PMSTPCOL PEmails

From: Diediker, Nona H [nona.diediker@pnl.gov]
Sent: Tuesday, February 26, 2008 12:32 PM
To: Paul Kallan
Subject: FW: STP Alternative Sites Visit information requests (Q4007, Task 1)
Attachments: South Texas Alternative Sites Visits - Pre-Trip Questions.doc

Nona

From: Diediker, Nona H
Sent: Friday, February 22, 2008 9:55 AM
To: 'Paul Kallan'
Cc: Cristina Guerrero; Becker, James M
Subject: STP Alternative Sites Visit information requests (Q4007, Task 1)

Attached is a file containing questions we will be asking the STP representative during the alternative site visit. My understanding is that Russell Kiesling will be the only STP representative available. However, we strongly suggest STP consider sending additional technical personnel, such as a hydrologist, who would be able to answer some of these questions, as well as, other questions that may arise during the site visits.

We also would like to request that STP arrange for us to speak with the plant manager or environmental compliance/permit manager at the Limestone Electric Generating Station when we are there for the site tour.

HOTEL NOTE: Due to the distance between Corsicana and DFW, and the fact that we would be hitting rush hour traffic Friday morning to make our flights, we are electing to travel to Dallas Thursday night. We currently have reservations at the Wyndham DFW Airport North on Thursday. Please let me know if you have any conflicts with our modified travel plans.

<<South Texas Alternative Sites Visits - Pre-Trip Questions.doc>>

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Questions for the South Texas Alternative Sites Visits

Questions Related to the Selection of Alternative Sites

Question	Response
Section 9.3.2.2 of the ER states that suitable water sources are available for development in the North and South ERCOT planning regions. If that is the case, why do STPNOC'c three alternative sites all appear to have significant water constraints?	
Was water from the Gulf of Mexico considered for plant cooling during the site selection process?	
Notwithstanding the statement in section 9.3.3 of the ER that STPNOC reviewed the alternative sites for water availability, it appears that the three alternative sites identified in section 9.3.2.5 of the ER all might require dry cooling for siting of new nuclear units. At the Limestone site, there seems to be a high likelihood that dry cooling would be needed for new nuclear units given that NRG's proposed coal-fired unit 3 will use dry cooling. On the other hand, the proposed STP site would use more economically desirable wet cooling. ESRP 9.3 calls for candidate sites, i.e., the proposed site plus the alternative sites, to be among the best that can reasonably be found in an applicant's region of interest. Does STPNOC consider the site selection process as possibly biased because of these potential plant cooling differences between the proposed and alternative sites?	
Other applicants have used EPRI's *Siting Guide: Site Selection and Evaluation Criteria* for an Early Site Permit Application as a basis for selecting candidate sites. Did STPNOC use this document for identifying candidate sites? If STPNOC did not use this document was a comparable siting document or	

methodology used? Bechtel, for example, has a *Site Evaluation Process for New Nuclear Generation* that was used in the 2002 document *Study of Potential Sites for the Deployment of New Nuclear Plants in the United States*.	

Questions Related to the Limestone Alternative Site

Question	Response
Why was NRG's plan to construct a new coal-fired unit 3 at the Limestone site not disclosed in the ER?	
How will the addition of NRG's planned coal-fired unit 3 to the Limestone site affect the discussion of land use in section 9.3.3.1.1 of the ER?	
How will the addition of NRG's planned coal-fired unit 3 to the Limestone site affect the discussion of transmission lines in section 9.3.3.1.1 of the ER?	
What are the dimensions of the existing transmission line right-of-ways serving the Limestone site?	
NRG has announced that it plans to use dry cooling for its planned coal-fired unit 3 at the Limestone site. What were the reasons for this decision? Would new nuclear units sited at the Limestone site, developed according to the time frame in section 1.1.2.7 of the ER for the proposed new units at the STP site, also require dry cooling?	
Section 9.3.2.2 of the ER states that suitable water sources are available for development in the North and South ERCOT planning regions. Section 9.3.2.5 of the ER states that the alternative sites represent the best available alternative sites. Assuming dry cooling would be needed for new nuclear units sited at Limestone, does the Limestone alternative site truly represent one of the best available alternative sites in STPNOC's region of interest and chosen candidate area?	

Section 9.3.3.1.3 of the ER states that the impacts to hydrology, water use and water quality for new nuclear units at the Limestone site would be similar to those at the proposed STP site. How was this conclusion reached?	
If the proposed new nuclear units were sited at the Limestone site where would cooling water from? Section 9.3.3.1.3 of the ER mentions Lake Limestone, the Carrizo-Wilcox aquifer, and dry cooling. What characterization was done for availability of water in Lake Limestone for new nuclear units?	

Questions Related to the Allen's Creek Alternative Site

Question	Response
Who is the current owner of the Allen's Creek site?	
Are there any zoning requirements applicable to the Allen's Creek site?	
Are there existing transmission line right-of-ways passing through or adjacent to the Allen's Creek site?	
Approximately how long would new transmission corridors have to be to serve the Allen's Creek site?	
What type of cooling (e.g., wet, wet/dry, or dry) would likely be most suitable for new nuclear units sited at the Allen's Creek site and developed according to the time frame in section 1.1.2.7 of the ER for the proposed new units at the STP site?	
If dry cooling would be needed for new nuclear units at the Allen's Creek site, would the Allen's Creek site truly represent one of the best available alternative sites in STPNOC's region of interest and chosen candidate area?	
Section 9.3.3.2.3 of the ER states that impacts to hydrology, water use and water quality at the Allen's Creek site are expected to be similar to those at the proposed STP site. How was this conclusion reached?	
What characterization was done to quantify water available for cooling new nuclear units out of the proposed Allen's Creek reservoir?	

Section 9.3.3.2.3 of the ER mentions groundwater as the source for cooling water if the construction precedes the creation of the reservoir. Section 9.3.3.2.3 of the ER also mentions that permitting for groundwater for new nuclear units may be uncertain. Why is dry cooling not considered? Why is the Brazos River not considered as a source (prior to the creation of the reservoir)?	

Questions Related to the Malakoff Alternative Site

Question	Response
Who is the current owner of the Malakoff site?	
Are there any zoning requirements applicable to the Malakoff site?	
Are there existing transmission line right-of-ways passing through or adjacent to the Malakoff site?	
Approximately how long would new transmission corridors have to be to serve the Malakoff site?	
What type of cooling (e.g., wet, wet/dry, or dry) would likely be most suitable for new nuclear units sited at the Malakoff site and developed according to the time frame in section 1.1.2.7 of the ER for the proposed new units at the STP site?	
Would it be practical to pipe in surface water from long distances to serve new nuclear units sited at the Malakoff site?	
If dry cooling would be needed for new nuclear units at the Malakoff site, would the Malakoff site truly represent one of the best available alternative sites in STPNOC's region of interest and chosen candidate area?	
Section 9.3.3.3 of the ER states that impacts to hydrology, water use and water quality at the Malakoff site are expected to be similar to those at the proposed STP site. How was this conclusion reached?	
What will be the source of cooling water at the Malakoff site?	

Why is dry cooling not considered in the ER?	
If cooling water is drawn from Cedar Creek Reservoir or from Lake Palestine, what characterization regarding availability of water in these lakes for cooling new nuclear units has been carried out?	

South Texas Project Alternative Sites: Aquatic Resources Information Needs

Has there been any consultation with Federal and State agencies on threatened and endangered species for the alternative sites?

At each alternative site, what recreational activities occur that are associated with terrestrial and aquatic species? What are the hunting/fishing/boating/swimming activities?

Rev. 1 of Section 9.3.2.4.2 states, "It was assumed that no threatened or endangered species are present at the generic greenfield site, and that the impacts during construction would temporarily disturb most aquatic habitats, while permanently disturbing some forest or open areas." What follow up efforts have been done to confirm this assumption at the alternative sites?

In Rev. 1 of Section 9.3.2.5, what evidence supports the statement, "There will not be any potential significant impacts to spawning grounds or nursery areas of populations of important aquatic species on Federal, State, and affected Native American tribal lists." The references do not indicate that all these affected agencies have been contacted during the reconnaissance-level review.

What are the fish species of concern that are downstream of Lake Limestone? Reference to these species was mentioned in assessing the level of impact in Rev. 1 of Section 9.3.3.1.5, and the reference provided does not indicate that STP has contacted the concerned agencies for their opinion.

In Section 9.3.3.2.5, what evidence supports the statement, "Generally, construction and operation of a nuclear power plant at the shore of Allen's Creek Reservoir is not expected to adversely affect aquatic species in the lake"?

It is unclear how the availability of water at the alternative sites was evaluated in relationship to the statements used for impact assessment of aquatic resources. For example, if water resources are not currently available, what were the assumptions used to determine impacts?