Site Location: Former Superior Copper Mine

Project Type: Wind

Site Description:
Former copper mine, currently owned by Superior Copper Company. Property is approximately 100 acres in size and located in a rural area on the outskirts of the Town of Bellehaven.

Site History:
Over 30 years ago, Superior Copper closed down its underground mining facilities after half a century of operation. The Superior Copper site was listed on the National Priorities List (NPL) about 25 years ago because nearby streams were being adversely impacted by the site’s large tailings piles and associated acid mine drainage (AMD). Superior Copper was identified as the Potentially Responsible Party (PRP) and funded the site’s cleanup under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)/Superfund program. The cleanup process included conducting an extensive Remedial Investigation and a Feasibility Study to evaluate possible cleanup and risk management options for the contaminated tailings piles and AMD. A Record of Decision (ROD) was signed about 15 years ago and the Remedial Action was completed about 5 years ago. The remedy included capping the contaminated tailing piles and treatment of the stream affected by the AMD. The site is currently in the Operations and Maintenance (O&M) and Long-term Monitoring (LTM) phases of the cleanup process, which includes routine maintenance of the capped tailings piles and active water quality monitoring of the nearby stream. Several portions of the property, including the capped tailings piles and portions of the site that were not found to be contaminated, have been designated ready for reuse by the EPA.
Current Status:
Superior Copper approached the State about repurposing a portion of the mine property, in an effort to generate revenues from the underutilized property. The site is not suitable for future residential or commercial use; however, renewable energy development was identified as a potentially viable option for repurposing the land. In cooperation with the State DEP and EPA, Superior Copper engaged in technical studies to determine wind resource availability. Their studies found that the site would be well-suited for wind development. An economic feasibility assessment indicated that the site could produce sufficient wind-generated electricity to justify estimated redevelopment costs, depending upon how it was designed, developed, and operated. The Town is interested in becoming an off-taker of the renewable energy from the installation as it will help the community save money, create jobs, and achieve clean energy goals.

Due to the site’s location and size, a utility-scale wind installation (i.e., turbine size > 1 MW) likely would not be economical; however, a smaller installation on the order of 200-900 kW turbine size (“large scale”) would be feasible economically. The size of the turbine would be dictated by availability of land area and proximity to population areas. The site is especially ideal for renewable energy development because it is located within 5 miles of existing transmission lines, as well as in close proximity to the local distribution network, so the energy produced can be distributed to the local area. Current plans for the site involve the construction of 4 turbines with a combined 2-3 MW capacity.

While the area immediately around the former mine is not densely populated, there is still a significant need for community engagement. Thus far, the community has expressed interest in the proposed renewable energy project, but stakeholders do have concerns about how the development will affect community members and resources, including issues such as electricity costs, environmental impacts, and sound and visual impacts.
Superior Copper recently selected a renewable energy project developer after a competitive bid and interview process, and is ready to get started with planning their next steps, in cooperation with the Town.

The next step in the planning effort is to conduct a meeting with key stakeholders who have a role in the redevelopment process.