Meeting - November 2, 2005
West-Wide Energy Corridor Peis Public Scoping Meeting

WEST-WIDE ENERGY CORRIDOR

PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

PUBLIC SCOPING MEETING

COPY

REPORTER'S TRANSCRIPT OF MEETING

On Wednesday, November 2, 2005

At 2:03 p.m.

At Tuscany Suites Hotel

Las Vegas, Nevada

Reported by: Deborah Ann Hines, CCR #473, RPR

would you make sure please that we have your first name, first and last name properly spelled for the court reporter.

PATRICIA ARONS: My name is Patricia Arons, P-a-t-r-i-c-i-a, A-r-o-n-s. That's one A.

Edison would like to commend the joint agency approach to undertaking designation of corridors. I believe it's a very important process for ensuring and preserving our ability to build energy infrastructure into the future, so my compliments undertaking this. And I believe that you'll find that it's going to have a very enduring impact on the energy industry.

I'd like to begin my comments by suggesting that you think about some expected outcomes of designating energy corridors. From Edison's perspective as we look at increasing load growth in Southern California and increasing transmission related services to new market based generation and new renewable regeneration what we see is that there's tremendous pressure to build new transmission to meet these obligations for the future.

So the expected outcomes that we would like you to begin to focus on would be to expedite environmental permitting for new projects as they

cross federal land. And in helping that, interagency protocols would be useful so that as you have a single project that involves use of different federal lands under different agency jurisdiction, having a set of protocols would greatly ease the burden on utilities in accomplishing and developing a particular project.

We'd also ask that this process take into consideration planned projects that utilities are beginning to look at. At Edison we have our transmission grid under the control of the California Independent System Operator. And through that process of working with ISO related staff we look at a planning horizon that is generally a ten year planning horizon but we also try to incorporate into our thinking long-term needs as to what we think the growth requirements would be out for 20 years. So begin to think about the time horizon in which you're designating corridors for the future.

And I think one other point in terms of a designated outcome to be thinking about is those federal policies that will preserve our ability to build energy infrastructure through federal corridors is going to be very important. And I get into that later on in my talking points.

We've got some comments included here on the importance of a sufficient corridor width, and I talk a little bit about how wide that should be. A single transmission line might require right-of-way width of 200 feet. And if you're talking about multiple transmission lines, you don't always site those transmission lines immediately adjacent to each other, as I discuss, because of the liability vulnerabilities that you can actually build into the system.

But we're suggesting that from the perspective of electric infrastructure you think about corridor widths that are about a mile wide. And that would give us opportunity to put two lines adjacent to each other with a third line having about a 2,000 foot separation for liability reasons.

And we have, at Edison we use a 2,000 foot separation as kind of a benchmark that came out of the planning of the California/Oregon transmission project. It was an activity that was undertaken in the mid '80s I believe where we looked at separating a third 500 KV line from the Pacific Northwest which was the existing two 500 KV lines had a capability of transporting 3200 meg watts from the Oregon area down into California, and the project was the third 500 KV

line.

And in the course of doing the studies we found that if there were a common event that could effect all three lines simultaneously, that we had some very adverse consequences that we were dealing with. So separation of those electric facilities became a critical issue. And as we look at energy corridors for building transmission, you really do need to incorporate in your thinking some sort of standard for separation so that you do not build in vulnerabilities into what you're doing.

And I do have a copy of that corridor separation report that was prepared for the California energy -- I'm sorry, for the California/Oregon transmission project that will give you some background and thinking. Actually discussed in that report was very –- I'm going into this elaborate because I actually wrote the report for the committee and spent a lot of time researching reliability and where it really came from.

But stemming from the 1965 blackout there was a great report that was written by the Federal Energy Regulatory Commission as a report to the President, and it really talked about one of the recommendations was getting adequate separation for

reliability reasons. So I would direct you or suggest that you perhaps include that in your comments. I think another --

JERRY PELL: Excuse me, Miss Arons, will you be able to provide us with a copy of that report for the record?

PATRICIA ARONS: We'll attach it to our formal comments that we plan on filing.

JERRY PELL: Excellent. Thank you.

PATRICIA ARONS: I may actually be able to get my hands on the original 1965 report to the President that was published by the Federal Energy Regulatory Commission. That would be another useful document to refer to.

The other suggestion that we included here in our talking points is that security of course today is a big concern. And as you go about publishing information, making it generally available, I think you want to be somewhat guarded about designating corridors for specific energy uses. In fact, I would suggest you don't even designate an energy corridor, that you designate it as a corridor and deal with the issue of what it is used for on a case-by-case basis.

I think also coordination with state, local

and tribal government agencies are very important. In California we have adopted –– the state has adopted a renewable portfolio standard that requires utilities to purchase up to 20 percent of their energy needs from renewable resources by 2017, although they're talking about accelerating that to 2010. I don't know if that's happened yet. I haven't really followed that that closely.

But what's important about that is renewable resources tend to be remotely located. They require substantial transmission to connect to the utility grid, and they're going to in all likelihood go to federal land.

The state of California actually is, stemming from their renewable portfolio standard, is considering undertaking an activity to do corridor designation on state land. And one of the things that would be a useful outcome from a utility perspective is to have some sort of alignment so that you can coordinate use of federal corridors with state corridors and assure access between the two. You don't want to see a north/south corridor across federal lands and an east/west corridor immediately adjacent over state lands that make it almost impossible to make access to the two readily

available.

Tribal governments I think are looking at -- first of all, they have extraordinary energy resources that are beginning to be developed. And I believe that it's really important to incorporate tribal energy development and tribal meetings into this process.

Federal policies that I think were particularly interested is that as we develop energy corridors at the federal level, access across private lands to be able to access those corridors become critical. And growth as developed in more and more remote areas tends to close off corridors. And so we have policies both at the state and federal level that limit our ability to carry property in rates unless they're associated with a particular project.

And I think that if we had a federal policy that was in alignment with a corridor designation process that would say that incorporates in particular you could hold right-of-way in rates in order to access those federal corridors for the eventual development of a transmission facility. So federal policy that would encourage and preserve that ability would be particularly important.

Your schedule is very optimistic. In

California spring bloom is critical in any environmental assessment that we do. And any new corridors that are developed included in your Draft PEIS for the spring of this year won't have spring bloom data in all likelihood. And you might want to think about data adequacy and valid designation of these corridors as being an important part of what your goals should be.

We own extensive transmission facilities, and it's important to us to preserve our ability to use our existing corridors through federal lands. And we think it might be a sensible thing to do to define corridors around existing facilities that would at the very least allow us to site new transmission adjacent to existing facilities, or at least within some reasonable separation for reliability.

I've listed on my talking points some particular federal lands that we had major transmission through where we're particularly concerned about our ability to build in the future as well.

And finally I would suggest that we consider a periodic review of this. This is going to be a very valuable process as time goes by and the world

changes. I'm a transmission planner and I can tell you every year I deal with a new set of facts as I do my work. And so you need some sort of periodic update, and I would suggest perhaps a five to ten year cycle that would ensure that the designated corridors are consistent and meet or satisfy the energy development needs in the west.

So I thank you for allowing me to perhaps go over my five minute limit by a few minutes, and I appreciate the opportunity to comment.

JERRY PELL: Thank you. Thank you very much. Very valuable comments. I especially appreciate the comments on corridor width because this has been a technical issue we've been struggling with at DOE in previous NEPA documents as to what constitutes an appropriate corridor for study. So your remarks and whatever information you bring to bear on that subject will certainly be available.

And thank you again for that corridor separation report in advance for when we get it. And I also want to thank you for enlightening me about Indian tribes. I did neglect to ask whether there were any Indian tribal representatives present that wish to speak, for which I apologize. Are there any?

Okay. Thanks again, Ms. Arons.

NV02

Southern California Edison
Comments on Department of Energy
West-wide Energy Corridor Programmatic EIS
November 02, 2005 Scoping Meeting
Las Vegas, Nevada

Comments

- The expected outcome of this process should be:
  - An expedited environmental permitting process for projects crossing federal lands.
  - Interagency protocols for designation and use of corridors.
  - Alignment with or ease of access to state designated corridors.
  - Consideration of utilities' future planned projects.
  - Federal policies that preserve the ability to build energy infrastructure through federal lands.

- Need for New Transmission Projects to Meet SCE's Obligations
  - Load growth in Southern California, specifically within SCE's service territory, has increased significantly over the past four years. As a result, several conceptual transmission projects are being considered in order to meet future load demand, improve system reliability, and facilitate import of economic resources both from the Pacific Northwest and Desert Southwest.
  - Interconnection requests by new generation (both renewable and market-based) that desire both interconnection and delivery services continue to occur at a remarkable rate
  - Existing operating transmission facilities and vacant ROWs are ever more critical for SCE to meet these growing needs.

- Need for Sufficient Corridor Width
  - Sufficient accommodation within each corridor is needed to provide room for new overhead electrical EHV transmission lines (i.e. transmission lines that are operating above the distribution voltage levels, generally, EHV is above 50 kV) in order to provide for future growth needs. The minimum width

for a corridor should be at least one mile to allow for at least 3 new EHV transmission lines with usable accommodation for siting purposes, and sufficient separation as discussed below. Each single overhead EHV transmission line requires approximately 200 feet of ROW width within a corridor. Voltage and tower design may necessitate somewhat more or less width as different utility design factors are considered. SCE recommends that corridor planning consider only overhead technologies for long term corridor planning purposes because today, in the West, where long overhead lines dominate, overhead construction is considerably less expensive than underground construction.

- Additionally, ROW width should accommodate access roads for maintenance vehicles and allow for vegetation management for brush fire and physical clearance considerations. The recommended width for this purpose alone is 50 feet for grading purposes, of which 20 feet is usable access road. Although access roads may depart significantly from the EHV facility, due to terrain or other issues, nevertheless permanent access roads for the purpose of O&M activities need to be included in corridor designations.

- Need for Sufficient Facility Separation
  - Sufficient facility separation is needed to minimize the possibility of simultaneous outages of multiple transmission facilities caused by a single event that could adversely affect system reliability and possibly result in system cascading. For example, plane crash, brush fire, earthquake, and flash flood are events that could affect multiple facilities and result in adverse consequences. This reliability consideration may limit the number of transmission lines within a single corridor and require a separate path for additional transmission lines that would otherwise create system vulnerability if located in a single corridor. Adequate separation should be provided to prevent a failure of a transmission line falling laterally and affecting an adjacent transmission facility with adverse reliability consequences. SCE's current transmission reliability guidelines require at least a 2,000 ft separation between two

physically adjacent parallel EHV transmission lines and a third EHV transmission line, where practicable. This separation ensures the low probability of the simultaneous loss of three or more EHV lines by physically separating the third line from the two lines that are in close proximity to each other.

- Following the Northeast Blackout (November 9-10, 1965) and similar instances, FERC, with the assistance of technical personnel from the electric utility industry, reported to the President of the United States on the prevention of power failures. The Report to the President contained an analysis of the causes and effects of the blackout and set out guidelines and recommendations designed to assure that major system interruptions and cascading outages would not recur. One recommendation made for transmission system planning was to avoid locating critical transmission circuits on any one common right-of-way. Therefore, SCE recommends that two corridors be identified through each federal land area under consideration to comply with the FERC recommendation.

- Security Concerns
  - Energy corridors should not be identified by specific energy uses (e.g. electric transmission lines, oil/gas pipelines). Designating a corridor for specific uses could subject the corridors to the possibility of a greater terrorist threat and compromise the security of the facilities.

- Coordination with State, Local and Tribal Governmental Agencies
  - It is our understanding that the California Energy Commission (CEC) has initiated a similar effort at the state level to identify corridors for energy use. The DOE's effort on the PEIS should be coordinated with the CEC and other public agencies so that a seamless and contiguous alignment of state and federal corridors results in a feasible and useful accommodation for new EHV transmission lines.

- Tribal governments should be encouraged to participate in this effort in order to incorporate into this process tribal energy growth needs as well as tribal energy development plans.
- Local public agencies should be encouraged to participate in this effort in order to incorporate into this process local public agency growth needs as well as energy development plans.
- Cooperative planning activities offer the opportunity for agencies to incorporate into their master plans provisions for energy corridors that provide access to federally designated corridors.

- Use of Designated Energy Corridors on Federal Land
  - The State of California has adopted a renewable portfolio standard which will require utilities to connect substantial new renewable energy resources. These resources are typically remotely located and require long generation tie lines to be built to connect to the utility grid. These resources will likely need to use corridors on federal lands designated for electric facilities. Sufficient accommodation for these facilities should be incorporated into the PEIS.

- Need for Public Utilities to Acquire Rights of Way
  - Public utilities need to acquire land Rights of Way (ROW) for future transmission development, particularly in areas where residential, commercial, or industrial development is beginning to occupy available open land.
  - Federal policy should recognize that rights of way over private lands should be preserved for the future. One way to encourage preservation is to allow public utilities to recover costs through rates for land acquired for future use, even though no identified project is yet under development. Rate recovery is particularly urgent to allow and even encourage utilities to acquire rights that would eventually assure access to the federally designated corridors.

- Data Adequacy
  - The federal agencies involved in this effort should use their best efforts to ensure that the best possible information is

gathered as part of its corridor assessment and PEIS. For example, spring bloom is generally considered a critical part of environmental impact assessment in California, and the lead agencies should consider whether a draft PEIS issued in the first quarter of 2006 will be able to have adequate environmental data for any newly designated corridors.

- Existing Facilities
  - SCE owns existing transmission facilities through federal lands that include parks, preserves and forests. The lead agencies should include designation of corridors around these facilities that would preserve current uses and allow sitings of new facilities adjacent or near to the existing facilities.
  - SCE is particularly concerned that the corridor designations on the following federal lands, or under lead agency direction have adequate provisions for both existing and future EHV transmission facilities:
    - Big Creek T/L System: Sierra National Forest, Los Padres National Forest and Angeles National Forest
    - Ormond Beach-Moorpark-Pardee T/L: Los Padres National Forest
    - Midway-Vincent T/L: Angeles National Forest
    - Vincent-Rio Hondo T/L: Angeles National Forest and Corps of Engineers
    - Serrano-Valley T/L: Cleveland National Forest
    - Lugo-Eldorado T/L: Bureau of Land Management(BLM) and National Park Service
    - Lugo-Mira Loma T/L: San Bernardino National Forest
    - Devers-Valley T/L: BLM and San Bernardino National Forest
    - Devers-Palo Verde T/L: BLM and U.S. Fish and Wildlife (KOFA Wildlife Reserve Arizona)
    - Chino-Villa Park T/L: Cleveland National Forest

- Interagency Protocols
  - Interagency protocols for designation and use of corridors need to be developed, that will provide for a smooth licensing/permitting process for new facilities. These protocols should consider coordination of corridors that may encompass lands other than federal lands and potentially involve private owners.

- Periodic Review

- The DOE should plan to review the designated corridors periodically through a similar coordinated process
- Demand change due to expected population growth, movement or economic change should be taken into account as designations of energy corridors are developed. The energy corridor alternatives selected should be sufficiently flexible to accommodate such changes.
- PEIS should be reviewed and updated every five to ten years to ensure the designated energy corridors are still effective and consistent with the public's energy needs and the obligations of public utilities to serve those needs.