



Beech Hill Solar Facility Proposal – FAQ

Why build solar at all?

Building a solar facility will help offset the cost of penalty payments written into a new Vermont renewable energy program.

- The **Renewable Energy Standard and Energy Transformation (RESET)** program currently in front of the Senate will require Vermont electric utilities to source **1% of their energy in 2017** from new renewable projects that are built in Vermont starting mid-2015 and are a maximum of 5 MW in size. The requirement **increases to 10% by 2032**.
- **RESET includes compliance payments that utilities will have to pay if they do not achieve the mandated percentages.** A utility that achieves 6% of their Tier 2 requirement will have to pay a compliance payment equal to 4% of their sales as a penalty.
- RESET includes an overall renewable mandate referred to as Tier 1 that requires electric utilities to source 55% of their energy by 2017 from a wide range of renewable resources, such as large scale hydroelectric plants in Quebec. Stowe Electric Department has already met the 2017 requirement two years ahead of schedule while other larger utilities are near 45%. This requirement increases to 75% by 2032.

What are the potential impacts of the RESET Program?

- If Stowe Electric Department has a shortfall and does not achieve the Tier 2 requirements, we will be forced to pay **\$45,000** for each 1% we come up short.
- If SED does nothing to comply with the 10% requirement by 2032 and instead makes the compliance payments, this will result in a **4.1%** rate increase. Over the 30 year life of the project, this could total approximately **\$11 million**.

This project as designed will account for **2%** of the 10% required by 2032. This translates to a reduction of **\$99,000** towards the costs of those payments, a total of **\$3 million** in savings over the 30 year life of the project.

How big and where?

- The 1 Megawatt (MW) facility will occupy 6 to 7 acres, the majority if the reclaimed portion of the gravel pit on Beech Hill Road. The solar panels would be less than 9 feet tall at their highest point.
- The reclaimed portion of Beech Hill Road gravel pit. It has been out of operation for more than 30 years.

Why build in Stowe?

Building the facility in Stowe helps to maximize the benefit realized for SED customers.

- **\$64,000 annual reduction** in the cost to purchase and deliver energy generated outside of Stowe to serve the SED customers
- This savings will amount to approximately **\$1.9 million over the 30 year** life of the project and will help to stabilize rates.
- **\$450,000-\$525,000** in revenue for the Town of Stowe over 30 years in the form of lease payments for the use of the property

How much will the facility cost and how will Stowe Electric pay for it?

SED has financing option available that will **save \$1.2-1.5 million** in interest payments over 30 years.

- The **facility will cost approximately \$3.5 million.**
- The Vermont Economic Development Authority (VEDA) is now offering **Clean Renewable Energy Bonds (CREBs) at a 0% interest** rate for these types of projects.
- The application for the CREBs is due **June 3rd**. SED has been working quickly to have all of the pieces in place to submit the application in the event the Stowe residents vote to approve the issuance of the bonds.

Did you look to locate the facility elsewhere?

SED evaluated a number of town-owned properties for their ability to host a site and the Beech Hill site was by far the most suitable. We evaluated the Beech Hill site, the Stump Dump, the Old Highway Garage, and the Kirchner property on Rt. 100 based on a number of factors:

- amount of available space to host the facility to maximize the return on the investment
- lack of shading from surrounding mountains and vegetation which would limit how much energy the facility could generate
- amount of prep work the site would need to host the facility
- potential aesthetic impact of locating the facility at the site

Why this site?

Several of the limiting factors made it impossible to build a facility 1 MW in size on any of the other sites. The reclaimed gravel pit on Beech Hill Road has several advantages.

- very good solar exposure (very few trees or mountains shading the site)
- would require minimal prep work to deliver the energy to the system once the panels are operational
- minimal traffic
- A 7 foot fence will be installed around the project. SED will also take other measures to limit the aesthetic impact such as building a berm and planting vegetation to screen the view from the surrounding area.

How long will the project take to build?

SED hopes to have the facility built and operational by **the end of 2016**. The construction period should take around three months after the necessary approvals and permits are received and the project is fully designed.