

Memorandum

To: David Flanagan, Chair, Transmission Subcommittee, Ocean Energy Task Force

Cc: Beth Nagusky, Co-Chair, Ocean Energy Task Force

From: Sarah Tracy, Bernstein Shur, Member of OETF Transmission Subcommittee

Date: February 16, 2009

Re: Quantifying and Capturing the Tangible State Economic Benefits of Ocean Energy Development

I. TANGIBLE ECONOMIC BENEFITS OF OCEAN ENERGY DEVELOPMENT

A. Jobs and Services:

1. Permit and pre-construction: survey, permitting assistance, electric interconnect studies, marine life studies, avian studies;
2. Manufacturing: tower bases, anchor and anchorage systems, blades;
3. Construction and installation: fabrication, launching and installation of bases; fabrication and installation of anchoring systems; construction of on-shore transmission lines and substations; construction of collector system and substation interface; home porting for construction vessels; staging areas for construction activities; long shoring services for energy project components; other infrastructure (piers, docks, etc.);
4. Operation and maintenance: land-based O&M facilities; home port for service vessels
5. Executive and administrative positions: development and procurement activities; public and community relations activities;
6. Indirect jobs resulting from purchase and use of Maine-based goods and services (e.g. procurement of raw materials such as concrete, construction or use of transport vessels, housing and food for out-of-state employees or relocated Maine residents, etc.);

B. Taxes: employment, income, real estate and sales tax;

C. Development and Revitalization: Development and revitalization of waterfront acreage and/or existing industrial facilities for use in proposed energy project; use of same facilities for subsequent ocean energy projects that are reasonably proximate (e.g. Atlantic or Northeast Coast);

- D. Education:** additional training regarding ocean energy technology and infusion of capital to create training programs within existing educational institutions (e.g. technical schools, University of Maine, Maine Maritime Academy);
- E. Lower electricity prices:** may be possible to obtain lower prices through power purchase agreement (though not guaranteed); and
- F. Fees:** One-time payment of permitting fee to the State.

See Attachment 1: “Summary of Economic Benefits of Proposed Off-Shore Wind Projects”

II. VARIOUS GOVERNMENTAL APPROACHES TO SECURING ECONOMIC BENEFITS FROM OFF-SHORE ENERGY DEVELOPMENT

A. Rhode Island Off-Shore Wind Request for Proposal (“RI RFP”)

1. Transmission Access – RFP stated expectation that Block Island towns be allowed to benefit from off-shore wind facility cable connection to the mainland; transmission line from facility should allow two-way flow of electrical energy (both to and from the mainland), with an interconnect to the Block Island power system, to enable Block Island residents to obtain mainland rates for electricity even when the off-shore wind farm is not producing power. (RI RFP p. 5, RI Stakeholders Report p. 11)
2. Power Purchase Contracts – RI stated intention to use its best efforts to assure a long-term contract for energy produced by the off-shore wind facility either through distribution companies, a quasi-public state power authority, or both. (RI RFP p. 6)
3. RFP Evaluation Criteria Included Economic Benefit as a Factor:

CRITERION	WEIGHT	CONSIDERATIONS
Experience	40%	1. Level of experience, from lowest to highest value: - selected vendor - permitting complete - in construction operating facility. 2. Type of facility, from lowest to highest value: - any power generation facilities - renewable energy facilities - on-shore wind power facilities - off-shore wind power facilities. 3. Capacity of facilities
Price Proposal	40%	1. Lowest price, \$/MW-h
Economic Development	20%	From lowest to highest value: 1. Total number of permanent jobs 2. Total salaries 3. Total tax revenues generated

- Price Proposal = Low Cost Electricity: Proposals evaluated first on the basis of lowest electricity cost to Rhode Island consumers. RFP provided that proposals to sell the output of the facility into the wholesale market at the market clearing price would not be considered for the first 1.3 million gigawatt-hours of production, unless creative approaches to provide long-term price stability for Rhode Island electricity customers were clearly demonstrated (anything above that could be sold on any basis to any purchaser). RFP acknowledged that firm pricing could not be determined with the level of effort expected for the proposal and recognized that final pricing would be negotiated with the successful respondent. However, RFP required that proposed pricing will be within a range of plus or minus ten percent (10%) of final pricing and RI reserved the right to terminate negotiations based on final pricing above the proposed price plus ten percent (10%). (RI RFP pp. 6-7)
- Economic Development = creation of new, full-time permanent jobs with associated tax revenues. RI considered jobs created by the operation and maintenance of the facility, as well as jobs created in the renewable energy manufacturing and service sectors directly resulting from the applicant's efforts. (RI RFP p. 7)

B. New Jersey Off-Shore Wind Solicitation (“NJ OSW Solicitation”)

1. NJ solicitation for off-shore wind project proposals required developers to disclose the extent to which the technology and project proposed would be manufactured in New Jersey and constructed by New Jersey-based businesses. (NJ OSW Solicitation pp. 13, 25-26)
2. Solicitation required developers to include a construction plan in the proposal that included subcontractors capable of performing necessary tasks, allowing the NJ Board of Public Utilities to determine whether local subcontractors would be used for the project. (NJ OSW Solicitation p. 19)

C. Newfoundland’s Management of Off-Shore Petroleum Resources

The Canada-Newfoundland Atlantic Accord Implementation Act, S.C. 1987, c.3, and the Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act, R.S.N.L. 1990, c. C-2, (hereinafter referred to as “the Acts”) established a Canada-Newfoundland and Labrador Off-shore Petroleum Board (hereinafter referred to as “the Board”) to manage the petroleum resources in the Newfoundland and Labrador off-shore area.

The Acts also established the requirements that proponents of off-shore petroleum development projects must fulfill in order to obtain approval for a Development Application. Section 45 of the Acts established criteria to ensure that the exploration for, and the development and production of the petroleum resources in the Newfoundland and Labrador Off-shore make a lasting contribution to the sustainable development of the Province’s economy. Accordingly, an applicant seeking approval of an off-shore petroleum development must submit a Canada-Newfoundland and Labrador Benefits Plan (“Benefits Plan”) along with the Development Plan. While the Board

oversees approval of both the Benefits Plan and the Development Plan, approval of the Benefits Plan is a prerequisite to approving the Development Plan.

Among other things, the Benefits Plan must describe the applicant's commitment to, and plans concerning, the following criteria:

- Before carrying out any work or activity in the off-shore area, the developer shall establish an office in the Province where appropriate levels of decision-making are to take place;
- Individuals resident in the province shall be given first consideration for training and employment;
- Expenditures shall be made for research and development to be carried out in the Province and for education and training to be provided in the Province;
- First consideration shall be given to services provided from within the Province and to goods manufactured in the Province, where those services and goods are competitive in terms of fair market price, quality and delivery; and
- Disadvantaged individuals or groups have access to training and employment opportunities and to enable such individuals or groups or businesses owned or operated by them to participate in the supply of goods and services.

Additionally, the Benefits Plan must also include a description of the applicant's plans for:

- Transfer of technology and know-how to Newfoundland and Labrador and other Canadian suppliers and contractors;
- The succession of qualified residents of the Province, and other Canadians, to any positions initially held by non-Canadians;
- Education and training programs and expenditures to be provided in the province for Newfoundland and Labrador residents and other Canadians to participate in the project; and
- Assistance to government departments and agencies and to private and public training institutions in identifying and developing suitable employment-related training programs.

III. POSSIBLE STRATEGIES TO ENSURE THAT MAINE CAPTURES ECONOMIC BENEFIT FROM OCEAN ENERGY PROJECTS (PARTICULARLY OFF-SHORE WIND)

A. Issue an Ocean Energy Project Solicitation or Enact Ocean Energy Legislation Designed to Obtain Economic Benefits for Maine

1. Possible methods:
 - Require specific commitments from project developers concerning economic benefit to Maine and local communities (Newfoundland model);
 - Heavily weight economic benefits in development proposal selection criteria (Rhode Island model);
 - Require a certain percentage of local content in development proposal.
2. Preferred economic benefits (above and beyond those that would automatically occur due to proximity and/or convenience):
 - First consideration to Maine residents for training and employment; where Maine residents cannot be hired in the first instance, efforts should be made to ensure that a Maine resident is able to succeed the employee initially hired;
 - Location of development office (where decision making takes place) and procurement office in Maine (so sales tax on high-cost items goes to State);
 - First consideration to Maine-based services and goods manufactured in Maine, where those services and goods are competitive in terms of fair market price, quality and delivery;
 - Identification of, funding for and creation of educational and training programs for employment in ocean-energy related jobs (construction, installation, operation and maintenance, executive level positions);
 - Pledge that Maine will serve as a regional hub for manufacture, assembly and transport of ocean energy components to other states (as applicable).

B. Create an Off-shore Wind Port and Construction Center

1. Invest in a manufacturing plant: With support of Maine's Governor and U.S. senators, invest Maine's stimulus package money in the construction of a plant for a preferred manufacturer to fabricate off-shore wind facility components in Maine. As products are sold, Maine could recoup its money by receiving a share of the profit. (Bluewater Proposal)
 - Manufacture nacelles (containing approximately 800 parts), blades, gear boxes, crew (O&M) vessels (need 3-5 per wind park), heavy lift (assembly) vessels, foundations (e.g. jacket foundations increase jobs);

- U.S. unlikely to manufacture heavy iron components because we cannot compete with Southeast Asian Companies with big iron capabilities.
2. **Secure Staging Areas and Ports:** Need industrial-scale working waterfront if Maine is to be involved in manufacturing and assembly of wind park. (Cianbro Proposal)
 - A 360 MW off-shore facility needs a 3-year lease of 25-40 acres of land with direct and close access to a deep water port for staging (Year 1 for preparation; Year 2-3 for installation and construction). (Bluewater)
 - Possible sites: Sears Island or Yard 8 (the old Guilford property in Portland). (Cianbro)
 3. Possible utilization of BIW shipbuilding capabilities (BIW has performed some shipbuilding work for Cianbro);
 4. NJ is currently considering a similar “carrot” approach of using stimulus funds to build out a port that has lots of common facilities (cranes, piers, lay-down areas, rail, etc.) that developers or manufacturers could rent.
- C. Ensure Grid Capacity:** Invest federal stimulus money to upgrade transmission system in anticipation of injection of 1,000 MW of wind power. Improvement of transmission grid in Maine creates jobs and ensures that off-shore facility can transport power to load centers. (Bluewater Proposal)
- D. Education:** Invest in training or require developers to create training programs to train local workers in technical skills related to wind facility operation and maintenance. Utilize Maine Maritime Academy, technical colleges, University of Maine (engineering program).
- E. See Attachment 2:** Reed & Reed, Inc. Memorandum Regarding “Tangible Benefits of Off-Shore Wind Power to Maine,” dated February 10, 2009 (stating position that Maine should not institute quotas or protectionist measures that provide preferential treatment for Maine business and worker participation in ocean energy projects).

SOURCES

Rhode Island RFP – “Rhode Island Energy Independence 1 Project” Solicitation (“RI RFP”)

April 3, 2008, http://www.governor.ri.gov/documents/wind_rfp.pdf

Rhode Island Off-shore Wind Stakeholders Final Report (“RI Stakeholders Report”)

February 2008, [http://www.energy.ri.gov/documents/renewable/RI_Off-shore_Wind Stakeholders Final_Report_February_2008.pdf](http://www.energy.ri.gov/documents/renewable/RI_Off-shore_Wind_Stakeholders_Final_Report_February_2008.pdf)

Press Release: GARDEN STATE OFF-SHORE ENERGY WINS BID FOR NJ OFF-SHORE WIND FARM (“GSOE PR”)

October 3, 2008, http://www.gardenstatewind.com/pdf/pr_100308.pdf

Garden State Off-shore Energy Fact Sheet (“GSOE Fact Sheet”)

<http://www.gardenstatewind.com/pdf/factsheet.pdf>

NJ Solicitation for Proposals to Develop Off-Shore Wind (“NJ OSW Solicitation”)

October 5, 2007, <http://www.njcleanenergy.com/files/file/OSW%20Final%20Solicitation100507final.pdf>

NJ OSW Evaluation Committee Award Recommendation Report

October 3, 2008, http://www.njcleanenergy.com/files/file/Renewable_Programs/CORE/OSWevaluationreport10308.pdf

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