From: Bohning, Scott
To: Tonnesen, Gail
Cc: Geselbracht, Jeanne
Subject: RE: Air Quality Protocol Review for NGS/KMC EIS
Date: Friday, May 02, 2014 2:30:00 PM

Gail -

Hi!

Look at diagram in attached "Modeling Protocols for Submittal to Air Quality Subgroup 2014-04-18.pdf" to see relationship of protocols Jeanne sent.

Actually, there are three more protocols... below is list and very short excerpts from each to help identify them. The "Near-Field" and "Ozone_AQRV" ones look like the most important to look at.

FYI, though Jeanne gave me a heads-up about this some time ago, it has not been on my radar screen, and I have not looked at these. I'm planning to attend 5/8 call that has been set up (no details yet), but can't really look at this stuff much till week of 5/19. They had a 5/12 deadline for comments, which I will not be able to meet, but it sounds like they would extend that to get EPA comments. Since NGS is a tribal source, it is in R9 jurisdiction, and I am logical one to look at this given my past involvement with NGS. But effects stretch into Utah, too, and of course your insight would be valuable.

- Scott B.

Modeling protocols related to NGS/KMC EIS (ones I've received as of 5/2)

NGS Memo on Deposition Area April 17 2014.pdf
NGS Near-Field Protocol April 18 2014.pdf
NGS HHRA Protocol April 17 2014.pdf
NGS_Project_ERA_May02_2014.pdf
NGS_Ozone_AQRV_Protocol_Apr29_2014.pdf
NGS SJR ERA Study Plan May 2 2014.pdf

Separate Kayenta Mine Complex (KMC) protocol?

NGS Memo on Deposition Area April 17 2014.pdf
Preliminary Modeling of NGS to Select ERA Deposition Model and Identify Deposition Area

- assess the deposition modeling area for the NGS Ecological Risk Assessment (ERA) and whether the United States Environmental Protection Agency (EPA)'s AERMOD modeling system is the appropriate model

"The results of the analysis demonstrate that the deposition area for the ERA (i.e., the region where selenium deposition exceeds 10% of the selenium ecological soil screening level) is within 16 km of NGS and that AERMOD is the most appropriate model to support the ERA because the distance to the selenium deposition threshold is well within the 50 km transport distance suggested by EPA."

NGS Near-Field Protocol April 18 2014.pdf
Near-Field Air Dispersion and Deposition Modeling Protocol

- air dispersion and deposition modeling of NGS emissions for evaluating the compliance with the national ambient air quality standards (NAAQS).
- In addition, the results of the air dispersion and deposition modeling will be applied to the human health risk assessment (HHRA) and ecological risk assessment (ERA)

NGS HHRA Protocol April 17 2014.pdf
Human Health Risk Assessment Work Plan

- following methodologies recommended by the U.S. Environmental Protection Agency (EPA) in the Human Health Risk Assessment Protocol (HHRAP) for Hazardous Waste Combustion Sources (EPA 2005).
- The air dispersion and deposition modeling for the HHRA will be conducted with AERMOD
- incl. Mercury

NGS_Project_ERA_May02_2014.pdf
Near-Field Ecological Risk Assessment Study Plan

- performed to meet compliance with the National Environmental Policy Act (NEPA) and the Endangered Species Act (ESA) Section 7 Consultation
- selenium deposition with SCREEN3 (AECOM) and AERMOD (ENVIRON)
- Exposure Assessment, Effects Assessment

NGS_Ozone_AQRV_Protocol_Apr29_2014.pdf
Ozone and Air Quality Related Values Assessment Modeling Protocol

- estimate the impacts on ambient ozone air concentrations and AQRVs ... AQRVs will be analyzed throughout the modeling domain with particular attention paid to impacts at Class I areas within approximately 300 km of NGS and at sensitive Class II areas.
- CAMx photochemical grid model
- Sulfur (S) and Nitrogen (N) deposition

NGS SJR ERA Study Plan May 2 2014.pdf
San Juan River Ecological Risk Assessment Study Plan

- focus on ecological receptors in the San Juan River potentially affected by mercury, arsenic and selenium.
- methods proposed to estimate potential risks to aquatic and semi-aquatic (water-dependent birds and mammals) receptors in the San Juan River from NGS emissions and other sources to evaluate Proposed Action impacts and cumulative impacts for the Project EIS and Biological Assessment.
- Modeling to be conducted by the Electric Power Research Institute (EPRI) in a separate study will be used in this ERA to establish media concentrations associated with arsenic and selenium contributions within the SJR Study Area

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From: Geselbracht, Jeanne
Sent: Friday, May 02, 2014 1:08 PM
To: Tonnesen, Gail
Cc: Bohning, Scott
Subject: FW: Air Quality Protocol Review for NGS/KMC EIS

Gail, would you be interested in helping review some air modeling protocols for the Navajo Generating Station – a coal-fired power plant in northern Arizona. The Bureau of Reclamation is preparing an EIS for changing operations at NGS and the Kayenta coal mine, and the EIS contractors are developing the modeling protocols for the air emissions from NGS. I understand from our R9 modeler Scott Bohning that you have a lot of expertise, so we are wondering if you have time and interest. This request is late in the turn around time for reviewing these draft protocol documents, and there is a conf call/webinar Wednesday May 8, which Scott and I will participate in. Please let me know if this interests you, and I can forward you more information. Thank you!

Jeanne Geselbracht
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Phone: (415) 972-3853

From: Bruce Macdonald [mailto:bmacdonald@slrconsulting.com]
Sent: Friday, April 18, 2014 3:08 PM
To: Charles.paradzick@srpnet.com; Grant.smedley@srpnet.com; Paul.ostapuk@srpnet.com; gwendt@peabodyenergy.com; bdunfee@peapbodyenergy.com; alexandersmith@usbr.gov; ncoulam@usbr.gov; Harrilene.yazzie@bia.gov; amcgregor@osmre.gov; rmartinezhernandez@osmre.gov; Geselbracht, Jeanne; Erin_Janicki@nps.gov; Michael_George@nps.gov; Patricia_f_brewer@nps.gov; Mike_barna@nps.gov; John_notar@nps.gov; baanderson02@fs.fed.us; dcmiller@fs.fed.us; Tim_allen@fws.gov; awilkers@blm.gov; Lherr@blm.gov
Cc: Eto, Sandra; Ellis, Scott; Sehi, Debby; Giere, Molly
Subject: Air Quality Protocol Review for NGS/KMC EIS

To the **Air Quality Subgroup** for the Navajo Generating Station / Kayenta Mine Complex EIS.

You have been included as a member of the Air Quality Subgroup that is participating in the review of technical data and analyses related to preparing an EIS for the License Renewal for the Navajo Generating Station and the Kayenta Mine Complex.

The purpose of this e-mail is to provide initial documents and protocols to the members of the Air Quality Subgroup for review. The documents provide details of air quality modeling and technical work that will be used to analyze air quality impacts associated with emissions from NGS. We need a fairly aggressive review of these materials in order to meet the overall EIS schedule, and are requesting your feedback on the attached comment form by May 12, 2014.

An Air Quality Analysis Strategy memo was distributed and discussed with the group on January 8, 2014, and the protocols will address the modeling requirements and other technical work that were described in that Strategy.

Attached are the following documents for review

1. A Technical Support Document that describes the "Bookends", and a separate associated workbook, that provides yearly emissions for each of the NGS Regional Haze Technical Working Group (TWG) scenarios.
2. The Near-Field Modeling Protocol.
3. A Deposition Area Memorandum that provides the modeling strategy and depicts the revised study area for the Ecological Risk Assessment.
4. Human Health Risk Assessment (HHRA) Protocol.
5. A diagram that shows the different modeling protocols that will be submitted, and how they fit together to provide a comprehensive assessment of air quality impacts from the Proposed Action.
6. A comment sheet (form) is included to all Subgroup members to submit comments.

At a later time, we expect to receive and forward the far-field protocol and a protocol from KMC regarding modeling of mine operations.

Meeting Notice: We plan to hold a meeting and potentially a webinar/conference call on May 8 to discuss air quality issues and review as a group, at a time immediately following the regularly scheduled NGS/KMC Agency-Proponent EIS Consultant Monthly call. If the remaining protocols are provided in the mean-time, those documents may be included in the meeting discussion as well. The meeting may be held at possible location in Denver or Phoenix. The specific location and webinar information will be forwarded later including by e-mail and Outlook®. Please advise if you would like to participate in such a conference call.

If you have questions or other input on this process, please e-mail or call me (970-999-3977) or Scott Ellis

(scott.ellis@aecom.com, 970-530-3351).

We look forward to your participation in this important and challenging effort.
Regards
BRUCE

Bruce Macdonald

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