

Keen, Shelley

From: Keen, Shelley
Sent: Tuesday, August 30, 2005 11:26 AM
To: Luke, Tim
Subject: RE: Arkoosh Permit 37-21297

Tim,

In your second bullet point, what kind of reporting requirements did you have in mind? How frequently should he report, and to whom -- IDWR or the watermaster?

Shelley

-----Original Message-----

From: Luke, Tim
Sent: Monday, August 29, 2005 5:06 PM
To: Keen, Shelley
Subject: Arkoosh Permit 37-21297

Shelley,

I looked at this permit and I think the conditions 10 thru 13 oare fine but I offer the following thoughts or questions:

- Are there any other diversions between the point of diversion and where the water returns to the river from the power plant?
- Should the measuring device condition include any requirement for a permanently installed recorder or data logger? Reporting of daily average flow to watermaster may be helpful to the watermaster, and that reporting be done on some frequency basis. The watermaster should have access to records/data upon request.
- Condition 6 measuring device requirement on the diversion is good. We should try to require or accept an actual measuring device rather than rating of turbines and kWh used etc. Seems like method of estimating use for power plants in this area has been problematic in the past, I'd prefer direct measurement method which perhaps should also be monitored with a recorder or data logger.
- The allowance to let the minimum bypass go to 13 cfs concerns me. I don't understand why IDFG did not require their approval or consent to go to the 13 in the drought years. How late is the SWSI published? Is it adjusted after April 1? The SWSI index may not reflect late rains or changed hydrologic conditions in the spring that would otherwise not warrant reducing bypass to 13. The reduction to 13 cfs seems too automatic - I would have preferred some consultation or consent from the watermaster in addition to or maybe rather than IDFG.
- This project is somewhat similar to the Vern Ravenscroft project, which I think resulted in problems and fluctuations on the river, some of which was caused by turbines shutting off or rejecting loads. I think the way they got around that was to put sensors on the inlet gates so that when the turbines shut off, the diversion headgates automatically shut off. I see that there is a letter from Sorensen stating that bypass flows will be rejected when loads are rejected (to be done in a manner similar to upstream Arkoosh plant), but I'm not certain how that is done. Should there be any condition about that? Maybe condition 11 is the catchall for that - IDWR retains jurisdiction to order operational changes to protect downstream users. I would think Corey Skinner, Allen Merritt and the watermaster know more about the problems with load projections and might offer suggestions on whether this is really an issue or matter of concern.

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