

Key Findings:
Port Cortlandt Technical Memorandum
Port Operations (9/17/20)

Waterson Terminal Services (WTS) is the proposed port operator for the Port Cortlandt project. WTS currently manages ProvPort, a 120-acre general cargo marine terminal in Providence, RI, specializing in dry and liquid bulk, roll on/roll off, and project cargo handling. WTS is currently the only port manager and stevedore (the entity that loads and unloads cargo from ships), in the U.S. with the hands-on experience of handling large, offshore wind energy components and understanding of the unique needs of this industry. A detailed summary of their qualifications is included in the technical memorandum, and below is a summary of the proposed Port Cortlandt project.

- A “next generation” nacelle¹ fabrication facility on the 34-acre portion of the Port Cortlandt site with inbound deliveries of large nacelle components by vessel (to occur at the 20-acre portion of the site), would generate the largest number of potential shipping and port operations. For this design option, the frequency of inbound vessels would likely be one to two times per month and could be at the port unloading for two to three days at a time, generally during daylight hours; however, flexibility for 24-hour operations is required.
- The next generation manufacturing facility would likely produce 75 nacelles per year (1.4 per week). It is expected that one barge can carry two “next generation” or smaller nacelles, resulting in 38 outbound barges per year, generally between the months of March and October.
- Outgoing components would only be moved to the port area in the days leading up to the vessel arrival. This movement from the upland area to the port would be planned well ahead of time and occur only during daylight hours for safety purposes. There would be flexibility to halt upland and movements to the port during times that are sensitive to the adjacent community, such as church events/funerals at the adjacent St. Patrick’s Church.
- Given the expected inbound/outbound cargo schedules described above, the port would be expected to have active vessel operations as follows:
 - Inbound deliveries – 2 vessels per month/3 days per vessel – 72 working days per year
 - Outbound nacelles – 38 barges per year/1 day per barge – 38 working days per year
 - Total port operations days per year – 110 days (30 percent of the year)
- If a future blade manufacturing facility (not part of this application) would be developed on adjacent property to the north and shipped from Port Cortlandt, a maximum of approximately 85 vessel round-trips per year are anticipated on the Hudson River as a result of the proposed port (170 total trips going up/down river), mostly consisting of barges for loading fabricated equipment out on the river. For comparison purposes, the U.S. Army Corps of Engineers reports that 7,000+ round trips (i.e., 14,000+ total trips going up/down river) related to waterborne commerce currently pass through this section of the Hudson River every year.
- Potential equipment used in offshore wind port operations includes:
 - Cranes—crawler cranes up to 1,350-ton capacity for barge loading. One option would be to use diesel engine power and boom height of approximately 150 feet high. Another alternative being investigated is the use of gantry cranes, which would have much lower

¹ A nacelle is the portion of an offshore wind turbine assembly that houses the components that transform the kinetic energy produced by the blades, which are attached to the nacelle, into mechanical energy used to turn a generator that produces electricity.

Port Cortlandt

heights, combined with finger piers. Vessels delivering large nacelle components would have their own cranes on board and not require shore cranes.

- Self-propelled modular transport (SPMT)—multi-axel transporter capable of moving nacelles of 500+ tons; hydraulic lifting capability would be used so components can be moved within the facility without crane lifting.
- Forklifts/Reachstackers—standard equipment for handling smaller/lighter equipment associated with large components.