

Hydro Kennebec uses ASL AQFlow Acoustic Scintillation Flow Meters.

Hydro Kennebec have selected ASL AQFlow's Acoustic Scintillation Flow Meter (ASFM) for a series of flow measurements for its two, 4-blade Pit Kaplan turbines at its hydro dam on the Kennebec river in Winslow, Maine, USA.

Hydro Kennebec selected the ASFM technology because it was desired to equate actual flow with plant output to determine the most efficient blade/wicket gate relationship under the usual operating conditions. The site is completely computerized and operates on a set of "3-D" cam curves that are resident in the controllers. The original curves were determined during the initial start up and index testing in 1989 and there was reason to believe that some optimization was possible if actual unit flow was known. ASFM provided the most cost effective means of measuring the unit flow.

ASL AQFlow worked with Hydro Kennebec site personnel to design and fabricate the frame to support the ASFM equipment and assisted in the measurement and interoperation of the data. The ASFM system is designed to be readily moved from one unit to another for measurements.

While the full implications of the testing have not yet been analyzed, there is every indication that sufficient increases in efficiency will be achieved to recover the cost of the testing in less than two years.

The measurements were made by ASL AQFlow of Sidney, BC Canada, using a 1-bay, 20- path ASFM system which is being leased from ASL AQFlow by Hydro Kennebec. See www.aqflow.com and www.uaecorp.com for more information.

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