



Section 28

Tangible Benefits



Section 28. Tangible Benefits

28.1 State Standards

Pursuant to the State’s Wind Energy Act, an Applicant must:

demonstrate that a proposed wind energy development will establish environmental and economic improvements or benefits to the citizens of Maine attributable to the construction, operation, and maintenance of the proposed development.

Including:

- Estimated employment due to construction and operations;
- Annual energy production benefits;
- Property tax benefits;
- Intended sale or use of the power;
- Ratepayer and emissions benefits
- Local purchases during construction and operations;
- Plan for post-construction reporting of Benefits to the Department;
- Community Benefits Package as required under 35-A M.R.S. §3454(2); and
- Other tangible benefits.

28.2 Estimated Employment during Construction and Operations

The Project will lead to the creation of hundreds of new jobs. The table below (Table 28.3) provides estimates of employment projections and associated earnings for the Project. These estimates have been calculated using the National Renewable Energy Laboratory’s Jobs and Economic Development Impacts (“JEDI”) wind model. This model factors in estimates of the Applicant’s construction costs and wages in order to project the estimated number of new jobs and their respective wages. Additionally, the Applicant customized the model with project-specific inputs, such as wind velocities, expenditures, and wages local to Maine.

Table 28.3. Employment Benefits, State of Maine

Item	Local Jobs	Local Earnings (\$ millions)
During Construction Period		
Project Development and Onsite Labor Impacts		
Construction and Interconnection Labor	38	5.575
Construction Related Services	9	0.65
Total Direct	47	6.225



Turbine and Supply Chain Impacts	130	6.6
Induced Impacts	51	2.45
Total Impacts	228	15.275
During Operating Years (Annual)		
Onsite Labor Impacts	1	0.075
Local Revenue and Supply Chain Impacts	2	0.125
Induced Impacts	2	0.125
Total Impacts	5	0.325

As shown in Table 28.3, the Project is projected to create 228 new jobs during the construction phase. Out of these 228 new jobs, 47 will be directly linked to building the project, 130 will be linked to material supply chains, and 51 will be the result of indirect economic impacts of project employees spending their wages. Cumulatively, these new jobs will result in earnings of \$15.275 million to Maine workers during the construction phase.

Additionally, the Project will generate 5 new jobs during the operational phase with associated earnings of \$325,000. Given that the Project is expected to operate for 30 years, the model estimates that it will provide direct earnings of \$9.75 million to workers in Maine during its operations.

28.3 Annual Energy Production Benefits

The Project is 3 wind turbines, each at 6.1 Megawatts (MW). The total installed capacity is 18.3 MW. The Project is expected to produce 57.4 gigawatt-hours of electricity annually. This should be sufficient to offset the electricity consumption of approximately 7,850 homes in New England.¹

28.4 Property Tax Benefits

The Project is estimated to include \$28.4 million in hard construction costs. Of that, \$23.1 million will be installed in the Town of Rumford. The Town of Rumford’s mil rate is currently 22.18.

It is estimated that \$5.3 million will be constructed in Roxbury, Maine. The Town of Roxbury’s mil rate is 11.05.

¹ The Applicant compared the average electricity consumed per household in the Northeast to the anticipated electricity production from the Project.
<https://www.eia.gov/consumption/residential/data/2020/index.php?view=consumption#by%20fuel>

The estimated annual property tax benefits in each town in year 1 are:

	Rumford	Roxbury
2023 Mil Rate	22.18	11.05
Project Value	\$23.1 million	\$5.8 million
Year 1 Tax Estimate	\$512,358	\$64,090

In the first year of operations, the combined contribution in property taxes is estimated to be over \$575,000 for the Project, equal to over \$192,000 per turbine.

28.5 Intended Sale or Use of Power

The Applicant is in discussions with various potential purchasers for the electricity and renewable energy credits (“RECs”) that will be produced by the Project from commencement of operations through 2050. These purchasers include traditional utilities and corporations. All of these entities have load within the New England region and are interested in purchasing electricity and/or RECs to offset that load. The Project expects that the final contract will be for a bundled product with one or more entities buying the electricity and the RECs over a long-term contract. Many of these entities have goals of being carbon-neutral by 2050 and the Project’s production would contribute to attaining those goals.

Due to cost and interest rate increases associated with the COVID-19 Pandemic, the Applicant has delayed negotiating final pricing for the Project to ensure that the Project’s offering is both competitive with the market and is not eroded due to inflation. The Applicant expects to finalize a contract to sell the electricity and RECs from the Project prior to starting construction for the Project.

The development team for the Applicant has negotiated numerous power purchase agreements for its energy projects over the years and is confident that it will secure a long-term offtake agreement for the Project.

28.6 Ratepayer and Emissions Benefits

The Project will generate long-term clean electricity at a low fixed cost. Wind energy projects are not subject to fuel cost volatility after installation. In the winter 2023, ISO-NE reported that natural gas prices averaged \$9.15/MMBtu, but at times spiked to

\$49.68/MMBtu.² Wind energy suppresses the wholesale cost of electricity as it does not have an incremental and turbulent fuel price. In addition, on the days where natural gas prices increased, the region relied more heavily on oil generators than an average winter day. According to ISO-NE, oil generation contributed 2% of total generation on average, that contribution increased to 20% or higher during the two coldest periods of the winter.³ Not only will the Project contribute to suppressing the wholesale cost of electricity, but it will also suppress the emissions, and the health impacts associated with those emissions, which is a benefit to the ratepayers.

The State of Maine has a goal of 80% renewable energy by 2030 and 100% renewable energy by 2050. According to “Maine Can’t Wait”, the State was expected to reach 48% renewable energy by the end of 2022.⁴ The Project will contribute to the State’s goals of a clean energy fleet.

28.7 Local Purchases during Construction and Operations

The Applicant expects to purchase many materials from within the State of Maine for the construction and operations of the Project. These items are in addition to the meals, fuel, and incidental purchases that its staff will purchase while constructing and operating the Project. Table 28.8 (a) lists the materials anticipated to be purchased during construction within the State of Maine. Table 28.8 (b) lists the annual materials anticipated to be purchased within the State of Maine during each year of operations.

Table 28.8 (a). Purchase of Materials for Construction (within Maine)

Construction Material	Spent in Maine (\$ millions)
Construction (concrete rebar, roads, and site prep)	9.02
Electrical (drop cable, wire)	1.73
Development/Other Costs	2.61
Sales Tax (Materials and Construction Purchases)	0
Total Construction Materials Cost in Maine	13.36

Table 28.8 (b). Annual Purchase of Materials during Operations (within Maine)

Construction Material	Spent in Maine (\$ millions)
-----------------------	------------------------------

² <https://www.iso-ne.com/static-assets/documents/2023/05/2023-winter-quarterly-markets-report.pdf>

³ Ibid.

⁴ <https://www.maine.gov/climateplan/dashboard>



Tools & Supplies	\$0.133
Insurance	\$0.256
Fuel and Motor Vehicles	\$0.048
Sales Tax (Materials and Equipment Purchases)	\$0.017
Total O&M Materials Cost in Maine (Annual)	\$0.455

28.8 Plan for Post-Construction Reporting

The Applicant will submit an annual report of tangible benefits realized from the construction, operation and maintenance of the Project to the Department.

28.9 Community Benefits Package (35-A M.R.S. §3454(2))

The community benefits package requirement is waived for any projects that meet the following requirement: *Has an installed capacity of less than 20 megawatts.*

The Project is an 18.3 MW project and is below the threshold for requiring a community benefits package.

28.10 Other Tangible Benefits

The Applicant started discussing additional benefits that the Project could provide the Town of Rumford with the Town’s selectboard and separately with a local non-profit in Rumford. These conversations commenced in 2022 and are ongoing.

The development partners for the Applicant have supported a local charity, Hailey Hugs, on an annual basis. Hailey Hugs is based out of Bethel, Maine. Hailey Hugs mission includes:

- Supporting families financially while their child faces cancer treatment*
- Supporting local hospitals, facilities, and research clinics—by financial assistance of items needed to support families during hospital stays*
- Supporting legislative documents in order to raise awareness and funds to support children with cancer.*
- Organizing and managing multiple events to fund the organizations efforts.*

The development partners for the Applicant also participated in the annual Hailey Hugs wind turbine tour in 2021. To learn more about Hailey Hugs, visit: <https://haileyhugs.org/>

In addition, the development partners for the Applicant established The Renewable Award, a scholarship for students in Roxbury, Maine. The Renewable Award was funded by a donation of \$100,000 to the Town of Roxbury in 2023.



The Applicant looks forward to continuing to contribute to the local region and community during the life of this Project.