

APPENDIX A

Response to Verso Androscoggin LLC's application for certification by Low Impact Hydropower Institute
Response to Question 12: *"Please attach a description of the Facility, its mode of operation and a map of the Facility"*

Verso Androscoggin LLC (the Company) is owner and operator of a hydroelectric Facility located along the Androscoggin River in the town of Jay, Maine. The Facility is composed of 4 separate developments (see recent photos in Appendix B) which are each described more fully below. The attached aerial photograph and drawings (see Appendix C) show the location of the Facility and the individual developments in more detail. All developments are operated in run-of-river mode. All upstream impoundments are also operated in run-of-river mode.

There is no direct electrical connection from the Facility to the power grid; rather, the Company uses the entire electrical output of the Facility within its pulp and paper mill. Electrical generation from each of the developments is transmitted to the pulp and paper mill via Company-owned transmission lines. In the rare instance that the electrical output of the Facility exceeds the requirement of the pulp and paper mill, the surplus electrical generation can be exported from the mill to the power grid.

The goal of the Facility is to provide maximum production of electric power generation, consistent with available water flow in the Androscoggin River and while complying with all conditions of FERC licenses issued in 1998. As part of the license conditions, the Company maintains 6 recreational sites along the Androscoggin. Recent photos of these sites are provided in Appendix D. The Facility is a vital tool in supplying electrical energy to the Company's pulp and paper mill.

Riley Development

Riley is the most upstream of the Facility's 4 developments, located at river mile 58.0. Riley dam is a 19.2 ft high by 757 ft long, L-shaped, rock-filled timber crib structure. The dam is topped with 48-inch high flashboards. A triangular forebay discharges to the 6 identical turbines contained in the 100-ft by 236-ft powerhouse. Turbines are horizontal shaft units, installed in 1982, each rated for 926 cfs hydraulic capacity and electrical output of 1.3 MW. Maximum available head for the turbines at Riley is 20.9 feet. Note also that the Riley forebay is the source of process water supply to the pulp and paper mill.

Jay Development

The Jay development is at river mile 56.5. Jay dam is totals 893 feet in length and is comprised of 3 non-contiguous sections separated by 2 island area. The 2 outer sections of Jay dam are topped with 32-inch flashboards. Jay has a 320-ft forebay leading to the 32-ft by 147-ft powerhouse. The 6 turbine-generators, installed in the early 1900's, are rated for a total flow of 3,300 cfs and will provide total electrical output of 3.1 MW. Maximum available head at Jay is 14.4 feet.

Otis Development

The Otis development is at river mile 54.0. The dam is composed of 2 contiguous spillway sections totaling 577 feet in length and topped with 24-inch flashboards. A 95-ft long forebay leads to the 70-ft by 86-ft powerhouse. The powerhouse contains 2 turbines, each rated for 3,000 cfs at 26 feet of head, and each having generation capability of 5.2 MW. While the Otis dam is over 100 years old, the Otis powerhouse and turbines were constructed in 1984.

Livermore Development

Livermore is at river mile 53.2 and is the furthest downstream development within the Facility. The dam is made of 2 contiguous spillway sections, totaling 599 feet in length and topped with 28-inch flashboards. A 185-ft wide by 594-ft long forebay leads to 2 separate powerhouses: (1) the (original) 88-ft by 157-ft power house containing 8 identical horizontal turbines (early 1900's vintage) with total hydraulic capacity of 3,456 cfs and 8 generators with total generation capability of 7.8 MW; and (2) a newly (2004) constructed power house and vertical turbine, discharging into the rocky area at the side of the forebay, with hydraulic capacity of 450 cfs and generating capability of 1.0 MW. Gross head available at Livermore is 33.3 feet.

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