Tom Frederick

From: Keno, Aaron D. [akeno@GFNET.com]

Sent: Monday, March 26, 2007 6:47 PM

To: tfrederick@rivanna.org; jwhitaker@rivanna.org; Hess, Amanda J.; WILLIAM ELLIS

Subject: RE: Conference Call/Meeting

All,

We are now confirmed for a face-to-face meeting in Charlottesville on Thursday (3-29) at 1:30 PM. Here are my current thoughts on what we need to review and accomplish. This approach focuses on our team developing a proposal for submittal to TNC and DEQ (at some point). I fear that continuing on our current path of reviewing work done by HDL will not result in an effective solution quickly.

Remember we expected to simply confirm HDL's work on the ultimate (2055) conditions and then work on interim rules. We are struggling with what we thought was a simple matter (due to HDL's errors and assumptions). Some of the more difficult work (interim conditions) is ahead. We need to land this plane....

Here is a draft agenda. Advance input is welcomed and requested.

- 1. Amanda review current modeling work
 - a. Identify issues of contention in the 2055 and interim conditions.
 - b. Review general modeling conditions such as 7 day rolling averages
 - c. Review compliance strategy (i.e. compliance range, etc.) and discuss reoccurrence of critical RWSA operating and compliance activities.
- 2. Discuss Bill's "Flows and Pumping" memo issued on 3-22.
- 3. Determine strategy for bringing the MIF issue to a close with TNC
 - a. Identify the operating parameters with which RWSA will agree
 - b. Discuss our best guess on what TNC may accept
 - c. Discuss both operating parameters/modeling AND Permit conditions (decide if these are separate documents).
 - d. Determine what additional modeling needs to be done (by Amanda) to confirm/edit our strategy.
- 4. Discuss content for submitting draft materials to DEQ...
 - a. Draft modeling documentation and results
 - b. Draft permit conditions
 - c. Develop approach and make assignments.
 - d. Set a schedule.

We need to stay focused in this meeting to accomplish our objective. We are trying to satisfy competing objectives (safe yield vs. stream flow) and the stream flow requirements are complicating the process dramatically. I think our best shot at resolving this matter quickly is to simplify the operating requirements to the extent possible while producing a large positive result for the streams (i.e. achieve most of what TNC wants). There are technical, practical and public interests that need to be balanced.

I continue to be concerned about the unforeseen implications of agreeing to a complicated set of conditions that produces an unpredictable result if conditions other than what is documented in the 80 year period of record were to occur.

One of the key items in this meeting will be 3a. and 3b. (above). Both HDL and GF have done a great deal of modeling. I think it is time to apply some good judgment for our final approach. For a starting point, I suggest the following. I may be off on some numbers and/or missing some points, but I wanted to convey a way in which we could proceed. I am open to other ideas!! In some cases, discussions with TNC may be too far advanced to back away as much as I have suggested. However, I do think we can meet DEQ's requirements fairly easily and

believe we could proceed if our position on stream flows is reasonable and defendable.

Ultimate Conditions (2055). TNC and Friends of the Moormans get significant benefit from the SHR to RMR pipeline beginning eventually decommissioned. Most of the time SHR is full and spilling natural inflow. If we also offer a percent of inflow release from SFRR under certain conditions, it seems to me that TNC gains a great deal toward their objectives. DEQ is likely to be agreeable to this approach. To accomplish this, I suggest:

- 1. Agree to some form of percent of inflow releases at SFRR with simplified trigger (ideally not more than 2 stages tied to 1 system feature with no tie to pump over. There is proably room for compromise here)
- 2. Consider possibility of proving a 2 cfs minimum release at SFRR (not sure we can).
- 3. I would prefer not pumping to RMR when SFRR stops spilling
- 4. Simplified 2 stage pump over the RMR similar to what we originally modeled using available flow past SFRR as trigger
- 5. I may have understood Tom F. to say that he does not want a percent of inflow release form SHR when it stops spilling. We could perhaps offer a simplified staged release instead (i.e. 1 mgd when SHR is at 75% to 100% useable storage, 0.5 mgd when SHR is less than 75% useable storage and zero when RWSA affiliated agencies implement conservation measures).

Interim Conditions. Recognizing that it is important to provide immediate benefits to the Moormans as soon as RMR is built, we need to increase flows over current conditions.

- 1. I suggest we use rule 5 stated above for ultimate conditions. We could increase the interim condition flow, if we feel like we need to, but we should not provide more flow in the interim than the ultimate (double edge here).
- 2. Consider 2 cfs floor at SFRR if we provide it in the ultimate condition.
- 3. Set 4 mgd (modeled at 3.2 mgd) transfer rule from SHR to RMR. Probably use HDL's 2 cfs floor at SFRR as trigger (consider using a higher SFRR flowby to allow SHR transfer to RMR if modeling confirms).
- 4. Closely examine WTP restrictions to make this work and confirm RWSA is willing to operate by these restrictions.

This is intended to prime our discussion and is not necessarily a proposal. I look forward to seeing you on Thursday. Please call if you would like to discuss in advance.

Aaron

From: Tom Frederick [mailto:tfrederick@rivanna.org]

Sent: Monday, March 26, 2007 3:28 PM

To: Keno, Aaron D.; jwhitaker@rivanna.org; Hess, Amanda J.; 'WILLIAM ELLIS'

Subject: RE: Conference Call/Meeting

I am available in the afternoon on Thursday, after a couple of commitments I have already made to Jennifer, she can give you a more precise time when we could start. I have several scattered appointments on Friday but will re-arrange if you need Friday and you can nail down the time you need by tomorrow.

appreciate the offer to come to C'ville for a face-to-face, and will be agreeable as long as we can meet before the end of this week. Thanks!

From: Keno, Aaron D. [mailto:akeno@GFNET.com]

Sent: Monday, March 26, 2007 3:10 PM

To: tfrederick@rivanna.org; jwhitaker@rivanna.org; Hess, Amanda J.; WILLIAM ELLIS

Subject: Conference Call/Meeting

All.

All of us are available at 10:00 AM on Wednesday. However, Bill suggested (and I agree) that a face-to-face meeting would probably be more productive. The outstanding MIF issues are large and time is getting very short.

Bill, Amanda and I are all available Thursday or Friday for a meeting in Charlottesville if RWSA is so inclined.

Tom and Jennifer – Please let us know how you want to proceed.

Aaron

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