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3 November 2005

Ms. Julia Souder
Department of Energy
Office of Electricity Delivery and Reliability
1000 Independence Avenue, SW
Washington, DC 20585

Re: Notice of Intent to Prepare a Programmatic Environmental Impact Statement, Amend Relevant Agency Land Use Plans, Conduct Public Scoping Meetings, and Notice of Floodplain and Wetlands Involvement, published in the *Federal Record,* 28 September 2005, pages 56647 to 56649

Subject: Comments Presented at the Public Scoping Meeting, 3 November 2005, in Phoenix, Arizona.

This letter is my presentation at the subject public scoping meeting.

Opening:

Presiding Officer and other officials present

My name is Marshall Magruder, M-a-g-r-u-d-e-r, resident of Tubac, Arizona. I have been involved with the recent environmental reviews in the Tumacacori Ecological Management Area of the Coronado National Forest, in Santa Cruz County, in the recent *Tucson Electric Power Company Sahuarita-Nogales Transmission Line Final EIS* (DOE/EIS-0336, BLM Reference No. AZA 31746m dated January 2005 and distributed in March of 2005.

During this process, there are lessons learned directly applicable to the scoping process for this Programmatic Environmental Impact Statement (PEIS) being discussed today. I will include a summary of (1) programmatic and (2) specific PEIS issue comments. In view of the limited time, I will only present some conclusions and lessons learned today but will submit a more detailed written response by 28 November 2005 deadline.

Part I Background of this Case Study

First, the above electric transmission line corridor Final EIS took 5 years to complete. Second, three different utilities requested conditional use permits for an existing utility corridor between December 1998 and August 2000. Third, two of these EISs involved DOE Presidential permits. Initially, this overwhelmed the limited Forest Service staff but the below conclusions were primarily failures by the utility that stretched out the environmental review process.

Case Study Summary. The utility submitted its Arizona permit request in March 2001 for an Arizona Siting Committee's Certification of Environmental Compatibility (CEC) prior to the EIS scoping process and, completed the CEC by January 2002, for transmission line routes in the National Forest long before the Draft EIS was completed in July 2003 and the Final EIS in March 2005. Thus, the

"state" approved routes in the National Forest before the federal decision makers had environmental review material available, as required by NEPA. The CEC used both an existing utility corridor but also proposed "new" corridors. Further, a small part of the existing utility corridor was in the roadless area established in January 2000, which required a change to the Forest Management Plan. Thus, this Case Study included

(1) An existing utility corridor,
(2) A required modification to the existing utility corridor, and
(3) Two new utility corridors proposed by the utility.

The proposed new corridors were denied based on environmental impacts while both the existing and modified corridor approved in the Final EIS. One of the new corridors used the only Arizona approved route, while the Arizona Corporation Commission denied routes leading to the existing and modified corridor. Thus, the utility has been denied a single corridor for his transmission line.

Part II – Programmatic Comments

Conclusions: These are a summary of much greater issues

1. State and Federal Cooperation. During the CEC process, the DOE NEPA representative, during two sessions, requested that both environmental reviews be conducted simultaneously prior to both federal and state decisions on this issue. Unfortunately, the State of Arizona is one of those listed by the Council on Environmental Quality that does NOT cooperate with the federal process.

   Lessons Learned: The Federal, State, Native American, and Local government and non-governmental organizations should cooperate and jointly proceed through a single environmental review process. This would have synchronized both federal and state decisions instead of the resultant impasse and involve all environmental organizations at one time.

2. Depth of Reviews. The EIS process resulted in a detailed environmental review compared to a more cursory review at the state level, primarily, because all parties understood an EIS would be completed prior to commencing the project.

   Lessons Learned: One set of environmental review requirements should be agreed early in this process to satisfy all impacted federal, state, Native American, local, and non-governmental environmental groups. These should be followed in the resultant EIS, including possible dissentions.

3. Preparation for Environmental Review. In this Case Study, the Siting Committee had to "toll" the schedule so the utility could prepare additional information or its permit would have been denied. Most of the delay in this case was caused by a utility that was poorly prepared to start the NEPA process; in fact, this utility still fails to understand this process. This preparation process must include diverse public participation including all government and non-governmental organizations in preparation for the preliminary environmental review.

   Lessons Learned: An in-depth Preliminary Environmental Review must be conducted, by a qualified organization, to determine if the applicant has adequate information before beginning the environmental review and empowered to require applicants to resubmit until prepared for the review in order to efficiently conduct such reviews.

4. Decisions. Environmental reviews are conducted so that significant impacts are understood PRIOR to making decisions. The NEPA process is substantive and may require changes in the project and results shown this occurs in more often than not. During the referenced case, letters from the Arizona Corporation Commission, Senators and Congressional representatives, county

supervisors, city and town mayors and city/town council members were sent to the Forest Service and BLM to expedite its decision in violation of the statutory process.

Lessons Learned: Political Pressuring and trying to force federal land managers for early "premature" decisions, prior to completion of the environmental reviews, should never be permitted.

5. Funding for Environmental Reviews. It must be understood that either the applicant pre-pays, as required, associate government expenses or waits at least five to six years for federal funding.

   Lessons Learned: The Applicant must understand and agree to pre-pay the governments costs or wait for federal environmental review funding.

6. When to Conduct an Environmental Review. In Arizona, all electric utilities are required by statute to submit annually in January their future ten-year Transmission Line Plan (above 115 kV). This permits long-range planning for projects that will have service lives of 50-years or more. Unfortunately, in the Case Study, the utility first included this transmission line in its 10-year plan when it submitted its application.

   Lessons Learned: Ten-year plans should be used for all utilities associated by this PEIS, in all states, to show and disclose future corridor expected use by years. In order to require long-term planning for these corridors, then the Joint Environmental Review must begin at least five years prior to the expected project start will ensure both the review will have adequate time and associated planning factors can be systematically included at federal, state, local and organizational levels. The Preliminary Environmental Review also needs to be satisfactorily completed five years prior to expected project start (probably 5.5 years before project start).

7. Need in Terms of Supply and Demand. Reliable forecast data are required to show that the project is actually needed, who will use the commodity, and in what long-term time frame when this commodity will be needed. Without such a basis or case, then the Preliminary Environmental Review cannot begin.

   Lessons Learned: In the above reference Case Study, the data provided by the utility was so incomplete and non-objective, that an evidentiary hearing was required to assess other Alternatives than presented in the originally approved Arizona CEC to ensure the local demands were being met by the utility. Independently derived supply and demand data are necessary for decision makers to understand the benefits of a project and must be included in the Environmental Reviews.

8. Need for Reliability Data. In the Case Study, the utility's reliability data was so poor, that data I obtained from discovery and included in my Testimony was used as the basis for reliability data in the service area. The utility has not been able or is unable to conduct such an analysis.

   Lessons Learned: In particular, all systems being proposed must include the predicted mean time between failure (MTBF) and mean time to repair (MTTR) system data to ensure appropriate reliability criteria for the transportation system are being proposed. The data in the NERC *Reliability Criteria* are deficient for proposing a new system's reliability.

Part III PEIS Comments

1. Proposed Alternatives. The Proposed Action and Alternatives include the following:

a. No Action Alternative.
b. Increased Utilization Alternative.
c. New Corridor Alternative.
d. Optimization Criteria Alternative.

2. Summary of the Recommended Alternative. As proposed, the first three Alternatives are rather limited approaches without deviation to meet future needs for utility corridors (a), only consider the existing corridors (b), or only consider new corridors (c).

Only the Optimization Criteria Alternative (d) provides a balance between (a), (b) and (c), and thus is supported. In the below discussion, the Optimization Criteria Alternative (d) is discussed in terms of the potential environmental issues listed in the referent Notice of Intent.

3. General Comments for All Alternatives. In general, a utility corridor, whether it be for natural gas, hydrogen, oil or electrical transmission and distribution facilities, needs to ensure all local, regional, tribal, state, national, and, in some cases, international issues are presented at one time to the decision maker (e.g., the federal land manager). This is to ensure that corridor management planning is aligned and coordinated with the federal land use management plan for each federal land, be it, multiple BLM and/or National Forest System lands.

4. Issues to be Analyzed in the PEIS. Each of the preliminary issues from the Notice of Intent and other issues are discussed below. The Case Study is in Part I above with programmatic lessons learned in Part II and environmental impact issues, discussed below.

A. Preliminary List of Issues to be analyzed in the PEIS and assessed for **each** Alternative:

(1) Socioeconomic and Recreational impacts of development of the land tracts and their subsequent uses. In the Case Study, the international economic impacts of the project were not included in the Final EIS. For new natural gas pipelines, from LNG ports in adjacent countries (primarily Canada and Mexico), the total economic analysis of both sides of the border have very important impacts on the project. The resultant changes to both the US or Mexican/Canadian societies and economic impacts in border communities as a result of the use of the corridor are critical for state, county and local governmental agencies to have prior to making decisions concerning a project.

When a project corridor impacts recreation, such as hunting, fishing, hiking, bird watching, or other "eco-tourism" industries, this needs to be clearly and objectively provided in the PEIS. Obviously, this is locally dependent.

(2) Impacts on protected, threatened, endangered, or sensitive species of animals or plants, or their critical habitats. In addition to the ESA section 7 Biological Opinions, federal land corridors have been used for decades. In the Case Study, two additional species, the Jaguar and Mexican Spotted Owl, have been observed in the vicinity of a new corridor being proposed by the utility. These new sightings where after the application and prior to the final EIS. When federal corridors are expected to last for decades, then periodic updating, of the Biological Opinion (BO), every three to five years, will be necessary to

a. Determine that current status of such species,
b. Determine the changes since the previous BO,
c. Determine if activities in the Corridor have impacted these changes, and
d. Have the land manager update the most appropriate actions necessary to ensure habitat deterioration does not occur or to use newer techniques, applicable for that corridor.

(3) Impacts on floodplains and wetlands. The Joint Environmental Review, discussed in Part II, must integrate the US Army Corps of Engineers 404 reviews and determination of any part of the proposed "transportation system" is critical. As a minimum, the 100-year flood plain impacts must be appropriately mitigated.

For critical facilities, the 500-year flood plain impacts must be appropriately mitigated. These mitigations must be included in both the Draft and Final EIS so all water impacts are incorporated.

In the Case Study, the northern terminal substation of the transmission line was in a critical facility that was adjacent to the Santa Cruz River; which the Applicant testified had 100-year floods every ten years. Obviously, the additional extension to this substation in the direction of this river, which requires the 404 Review, must be considered and impacts understood before any decision maker could approve this project. In addition, the southern end substation is also within the 500-year floodplain and is the only substation of this city.

The Wild and Scenic Rivers Act clearly prohibits transmission lines and, as such, needs to be emphasized in the development of any new corridors.

(4) Impacts on archaeological, cultural, and historic resources. These three resources, in the Western US, are largely unknown in the federal land, as detailed surveys have not been accomplished. In the Case Study area, it was estimated that archaeologists had not surveyed 70% of the new corridor. The Native American cultural, religious sites and spiritual areas exist throughout the Case Study corridor area. Incorporation of Native Americans tribal cultural organizations is a critical component of Environmental Review teams.

(5) Impacts on health and safety. One important safety area developed during the Case Study that needs to be considered whenever high voltage transmission lines are in a corridor with underground metallic piping. The electrical and electro-magnetic fields can accelerate the corrosive impacts of the natural soils on such pipelines.

The "safe" separation distance to eliminate such corrosion is not known; however, according to the Director of the Federal Office of Pipeline Safety, the National Academy of Science (NAS) has been tasked to develop the solution of this problem area. Factors include soil conductivity to the transmission line radiations, grounding and shielding for the towers, depth of the pipelines, active and/or passive cathodic protection methods used by the pipeline company and other factors. Solution to this issue is necessary to know how far apart to separate electric and magnetic pipelines when determining the width of a right of way. Further, pipeline measurements need to be required to ensure that pipe thickness is adequate for the pressure of the commodity being transported. The results of the above NAS study need to be implemented for all corridors and rights of way.

In Tucson, a petroleum product pipeline burst in a housing development. This pipeline was unknown to residents. The result of this accident now require disclosure of all such pipelines so residents know and understand the associated danger to digging or accidents.

(6) Impacts on existing and future land uses. The Arizona State Land Trust holds lands that are for the benefit of a variety of groups, primarily for schools. During the Case Study, this land manager's policy is not to approve transmission line rights-of-way in state land areas that would reduce the fair market value for future state land sales. This policy may conflict with adjacent federal lands and must be considered, in Arizona, whenever a proposed federal corridor will require state land for continuity.

Further, each federal land manager must consider future land uses impacted by such corridors, at least 50-years in the future. Any shorter-term visions will not be productive. Projects and forecasts need to be derived from "independent" sources (e.g., not the utility).

(7) Visual impacts. In general, only surface and above-land facilities will have visual impacts; however, maintenance roads, construction and equipment sites, substations (gas, oil, electric), and grading all need to be considered. Installation of towers at the highest points will have the highest visibilities and should be limited to very unique cases.

Maintenance roads should not be established in any "roadless" or wilderness areas under any circumstances; however, helicopter access should cause less impact.

(8) Disproportionately high and adverse impacts on minority and low-income populations, also known as environmental justice considerations. In the Case Study, the border community has a very high minority and low-income populations. The unemployment rate has reached 25% in recent years. There was nothing in the proposed transmission system that improved this EPA non-attainment area, reduced illegal aliens from using the north-south transmission line as a new "road" to enter the United States.

B. **Additional** Issues recommended to be analyzed and assessed in the PEIS for **each** Alternative:

(1) Need. The proposing applicant for a utility corridor needs to provide objective data to show why this project needs to be developed in terms of the impacts on the eventual users of the commodity (gas, liquid, or electricity) being transported in the corridor. The utility must make a case providing that a real requirement exists for the commodity in terms of long-term projections for users of the commodity. These requirements must use data from the DOE's EIA or other "neutral" sources, as "compliance with the company's business plan" should be considered as non-compliant during the Preliminary Environmental Review.

(2) Supply versus Demand. The proposed project needs to include an objective, independent analysis of the future supply capabilities and demand requirements for several decades (with 50-years being typical) for the entire proposed transportation system and its tributaries.

(3) Reliability. The proposed users of the corridor need to provide predicted Mean Time Between Failure (MTBF) and Mean Time to Repair (MTTR) data so that reliability of the proposed transmission and distribution of the commodity are adequate to meet the reliability needs of potential customers. Reliability data must be provided so the decision makers understand how often the transportation system will fail and how long each failure might last. The existing NERC *Reliability Criteria* are inadequate to meet this basic reliability-engineering requirement.

(4) Cost to build, wholesaler transportation estimated costs, and estimated consumer costs. The cost of each Alternative should always be considered before any decisions can be made. The total costs to construct the facility for all proposed options are an economic factor in selecting the most appropriate Alternative. The estimated cost for use of the transportation system for both wholesalers and customers needs to be clearly derived (based on the construction, maintenance, and operational cost estimates) so that decision makers can consider the estimated resultant rates.

In the Case Study, this was not provided due to "FERC" or "ACC" determines these in a rate case. This is unfair to both the users and customers of the proposed transportation system, as these values are known by the utility its expected future profits. This estimate will not have the

usual prudency review and other "rate case" impacts; however, a simple, estimate is necessary for federal, state, tribal, and local decision makers.

(5) Leasing Costs and Rules for Federal Land Corridors. The reasons why federal lands are preferred for a utility corridor is that they are cheap, do not involve multiple private landowners, eminent domain process are not necessary, and the landowner will **not** change with time. These reasons should have a premium cost but the present policies are for minimal cost. The EIS process with federal land managers needs to show these costs and initial rules (some are to protect other multi-use leaseholders, such as closing ranchers gates) in the Draft and Final EIS.

The leases for rights of way in these corridors needs to be fair to all Americans, not to the utility company for its shareholders and customers. Thus, fair market value leases are warranted. Further, these leases need to be priced using total impacts on the federal land, including equivalent long-term values for loss of viewshed, loss of roadless area, loss of recreational options, and other facility-site related factors that are valued based on the characteristics of individual corridor related factors. These values need to be determined by an independent organization to ensure the taxpayers are receiving their fair share.

In the Case Study, the Final EIS did not include the location of the actual facilities on private land because the utility indicated it would reduce its bargaining power with private landowners. This should not be allowed as the final design must be required so that decision makers have such information as such leases should have been completed before a Final EIS could be published. The same should apply to the federal land managers, with the actual leasing costs published. In view of inflation, all such leases from federal land managers need to include inflation-based leases, so that all taxpayers are receiving adequate compensation for this use of federal land.

(6) Distribution interfaces. All the transportation systems that will use these corridors with interface with other transportation systems to distribute the associated commodity being transported. Each such distribution interface needs to be described in objective terms, including long-term predicted demands for each such interface. An "adequacy" for each such interface needs to be described to ensure decision makers understand the impacts the proposed transportation system will have on other interconnected systems.

Federal land corridors will eventually interface with private land utility corridors, where the utility facilities are located. This private land must receive the same level of Environmental Review because most issues are even more complex on private land. Assessing the continuity of environment factors on private land requires coordination, cooperation and consent, which might require time, thus a five-year lead time for all corridor approvals is necessary since the eminent domain process requires up to two years.

In the Case Study, a 345 kV transmission line was to go to the Mexican border and "interconnect"; however, there are NO 345 kV transmission lines now nor are any 345 kV line expected in the State of Senora, Mexico. This "hanging in mid-air" interface should never be permitted nor allowed to meet the Preliminary Environmental Review criteria.

(7) International Environmental Impacts. The environment is continuous at the border. Thus, the Environmental Review process must be continuous at international borders. For any such transportation project that crosses the US International Border, both countries need to jointly develop the Joint Environmental Review as discussed, in general, in Part II above.

In the Case Study, this was not done, in fact, as of mid-September 2005, the utility indicated that the Mexican required environmental review had not yet started while the DOE Final EIS has already been issued. This should not be allowed to happen for international project that should benefit both countries. If they don't, then clearly the project should be abandoned and the No Action Alternative is the recommended option for decision makers.

(8) Restoration after Decommissioning Facilities. In the Case Study, the utility does not have any restoration reserve for decommissioned facilities. This utility nearly was almost bankrupt less than a decade ago. All federal land corridor users installing such facilities need to have a restoration reserve specified, based on the impact of the project, in escrow, that is adequate to cover decommissioning, removal, and complete restoration of the impacted federal lands, including removal of all roads unique to the project.

Part IV Some Administrative Comments

It is respectfully requested the Department of Energy, during this PEIS process, to keep all parties informed in order to ensure effective participation by interested parties and organizations.

1. It is requested that all Scoping comments, including transcripts of oral comments and all written comments, be included on the existing PEIS website within 10 days.
2. It is requested that the Draft PEIS be provided to this party, preferably in hard-copy, with the entire PEIS also be included on the existing PEIS website.
3. It is requested that at least a 45-day comment period be provided for comments on the Draft PEIS by notice to all who have participated in the Scoping meetings.
4. It is requested that the Draft PEIS include maps of all proposed corridors and enough detailed information so that they can be accurately located and understood by the public during the requested Draft PEIS public comment period. Further, these maps should be provided with all hard copies of the Draft PEIS and on the existing PEIS website.
5. It is further requested that the Final PEIS distribution include all those for the Draft PEIS.

If there are any questions about this letter, my oral comments or if I can be of service to assist in making this a better PEIS, please do not hesitate to call or contact me at the below address, email or telephone number.

Two Final Thoughts:

1. Let us NOT impose on **multi-use federal land Multiple Abuses** based on this PEIS.

2. As Chief Joseph said long ago, ***when making decisions today you much consider their impacts seven generations from now.***

Thank you.

Sincerely,

Marshall Magruder