use categories. Rhode Island and Maine are focused more narrowly on energy uses, although they are trying to think these through in their large context. While Rhode Island and Massachusetts have most of their renewable energy potential in offshore wind, Maine has more developable terrestrial wind resources. Their ocean energy planning is being developed within that context.

Massachusetts not only has the broadest planning goal, but the shortest timeline. This is very likely to limit effective stakeholder involvement., There is very limited time for the public to speak to the tradeoffs involved in delimiting competing ocean uses. Maine has a longer time horizon, and can therefore integrate local input into the state planning efforts and encourage demonstration projects. The added time for public feedback should lead to more public support for offshore wind.

States are not only constrained by legislatively mandated schedules, but by their ambitious RPS objectives. Maine has the least stringent RPS (i.e., to provide 10 percent of sales by 2017), while Massachusetts is committed to providing 15 percent by 2020. Rhode Island has set the most ambitious near-term goal, formulated by Governor Carcieri, to provide 15 percent of the state's energy from renewables by 2012. While

this is not a legally binding target, it can only be met if Deepwater Wind builds the offshore wind farm they have proposed.

The push for more integrated coastal and ocean planning (recommended by the Pew Oceans Commission) is a positive step. However, these three New England states show that there are multiple ways of pursuing this objective. While Massachusetts is trying to address all uses (except fisheries) in a single plan, Rhode Island and Maine are focused more narrowly on renewable energy development as a near-term goal. Although they are considering offshore energy in the broader context of all possible locations and ocean uses. Maine will produce an offshore energy plan and not an oceans plan, but it will try to do this in a broader multi-sectoral framework.

Just as there are tradeoffs among different ocean uses, there are tradeoffs among different approaches to public decision-making. More comprehensive public engagement efforts demand more time. This lengthens the timeframe for offshore wind development, and the time it will take for states to meet their energy and climate goals.. Given the bumpy history of wind development in the Northeast, the push for near term development has the potential to diminish the value of a full scale, integrated planning effort.

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