I. INTRODUCTION

The Southwest Area Transmission (SWAT) sub-regional planning group promotes western regional transmission planning. SWAT is comprised of representatives from two states (Arizona and New Mexico) and parts of four other states (Southern California, West Texas, Southern Nevada, and Southern Colorado) who work to promote collaborative regional planning in the Desert Southwest region of the Western interconnection. Participants in SWAT projects and technical subgroups variously include the Arizona Corporation Commission, Arizona Power Authority, Arizona Public Service, Western Area Power Administration, Southern California Edison, California Independent System Operator, Central Arizona Project, El Paso Electric, Electrical Districts 2/3/4 of Pinal County, Imperial Irrigation District, New Mexico Public Utilities Commission, Tucson Electric Power, PacifiCorp, Public Service of New Mexico, Tri-State GT, Dine Power Authority, BHP Billiton, Navajo Tribal Utility Authority, Nevada Power, Rocky Mountain/Desert Southwest Reliability Center, Salt River Project, Southwest Transmission Cooperative, and other interested Parties.

II. GENERAL COMMENTS

The challenge of meeting increasing needs is becoming more complex and multifaceted. New supply resources, by necessity and to comply with environmental laws, are often remotely located, which then requires long extra high voltage (EHV) transmission lines to traverse the longer distances to the load centers. At the same time, growth in the load centers and immediately surrounding areas is effectively “choking off” critical passages from the EHV points of receipt to the distribution networks.

Coordinate Energy Corridors - We view the designated corridor proposal as one that encompasses a much broader scope than federal lands, and one that demands well thought out actions be taken immediately. Due to federal ownership of large sections of land in the west, it is critical for the federal agencies to take the lead in the development of energy corridors. Thorough consideration of environmental impact and other important and relevant factors in land use planning as proposed in the Energy Policy Act of 2005 (EPAct 2005) is the most logical way to proceed. The concept of designating energy corridors as required by EPAct 2005 in such a fashion, and incorporating these corridors in relevant land use planning forums is critical for efficient development of energy transmission systems while minimizing adverse environmental impacts. A streamlined process for permitting energy infrastructure projects is also critical. Designating energy corridors sets the right example, and may become the model for coordinating with other entities that having siting and land use planning responsibility.

Designation and publication of utility corridors on public land will improve the public’s awareness of future transmission line locations, improve their knowledge of transmission system impacts, and
increase their understanding of why utilities need these corridors. Early identification of the corridors combined with coordinated land use planning will assist in the development of future transmission projects.

We recommend corridors be designated on a regional network basis based on input from regional, state and local planning groups as well as coordination with any National Interest Electric Transmission Corridors (NIETC) designated under Section 1221 of EPAct 2005. We also recommend Federal maps show the entire corridor for those segments having the potential to become designated corridors. The maps should clearly identify where the corridors cross federal lands to meet the Department of Energy (DOE) objectives. Showing the entire corridors provides continuity and offers an opportunity to coordinate designation of corridors on lands of other interested parties, including any NIETCs. Corridors that are currently designated as a utility corridor in any governing Federal Agency plan should be designated on the DOE and Agency maps. All land use plans should incorporate designated corridors including all local plans such as city and county zoning as well as state siting processes. This is a critical item that was not fully implemented in previous western utility corridor work. To be effective, a corridor designation must be continuous and connect between points of interconnection with existing infrastructure. A collaborative federal, regional, state, and local process should be developed to define and coordinate continuous energy corridors. Lastly, we encourage DOE to clearly delineate what procedures will be required for use of a designated corridor.

The Programmatic Environmental Impact Statement (PEIS) process should attempt to maximize benefit by selecting the most significant corridors for study. The resulting ability to pre-screen some of the likely future corridors and have a significant portion of the permitting completed represents a significant step forward. However, this process should be explicit in stating it is not the intent to funnel all future projects into these corridors or be used to block other corridors not designated in this process. The existing process and ability of a user to attempt to permit a corridor not identified in this new process should not be affected by this effort.

**Reliability** – For energy corridors identified by DOE, we recommend DOE incorporate an evaluation that considers a balance between the public desire for consolidation of facilities within corridors and the risk of placing too many facilities in a common corridor. The basis for determining this balance should be a rational evaluation based on the types of events that may cause a loss of multiple facilities in a common corridor and the impact of the loss and its consequences

**Separation of Facilities in Common Corridors** – We recommend DOE incorporate appropriate separation distances between the different pipelines and electric transmission lines in proposed energy corridors. The basis for the separation distance should include the safety and reliability impact of each facility upon the other facilities, not just historical or previously used separation distances.

We recommend a rational evaluation based on the types of events that may cause a loss of multiple facilities in a common corridor and the impact of the loss and its consequences. A good example is the situation that occurred in Arizona this past month (June 2006) where APS and SRP have parallel 500kV lines in a common corridor and needed to take both lines out of service due to a forest fire. The need to take both lines out of service at the same time potentially could have been avoided if the lines had been built with a larger separation between them. Although the lines were constructed with spacing that sought to balance the need for a right-of-way, the public desire for consolidation, and the need to minimize impact (visual and ground disturbance) and cost, we have learned over the years that
additional spacing can be critical to ensuring reliability. The loss of multiple transmission lines in a common corridor can expose major metropolitan areas to a significant risk of rolling black-outs due to lack of diversity and prudent facility separation within corridors.

If the line on the DOE map represents an opportunity to place another transmission facility in a corridor that already contains multiple transmission lines without additional separation this will not meet the intent of the legislation or offer the opportunity desired.

Currently, it is difficult to decipher from the draft maps the precise route and features followed to generate the lines and how much of the 3500 foot width noted on the map is available for additional facilities. Will use of the corridor require placement of adjacent structures in close proximity to existing structures or will the entire corridor width be available? There is a need and desire for new corridors and we recommend DOE evaluate and consider a balance between the desire for consolidation of facilities within corridors and the risk of placing too many facilities in a common corridor.

While we understand the concern that agencies might have had about public reaction to something that could be perceived as “over designation,” it is critical that utility corridors be wide enough to provide the flexibility needed to avoid environmentally sensitive areas, address engineering, technical and vegetative management constraints, and allow lines to be built with sufficient separation to reduce the risk of simultaneous outages of multiple lines. We believe that the drivers for decision making ought to be: (1) anticipated need; (2) an unbiased assessment about how to meet those needs where federal lands must be involved (i.e., avoiding sensitive land unless no other options are available and setting an appropriate higher burden for demonstrating need and no other feasible alternatives when sensitive lands are involved); (3) the technical requirements governing co-location of energy facilities of the same type or differing types; and (4) the cost and impact of adding substantial facility length in routing around federal or other sensitive lands. The agencies have preliminarily proposed corridors of only 3,500 feet wide. Such a narrow corridor not only would be narrower than many previously designated corridors, but does not meet the criteria listed above. We believe that corridors should be no less than one mile wide and preferably 3-5 miles wide.


The Preliminary Draft Corridor Maps issued by the federal agencies do not include already existing corridors as corridors to be carried forward. It is not clear if that is intended to imply that those corridors will not be re-designated or whether they will remain in place and the corridors on the map are additional corridors. We believe that the agencies need to carry forward all of the existing corridors already included in Resource Management Plans and that the PEIS should address additional utility corridors.

We understand that the Departments are planning to define procedures for siting within designated corridors, as well as the management practices that should be employed. Such practices and procedures will be very important to electric utilities. Meaningful siting procedures that recognize the substantial environmental work that already have been completed as part of the PEIS will be critical to making
the designated corridors useful for their intended purposes. For example, if the siting procedures required within a designated corridor are not appreciably streamlined compared to those required for siting outside a corridor, companies will have less incentive to avail themselves of these corridors.

III. AREA SPECIFIC COMMENTS

SWAT is evaluating long term needs for the southwest, not just what is needed during the next 5 to 10 years. We encourage the DOE to have a long-term perspective in their evaluation and consider future needs. SWAT studies have identified needs for additional transmission, but if action is not taken during this evaluation, the needed corridors may not be available in the future. These long term needs include transmission between the Arizona/New Mexico border near Springerville and St. Johns to the Phoenix metropolitan area; Benson area (Winchester Substation) and Coolidge area (Pinal South Substation); Four Corners and the Phoenix metropolitan area; Tucson and surrounding area extending to the border with Mexico; eastern New Mexico wind farm areas and the Arizona/New Mexico border areas near Four Corners, Springerville/St Johns, and Benson; and Palo Verde Nuclear Generating Station area and Yuma (North Gila Substation).

We note that the entire border between Arizona and Utah is federal or tribal lands and no corridors are identified or included to allow a connection between Arizona to Utah. We also note that almost the entire border between Arizona and New Mexico is federal or tribal lands and only one corridor in the southern portion of the states is identified. We encourage the DOE to re-evaluate the work performed to date and determine appropriate corridors through these areas. We also note corridors that have been recently permitted by the Bureau of Land Management, Forest Service, and the Arizona Corporation Commission are not included as corridors. Two examples of this are the energy corridor along the north border of the Sonoran Desert National Monument and the corridor between Tucson and Nogales, Arizona. Particularly in circumstances where federal and state siting processes have been addressed, we would like to understand why they are not included and again encourage inclusion on future energy corridor maps.

IV. CONCLUSION

SWAT appreciates the opportunity to comment on the West-wide preliminary draft maps of potential energy corridors on federal lands.

V. CONTACT INFORMATION

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