

Hon. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

Dec 15, 2010

RE: COMMENTS ON PLACER COUNTY WATER AGENCY'S
DRAFT LICENSE APPLICATION FOR THE MIDDLE FORK AMERICAN
HYDROELECTRIC PROJECT #2079

Dear Secretary Bose:

My comments are directed primarily at whitewater boating opportunities in the bypass reaches. Historically under impaired conditions the opportunities for boating in the bypass reaches have been almost non-existent due to project diversions and lack of flow information. Hopefully, this FERC process will give whitewater boaters in the bypass reaches a once in a lifetime opportunity to restore balance to the project in terms of opportunity to boat these bypass reaches with predictability through scheduled releases and with accurate information through new gages.

Since some of the sections of the DLA relate to the same issue, some of the comments submitted will be redundant.

I respectfully submit the following comments and observations regarding the Draft License Application Project #2079:

Volume 3-Exhibit E Supporting Document A

Aquatic Resources-Management and Monitoring Plans

FLOW AND RESERVOIR MONITORING PLAN

6.2 Annual Flow and Reservoir Data Reporting

The gage data should to be real time in 15-minute increments (USGS standard) and be accessible online for historical reference with no historical time limits. The data should be on demand and not by request and not be limited to two-week blocks of information. Flows can be extremely erratic during spill making 15-minute flow data necessary to

determine whether it is safe for boating. Historical data are important to predict potential periods when boating is likely to occur.

Table 1 Implementation Table for Instream Flow and Minimum Pool Compliance

The implementation of minimum instream flows should begin sooner than 1-4 years after license issue as proposed in the DLA. Gages are a relatively inexpensive and quick project expense and should be given priority in terms of early completion. The data help inform much of the other project's infrastructure and should be installed in year 1 or 2. Where current gages are in place the timeline for flows should be no later than 1 year after license.

For facilities that are physically able to release flows and that have current gages, all compliance flows should begin in year 1 after license.

Table 2

The proposed gages should be year 1 projects.

Pulse flows proposed should begin no later than year 3 after license, and should include the pulse flows out of Hell Hole since PCWA can physically push up to 400 cfs out of French Meadows into Lower Hell Hole to create a spill in Wet and AN years when the reservoir is near capacity and close to spill.

Attachment A Feasibility Study Hell Hole Dam Low Level Outlet Release Capability

The licensee has stated in a Stakeholder meeting that at approximately 425 there is a cavitation problem associated with opening the low-level outlet valve indicating that the valve has already been tested at this level.

The lengthy protracted process detailed in the Feasibility Study does not address the real problem; the valve is faulty by design and needs to be brought up to current safety code. Please provide engineering studies and cost estimates for the repair of the outlet valve. If the outlet valve were able to operate at design, the proposed pulse flows would be able to be provided. Current dam drawdown standards would also be able to be met. Given the additional storage capacity of 7600 AF with the Betterment project, the valve should be brought up to current dam safety standards or an alternate method of meeting standards should be provided in a more timely manner than proposed in the Feasibility Study.

I am also concerned with the parameters set up in the Feasibility Study. Is it scientifically worthwhile to use 200 cfs for a pulse flow release? Initiation of motion begins in this reach at 2198 cfs at RM 3.5, 678 cfs at RM 20.9 and 500 cfs at RM 25.7 according to the Draft Instream Flow Proposal Resulting Effects Report of March 15th, 2010. Please explain the rationale for the use of flows less than required to initiate motion to create a "pulse" in the DLA.

The statement in the proposal that total volumes of water used for the pulse flow will remain constant from the baseline volume used at 200 cfs if the flows are increased above 200 cfs is not supported. If the pulse flows go up to 600 cfs or more (and 500 cfs is a preliminary minimum for boating) the set water volumes result in a potential for significantly less boating opportunities. The total AF volume set for Wet water years is 15,808 AF and for AN water years is 7081 AF. The down ramp rates should remain the same for both 200 and 600 cfs to protect habitat and species. This bypass run takes 2 days to complete. Using the figure of 600 cfs, one boating day would consume approximately 1200 AF of water and two boating days at this flow would use approximately 2400 of the 7081 proposed AF volume in AN water years. The remaining water does not allow for an acceptable down ramp of approximately 8-9%. This also results in significantly less boating days from the base line impaired conditions. The May start dates would likely not allow enough time for a ramp down rate that would end before May 15th at the higher pulse rates. There is also no pulse flow proposed in BN water years and historically under impaired conditions this has occurred. Please explain the rationale for using the same volume of water in different water year types and different flow volumes and explain how the proposed volume is sufficient to accomplish a beneficial pulse and down ramp schedule in BN, AN, and Wet water year types.

To illustrate the availability of excess water for interests other than power generation and consumption, in 2009, which was year 3 of 3 Dry water years in a row, a water transfer of 20,000 AF was made to San Diego County Water Authority from the project as a result of projected excess stored water. These transfers were requested to occur in the May-October timeframe. If PCWA has this amount of excess water to sell after three Dry water years, it should have the ability to provide more water for beneficial use such as pulse flows and recreational boating flows in the project bypass reaches during the same time frame in BN, AN, and Wet water years. Please provide the rationale explaining why pulse and whitewater boating flows cannot be provided on the bypass reaches in the different water year types. Also please explain why, with the Betterment increase of an additional 7600 AF of water storage, PCWA does not have sufficient water to accomplish pulse flows of greater volume and duration in the bypass reaches than proposed in the DLA.

I believe it is premature to state a minimum boating flow on the Rubicon bypass reach at this time since the test flow study has not been completed. If boating opportunities are to be tied to these pulse flows and spill events, the flows must be of sufficient volume and timing to allow boating to occur. The DLA as written does not necessarily guarantee adequate boating flows for this reach.

This also represents a deviation from current impaired baseline conditions in certain water years. Please provide rationale for using the stated flow numbers as an acceptable boating flow.

Aquatic Resources-Measures INSTREAM FLOW AND RESERVOIR MINIMUM POOL MEASURE

1.2.2 Pulse Flows Large River Bypass Reaches

Rubicon River below Hell Hole Dam

On the large river bypass reach of the Rubicon below Hell Hole dam the proposed pulse flow range of between 200 and 600 is unacceptable for several reasons, many of which have been stated above. In Wet, AN, and BN years this reach has historically under impaired conditions spilled with greater volume and greater duration than the proposal. (See Vol 3 Exhibit E Appendix B1) It is also proposed that the pulse events begin in year 6 after license issue. This potentially changes existing baseline historical events for spill and as such affects the riparian environment and historical flow conditions negatively. It also potentially reduces the number of boatable days during this time.

In Wet and AN water years pulse flows up to 600 could theoretically be provided by releasing 200 from the outlet valve and pushing 400 cfs from French Meadows when the level is near spill to create an artificial spill until the outlet valve is repaired or other means of providing pulse flows are proposed.

Given the priority of "filling storage facilities without spilling" found in Vol. 3-Exhibit E Appendix C3 and given the fact that there will be an increased storage capacity of 7600 AF included in the Hell Hole Betterment proposal, the likelihood of spill in Wet, AN, and BN years is both decreased and delayed from existing impaired conditions, potentially impacting both species and riparian environment and potentially negatively impacting recreational boating on the reach by decreasing the number of boatable days.

Initiation of motion begins in this reach at approximately 2198 cfs at the upper end of the reach and goes down to 500 cfs lower in the reach so flows lower than this would likely not result in any type of movement. Please provide rationale for using flow volumes less than what would initiate motion as a pulse flow base.

Since recreational boating is only being provided as tied to these pulse flows or down ramp of spill events and the optimum range for boating is preliminarily thought to be in the 700-1500 range, the range of 200-600 will likely not accommodate recreational boating. If recreational boating is to be solely tied to pulse flows and spill events then these flows have to be of sufficient volume and duration to support this use. The proposed pulse flows and duration most likely do not provide either pulse benefits or acceptable boating levels on this reach. Please provide the rationale for using the range of 200-600 for boating opportunities and explain whether the proposed flow volumes and duration will accomplish a pulse for geomorphologic benefit.

The Howell Bunger valve on Lower Hell Hole Reservoir has a full pool release capacity of 950 cfs but PCWA has stated in a Stakeholder meeting that cavitation in the system begins at approximately 425 cfs. PCWA has stated that they are potentially comfortable releasing approximately 185 cfs. A valve test was done at 180 cfs in 1966 without the current powerhouse in place. With the powerhouse in place this flow would flood the powerhouse. The minimum flow pipe can pass approximately 70 cfs with the potential to release up to 200 after modification to protect the powerhouse. We have not been shown any engineering proposals or costs that would allow the dam to release it's designed capacity and I would request that these be provided before release levels be set for pulse or boating flows on this reach. Also, please provide evidence from DSOD that the current state of the valve system given the Betterment's increased storage capacity will be sufficient to allow current standards of reservoir drawdown. Does the Betterment project require the dam be brought up to current standards in terms of drawdown and dam safety or can PCWA provide adequate drawdown by an alternate means?

Moreover, the boating test flow study has not yet occurred for this reach to determine a base minimum acceptable boating flow so until that minimum acceptable flow is established the proposed flow numbers should not be used to determine the volume of water to be released as a pulse flow that may be sufficient for boating to occur on this bypass reach.

Middle Fork American River below French Meadows Dam

The single boating flow test study for this run released 252 cfs but the study was aborted due to weather and wood and time constraints. The range of acceptable flows was determined to be a minimum of 200 to a 350 maximum.

In a subsequent attempt (not sponsored by PCWA) putting in lower (RM 42.5) to bypass the wood zone caused by the Starr fire the team had a flow of approximately 215 solely from accretion and this was considered an acceptable level. The previous acceptable flow estimates were deemed too high and revised to be between 175 and 200 cfs.

Using the number of 175-200 cfs as an acceptable boating flow, the proposed pulse flows out of French Meadow would result in approximately 4 boating opportunity days in wet water years, 4 days in AN water years, and none in BN water year types given the proposed pulse flows and ramp down. These numbers represent significantly less boating opportunities than under present impaired conditions. Under impaired conditions, boating days have occurred in Dry, Below Normal, Above Normal, and Wet water years. Please provide the rationale for limiting the pulse flows to two water year types potentially changing baseline impaired conditions. Also, please provide evidence that a flow of 400 cfs will be sufficient to create any pulse or initiation of motion for geomorphologic benefit in this reach.

Middle Fork American below Middle Fork Interbay Dam

The single boating flow test study for this run released 425 cfs and a range of between 400-600 cfs at the takeout was determined to be an acceptable boatable range. Put in acceptable flow was set at between 400-500 cfs. The proposed DLA decreases the flow proposed in the Draft Instream Flow Proposal of March 8, 2010 by 100 cfs. In the Draft Instream Flow Report 550 cfs was stated at that time as a requirement to initiate motion (or create a pulse). The DLA proposal also decreases the total number of days for the pulse from 22 days to 18 days for Wet water year types and decreases the pulse in AN water year types from 16 days to 12 days from the Draft Instream Flow Report of March 8, 2010. This results in a large decrease in volume of water available for boating from the original Draft proposal of March 8th. Please explain the rationale for the reduction in both pulse flow volume and boating days in the DLA from the Draft Instream Flow Report of March 8th, 2010.

The proposed DLA allows for approximately 8 boating opportunity days (range of 400-500 cfs at put in) in Wet water years, 2 opportunities in AN water year types, and none in BN water year types. These numbers represent significantly less boating opportunity than under present impaired conditions. Please explain the rationale for decreasing the

number of boating days. Also, please explain whether a maximum release of 450 cfs is sufficient for initiation of motion for this reach.

Small Stream Bypass Reaches

No boating test studies were done for any of the small bypass reaches but given the proposed in stream gages and the removal of the diversion gates at set times, it appears that opportunities for recreational boating on these stretches can be addressed. This statement also presupposes that the gage information will be on demand 15-minute data instead of hourly only, with historical data available and accessible to the general public in some easily accessible form, and that the gages will be online in year 1 after license.

1.2.3 Down Ramp of Spill Flow

Rubicon River below Hell Hole Dam

Since a minimum acceptable boating flow has not been determined I do not think that 600 cfs is necessarily an acceptable number to use as the number to begin a down ramp. Until the contingency test flow study is completed this number is speculative and should not be used in the FLA. The proposed 6-year timeframe for implementation of control of down ramp of spill events is too lengthy. Please explain the rationale for this timeframe and for the use of the 600 cfs figure.

The run is typically done in two days and the proposed down ramp would only allow for 4 days of boating (or more accurately 3 days to start) on the reach on a spill event (presupposing that 600 is an adequate amount of water to boat the reach).

VOLUME 3 EXHIBIT E SUPPORTING DOCUMENT B

Final Technical Study Reports

Rec 4

Contingency Whitewater Boating Study

3.3

The statement "All study elements from Rec 4-Contingency Whitewater Boating Study have been completed" is not accurate. The flow study on the Rubicon River below Ellicott Bridge on the Rubicon was never completed.

3.4

There is a proposed test flow on a spill event for 2011 on the Rubicon if spill occurs.

6.1

The test flow target range of the Contingency Study was set between 500-800 at Ellicott Bridge and the test was supposed to determine a minimum acceptable flow.

The last paragraph accepts unverified and unsubstantiated guesses at flows from literature and follow-up interviews to determine that 400 is an acceptable minimum when 400 was clearly stated to be an unacceptable level in the reports. Until a real test is done I would request that guesses in terms of minimum flows not be a part of the Final License Application.

Final Rec 4 Stream-Based Recreational Opportunities Technical Study Report June 2010

3.3 Outstanding Study Elements

The bullet paragraph below is not an accurate or complete statement.

“Middle Fork American River – French Meadows Dam to Middle Fork Interbay. PCWA agreed to conduct a single flow study during the spring of 2010, with the target flow range to be determined by the study team. This study was conducted on May 22, 2010. The study flow at the put-in was 252 cfs. The study team was unable to complete the run due to the extensive amount of logs and downed trees in the river.”

It should be noted that the temperature during the flow study was in the 20's and it was snowing which significantly impeded progress. A subsequent unsponsored attempt was made a week later and successfully completed the run (putting in near the river mile where the sponsored group hiked out). A relatively accurate flow level was determined to be 175-200 for the run.

5.4.3

Whitewater Boating Opportunities in the Bypass Reaches

Of the bypass reaches discussed above, only two have verified test flow data available. To determine acceptable flows on conjecture and guessing for the remaining section is unacceptable. Until real verified data is produced it is premature to use the quoted flow ranges as acceptable minimum and maximum flows.

The ranges for the Rubicon include two levels and are based on speculative unverified data, essentially educated guesses. Dates for

actual runs on the Rubicon have been provided to PCWA and these runs should be matched with actual flow data and accretions and used as preliminary minimum and maximum acceptable flows until a flow study can be completed. If the Contingency Study cannot be completed before the FLA is filed, the flow numbers as well as best approximations of accretions from the actual verified dates that the section has been run should be used to determine minimum acceptable flows.

6.4.1

The last paragraph in this section is the primary reason the bypass reaches are not boated. To put the statement last is biased and does not accurately represent why the bypass reaches are not boated regularly. Please move the following paragraph to the first bullet position:

“There are no real-time flow gages on any of the bypass reaches. Accordingly, boaters have to determine whether boatable flows are present by sight, word of mouth, and/or estimate flows based on: (1) flows measured downstream at the Middle Fork American River Gage below Oxbow Powerhouse (USGS Gage No. 11433300); and (2) reservoir storage and/or spill information. The absence of real-time flow information may limit use of the bypass reaches because boaters do not know when boating flows are present.”

Aside from the significant fact that the bypass reaches have been dewatered by diversion, the lack of flow information is the second determining factor that makes the bypass reaches inaccessible for recreational boating. The other reasons given for lack of boating on the bypass reaches are unsubstantiated and have no validity.

The days of boating opportunities cited are based on unsubstantiated acceptable minimum and maximum flows and as such should not be considered as an accurate count. The number of listed boating opportunities under impaired conditions do not take into account the fact that flows can sometimes double and triple between Ellicott Bridge and the take-out near Ralston which could both make the run either too low or too high using the flow range accepted in the DLA when boating opportunities were counted.

Also please note that in follow-up consultation a minimum boatable flow was determined to be 500 cfs but PCWA uses the range from 400-1500 as an acceptable range for boating to determine boating opportunities. Until a test study is done to determine the minimum flow these numbers are speculative and should not be used.

In conclusion, I would like to recognize PCWA's genuine attempt to listen to all stakeholders and to provide access to information and data to inform the public throughout the process. I believe the DLA is a good

start to further discussions regarding balancing the Licensee's consumptive demand, power generation, and the environmental health of the ecosystem with the interests of all Stakeholders.

This project is unique from most relicenses in that the Licensee, in addition to its consumptive water rights and sales, is inheriting the power generational sales of the project with the new license.

I feel that while the DLA represents a good start to reaching a balance, there are many variables and open issues that still need to be addressed and I look forward to continuing discussions on how a more equitable balance can be reached for all stakeholders, particularly recreational boaters in the bypass reaches of the project.

Thank you for your time and consideration,
Hilde Schweitzer,
Private Boater

Document Content(s)

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