

Notes from October 21, 2011 NGS NREL Study Executive Committee Meeting/Conference Call (final)

Introductions/attendance: Letty Belin, Tanya Trujillo, Mary Josie Blanchard, Bob Wright, Dave Hurlbut, Scott Hasse, Lorri Gray-Lee, Bret Anderson, Carol McCoy, John Vimont, Pat Brewer, Randy Chandler, Bob Postle, Julie Decker, Harrilene Yazzie, Tim Allen, David Murillo, Ann Acheson, Ralph Morgenweck, Chris Cutler

Past Minutes/notes: There were no comments or changes on past minutes/notes.

Executive Committee Charter: Letty asked for comments regarding the proposal to include representatives for the Forest Service on the Executive Committee. There were no comments. Letty stated that the Forest Service is now represented on the Executive Committee and the matter is closed.

Clarification of the Statement of Work: Letty asked that the wording of the section titled, "Trust obligations to tribes" be changed to "Trust responsibilities of tribes". No objections were voiced. Bob Wright asked that the benefits description be defined for the Executive Committee. In particular, does NREL plan to report on a single figure of merit for benefits or will the benefits be described individually? The discussion centered on the value judgment that would be required to combine the value of benefits into a single merit figure and the consensus was to report on individual benefits. Dave will provide an email describing which benefits are being analyzed and why in the next one-to-two weeks. Letty said it would be acceptable to take more time if necessary to provide that information.

Data Gathering Meetings Update: Dave and Scott reported on the results of a four-day site visit to the NGS area following the last Executive Committee meeting. On day-one, they visited Flagstaff and met with the Sierra Club, the Forgotten Peoples Organization, and the Navajo Nation. The meeting went well and discussions included health issues and impacts (many locals burn coal in their homes, so it is difficult to ascertain the cause-and-effect that the Navajo Generating Station poses regarding health concerns). On day-two, the team met with the Hopi Tribal Vice Chairman Herman Honanie and members of the Tribal Council. Discussions focused on the study. That afternoon, the team held public meetings with the Sierra Club which was poorly attended. Discussions included concerns over groundwater contamination and drying springs supposedly occurring as a result of mining operations. The true cause of these effects is not yet determined. A second public meeting included Nicole Horseherder and Marshal Johnson and the discussion included information similar to recent congressional testimony including the cost of water hauling and the development of sinkholes. On day-three, the team met at Peabody Mine to discuss the PowerPoint presentation. Peabody doesn't break down labor statistics by tribal affiliation. Discussions also included the plant extension EIS following the current EIS. The team toured the mines and then met locals from the area as well. On day-four, the team met with Navajo technical representatives on coal and water issues as well as the Navajo Nation attorney-general. The discussion included the ripple effect of large industrial plant closures. A sawmill closed in the past with deleterious effects on the local economy. Also discussed were the sinkholes and declining aquifer.

Study Status/Website Update: Bob Postle requested a copy of the hydrology report. Scott will provide that report. David Murillo asked if the study will analyze unemployment rates in tribal reservations. The Rural Water Program will be reporting similar data and he wanted to ensure accuracy and consistency between the two reports. Scott has requested Navajo Nation unemployment data and will post it to the internet. Mary Josie Blanchard asked for specifics on how the new EIS on plant lease extension relates to the EIS on permit revision for the mine. Bob Postle indicated that the EIS on the mine permit revision will begin in early 2012 and will be separate from the EIS on the NGS plant lease extension. Scott said that the permitted area contains approximately 800 million tons of coal but the

coal lease only allows for extraction of up to 672 million tons. Current production is approximately 8 million tons per year. The coal lease terms are currently being renegotiated by both the Hopi and Navajo Tribes. Carol McCoy expressed strong concern about the need to convey information providing an accurate picture of the true effects of a plant shutdown, including unemployment, taxes to maintain schools, healthcare for workers, etc. The data submitted will be closely scrutinized. We need to ensure that we consider this data in a non-anecdotal fashion. Dave responded that we need to use the data we have at hand. Further refinements may be too late for inclusion in the study. He has county data for the three affected counties. He also noted that employment in the area is trending toward diversification and is not as focused on the mining industry as it was in the past. Scott Haase will be in Washington, D.C. next week and will meet with Dave Murillo to discuss the Rural Water Program as it relates to the study. Bob Wright asked if NREL has met with the local Regional Transmission office (RTO) or dispatcher to discuss the effects of possible energy reduction. Scott said that there are no RTOs in the area but he is talking with each of the Balancing Authorities. The reserve margin effects are being studied and NREL is talking with the utilities on this issue. If a plant goes out of production, the effect on other power producers is studied via production cost modeling. Letty asked for an update on the progress of the report. Scott replied that the report process is at a very critical point right now. The authors of each chapter are scheduled to submit their drafts by close of business Friday, October 21 (today). The chapters will be reviewed by early next week and a determination will be made on what else is needed and the time requirements for obtaining such data. The regional analysis piece (analyzing the effect of natural gas on the system) is nearly done and will be ready for review by next week. The utilities and other sections are also nearly ready for review. The analysis of alternative energy technologies (geothermal, solar heat on boilers, photo voltaic power) is not as comprehensive as NREL would like. Bob Wright asked if the study included an analysis of natural gas – this subject is becoming very important across the nation and the analysis will be closely scrutinized. Scott said that the distance to the nearest pipeline is being analyzed as (1) replacement power and (2) on-site development. Dave said that the utilities are already analyzing natural gas.

Peer Reviewers for the Study Report: Carol McCoy asked if technical questions will be vetted through the technical committee and does a charter exist which covers that action. Dave said that the technical advisory group is providing background and data but is not reviewing the study. Carol asked about municipal waste water contamination due to the lack of a certified landfill. Letty asked NPS and NREL to discuss this matter afterward to save time. Letty asked if the website is up (yes). Scott said that he is short handed because everyone is busy writing but the website will be updated soon www.nrel.gov/ngs/. Letty asked when the draft will be peer reviewed (next 1-2 weeks). Following the peer review, NREL will integrate the reviewers' comments. NREL plans to provide a final draft in mid to late November. Letty asked that the final draft be provided to the Executive Committee only. We can provide a short synopsis to the Navajo Tribe. Harrilene Yazzie shared that Mr. Stephen Etsitty, Executive Director, Navajo Environmental Protection Agency expressed appreciation for the work being done on the report.

Action Items: Decide how to distribute the final draft, when to go public, and how to handle public comments. Next meeting: Thursday, November 10 at 10:30 EST.