

BOYCE HYDRO POWER, LLC

*A W.D. Boyce Trusts Legacy Enterprise
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May 20, 2013

The Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, D.C. 20426

Re: P-2785
Art. 402, Flow gaging

Dear Secretary:

We are writing in response to your letter of April 23, 2013. We understand and acknowledge the Orders, filings and results outlined in your letter of April 23 and would like to present our proposed plan for the coming year to finalize the flow gaging installation at Sanford. Please find below our response to the four specific items listed on page 5 of your letter.

1. The gage, ChannelMaster H-ADCP, was installed in the fall of 2008. In July of 2010, staff from the USGS did a one day river calibration. In December of 2011 we received the final documentation of the river calibration from USGS. The installation consists of the ChannelMaster mounted in the river, a data logger and DC power supply mounted in a control panel on the river bank, and an interconnecting cable. The power is supplied to the system through a solar panel mounted above the control panel. The control panel also has telephone service to a modem where we can transmit data back to the operating computer at the plant for viewing and storage. Enclosed you will find a map showing the location of these facilities along with a cross section of the river. We are also enclosing some photos of the facilities and their location. The photo locations are shown on the map.


2. The meter has not been calibrated. As noted above, it took 18 months to get all calibration data from USGS. With that data they explained "Further, and even more importantly, the area rating and the discharge rating included in the attached spreadsheet were developed from a single transect at the Boyce Hydro velocity meter and used an estimate of Bank elevations. Because discharge regression is developed from the area rating, it will likely be in error if used with the actual surveyed cross section Boyce Hydro obtained for the site."

3. We plan to recalibrate the gage this July 2013. It will be done by an Environmental Consultant fully experienced in the process of river calibration. The measurements will be accomplished by an acoustic Doppler current profiler using multiple Doppler sonars. We will conduct two separate sets of measurements running through eight different flows from approximately 25 cfs to 2,000 cfs. Once complete we can calculate the proper regression factors for our acoustic Doppler current meter and finalize the recording and storage format.

4. Since we have not had any meaningful data to work with we have not proceeded to finalize the recording and storage function, or given consideration to adding the output to a SCADA system. In regards to SCADA, we are not aware of any inclusion of a SCADA connection in our submitted plans or in any order issued by the FERC. To the best of our knowledge we have not agreed to provide such an alarm system with this installation, for what we believe to be a good reason. Once the river flow calibration is complete, we will be able to accurately calibrate the various gate openings and the various turbine settings to a known river flow. Thereafter, when we set a gate to a specific opening, or a turbine to a particular setting, we will know in advance what the flow will be. With this advance knowledge there is no need to set up an alarm system since we know that we are avoiding a default condition at the beginning.

We propose to submit a report at the end of September summarizing these activities, including the results of the river gage calibration and a data storage format. In July of 2014 we plan to have the same Consultant return for two more separate sets of measurements. We will submit these results in September 2014 along with our recommendation for frequency of river measurement.

Sincerely,
Boyce Hydro Power, LLC

A handwritten signature in black ink, appearing to read "Frank O. Christie". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Frank O. Christie, PE
General Manager

cc: L. Mueller
S. Hultberg
K. Kruger, MDNR
B. Fisher, USFWS