

**From:** [corridoreiswebmaster@anl.gov](mailto:corridoreiswebmaster@anl.gov)  
**To:** [Corridoreisarchives;](#)  
**CC:**  
**Subject:** Energy Corridor Programmatic EIS Comment 80072  
**Date:** Monday, November 28, 2005 5:35:59 PM  
**Attachments:** [Ltr\\_Souder\\_80072.pdf](#)

---

Thank you for your comment, Karilee Ramaley.

The comment tracking number that has been assigned to your comment is 80072. Please refer to the tracking number in all correspondence relating to this comment.

Comment Date: November 28, 2005 05:35:53PM CDT

Energy Corridor Programmatic EIS Scoping Comment: 80072

First Name: Karilee

Middle Initial: S

Last Name: Ramaley

Organization: Arizona Public Service Co.

Address: 400 N. 5th Street

Address 2: MS 8695

City: Phoenix

State: AZ

Zip: 85004

Country: USA

Email: [ksr@pinnaclewest.com](mailto:ksr@pinnaclewest.com)

Privacy Preference: Don't withhold name or address from public record

Attachment: H:\Karilee\Line Siting\DOE Corridors\Ltr Souder.pdf

Questions about submitting comments over the Web? Contact us at: [corridoreiswebmaster@anl.gov](mailto:corridoreiswebmaster@anl.gov) or call the Energy Corridor Programmatic EIS Webmaster at (630)252-6182.



**PINNACLE WEST**  
CAPITAL CORPORATION  
LAW DEPARTMENT

KARILEE S RAMALEY  
Senior Attorney  
Telephone (602) 250-3626  
Facsimile (602) 250-3393

November 28, 2005

Ms. Julia Souder  
Office of Electricity Delivery and Energy Reliability  
U.S. Department of Energy  
1000 Independence Avenue, SW  
Washington, D.C 20585

Re: Notice of Intent to Prepare a Programmatic Environmental Impact Statement, Amended Relevant Agency Land Use Plans, Conduct Public Scoping Meetings, and Notice of Floodplain and Wetlands Involvement, FR Vol. 70, No. 187, page 56447 (September 28, 2005)

Dear Ms. Souder.

Arizona Public Service Company ("APS") appreciates the opportunity to comment on the Notice of Intent to prepare a draft Programmatic Environmental Impact Statement ("PEIS") implementing Section 368 of the Energy Policy Act of 2005 (P.L. 109-58) ("2005 EAct"). APS spoke at the Public Scoping Meeting ("Scoping Meeting") held in Phoenix, Arizona on November 3, 2005 and incorporates the comments it made at the Scoping Meeting. APS also supports the comments submitted by the Edison Electric Institute ("EEI") and incorporates them here by reference. Finally, as indicated during the Public Scoping meeting, APS hopes to continue to be a partner with the Departments of Energy, Interior and Agriculture ("Departments") as they complete the preparation of the PEIS.

Annual system load growth throughout the Southwest is 3-5%, which is approximately three times the national average. APS, which is the largest electric utility in Arizona, serves more than 1 million customers in 11 of the state's 15 counties. The APS service territory is one of the fastest growing in the country and covers federal, state and tribal lands. APS continually evaluates where it needs both new and upgraded transmission facilities to serve its customers needs. Many of the transmission lines constructed and operated by APS cross federal lands, as well as state, tribal and privately owned lands. APS has worked successfully with various federal agencies in the past to develop utility corridors that have

APS • APS Energy Services • Pinnacle West Energy • SunCor • El Dorado

Law Department, 400 North Fifth Street, Mail Station 8695, Phoenix, AZ 85004-3992  
Phone (602) 250-3630 • Facsimile (602) 250-3393 E-mail [Karilee.Ramaley@pinnaclewest.com](mailto:Karilee.Ramaley@pinnaclewest.com)

been incorporated into the agencies' Resource Management Plans. Attachment 1 is a map showing the existing transmission system in Arizona. Attachment 2 is a map showing APS's current plans for new facilities between 2005-2014. Attachment 3 is a map identifying existing corridors in Arizona that could be widened and potential new corridors that APS believes would be beneficial for currently planned facilities and facilities that may be needed outside the current planning horizon. APS requests that the Departments use the information in these maps to identifying and designate utility corridors to be incorporated into the Departments' Resource Management Plans.

APS will continue its detailed analysis to identify additional specific corridors to recommend for the Departments' consideration and will submit that information as soon as it becomes available.

In order to access future base load coal-fired generation and renewable resources, APS recently announced the initiation of a feasibility study for two 500,000-volt (500-kV) transmission lines from Wyoming to northern Arizona ("TransWest Express Project" or "Project"). The completion of the TransWest Express Project would provide Arizona and other western states increased capability to access electricity generated from coal, wind and other resources in Wyoming. Additional information regarding the TransWest Express Project is provided below. Again, as APS identifies more specific corridors for the TransWest Express Project, that information will be submitted for the Departments' consideration in preparing the PEIS.

### **General Recommendations**

Like EEI, APS believes that Alternative 4, the Optimization Criteria Alternative, set forth in the Notice of Intent best accommodates the objectives underpinning the 2005 EPA Act and should be the preferred alternative for the PEIS. Alternative 4 takes into account critical elements important for sound transmission planning while providing the best assurance that the required environmental review and analysis are completed early in the process, thereby allowing for expedited procedures when the time comes to site (or upgrade) a line within a designated corridor.

To most effectively complete the PEIS process within the time frame provided in the 2005 EPA Act, APS encourages the Departments to look to the work already done or underway by regional planning groups with detailed knowledge of the regions at issue. In the Western Interconnection these groups include:

- Seams Steering Group – Western Interconnection (SSG-WI)
- Colorado Coordinating Planning Group (CCPG)
- Northwest Transmission Assessment Committee (NTAC)
- Rocky Mountain Area Transmission Study group (RMATS)

- Southwest Transmission Expansion Plan group (STEP)
- Southwest Area Transmission group (SWAT).

The work already completed or underway by these groups will assist the Departments in identifying necessary and appropriate utility corridors, as those regional groups, along with the specific utilities affected, best understand what is needed to ensure system reliability and address congestion concerns. In addition, APS recommends that the Departments take into consideration the work reflected in the 2003 Western Regional Corridor Planning Priority Corridors map (and its predecessors), which was prepared in cooperation with federal land management agencies

APS strongly urges the Departments to designate specific energy corridors through the PEIS process where it is feasible to do so. At a minimum, those corridors should include the corridors already being utilized by existing 69 kV and above transmission lines crossing federal lands. APS also encourages the Departments to assess the feasibility of converting or expanding those existing corridors to accommodate additional or upgraded transmission facilities. To the extent possible, the Department also should designate new corridors for transmission lines to meet the needs expressed through the regional planning processes and by the individual utilities, and that are consistent with environmental constraints. APS has undertaken a process to identify proposed corridors to meet its anticipated needs and will submit that information as it is developed. APS further recommends that the Departments include new corridors for future 69 kV and distribution facilities, particularly on U.S. Forest Service lands. APS suggests that, wherever possible, such corridors should follow existing linear features (e.g., highways, U.S. Forest Service roads, and existing utility lines). Finally, APS strongly urges the Departments to ensure that after the PEIS is completed, the same NEPA analysis does not have to be redone for a minimum of ten years.

It is essential that the Departments work with other affected jurisdictions (states, local communities, and tribes) to enhance coordination and timely permitting of transmission lines. The ability to cross state, local and tribal lands, particularly in the west, is critical to the siting of transmission facilities. APS also encourages the Departments to consult with the Western Governors Association. If the Departments can designate corridors that coordinate with the preferences of the affected states and tribes, the value of such corridor designations will only be enhanced.

Once a transmission line is sited and constructed within a designated utility corridor across federal lands, the corridor should remain a utility corridor until it no longer is needed for the transmission facilities located within it. Thus, any transfers of federal lands should, at a minimum, require the transferee to maintain the utility corridor, avoid conflicting uses, and maintain terms consistent with a federal right-of-way. In addition, APS encourages the Departments to develop enforceable guidelines to prevent the placement of incompatible uses in the same corridor, as well as to prevent encroachment on the corridors by incompatible uses. Although there are a number of uses compatible with transmission lines,

and there is value in corridors being used for more than one compatible purpose, APS believes that certain uses are incompatible with transmission facilities.

Of equal importance to the designation and protection of utility corridors in the PEIS, however, is the development of procedures for (i) designation of additional corridors in the future and (ii) a streamlined process to ensure expedited compliance with the National Environmental Policy Act ("NEPA") for lines to be sited within previously designated energy corridors on federal lands. With respect to the designation of future corridors, it is important that the corridors developed through the PEIS process not preclude a siting application outside such corridors, nor should such a siting process be made any more difficult than under currently existing regulations.

With respect to the siting of facilities within already designated corridors, it should be clear that so long as the facilities are consistent with the parameters established for a corridor, no more than an Environmental Assessment should be needed to satisfy NEPA. At a minimum, work that has already been completed should not have to be repeated when a siting application is submitted for a previously designated corridor.

APS also encourages the Departments to develop consistent vegetation management practices on federal lands so that utilities are able to comply with the NERC Transmission Vegetation Management Standard.

### **Specific Recommendations**

Corridor widths identified by federal land management agencies in their management plans currently vary between agencies. APS recommends that all corridors designated under the PEIS be three to five miles wide. Such widths will provide the flexibility necessary to avoid environmentally sensitive areas, address engineering, technical and vegetation management constraints, and allow lines to be built with sufficient separation to reduce the risk of simultaneous outage of multiple lines. Those widths also would accommodate the need for access roads and temporary construction activities. Closely paralleled lines in a common corridor may have a high probability of common mode outage, which would result in a lower path rating based upon Western Electric Coordinating Council ("WECC") planning criteria. Wider corridor widths also provide flexibility to meet separation requirements necessary to accommodate various uses within the same corridor.

### ***Environmental Issues***

APS recommends that the following four environmental resource categories be evaluated to determine opportunities and constraints for locating utility corridors: (1) land use (jurisdiction, existing and future land use, recreation, and utilities); (2) visual (most land management agencies have defined visual resources and determined management levels); (3) cultural (archaeological, historical and traditional cultural properties); and (4) biology

(vegetation, wildlife, habitat, threatened and endangered species, etc ). APS believes that the best opportunities for utility corridors typically are (1) corridors following linear features, such as existing or future transmission lines, roads, railroads, pipelines, linear communication facilities (e.g., fiber optic lines), canals, and jurisdictional lines, or (2) areas with low resource sensitivity. The PEIS should comprehensively evaluate cumulative effects (future NEPA documents could refer to these results), land values, and environmental justice issues, among others. Corridor widths of three to five miles will facilitate the siting of new transmission facilities in a manner that is more compatible with environmental concerns because such widths will provide the flexibility needed to avoid or mitigate harm to such resources

### ***Jurisdictional Issues***

A large portion of the land in the western United States is under federal, state or tribal jurisdiction. Several federal land designations currently limit new transmission lines. In such areas, it is even more important for corridor widths to be expanded to three to five miles to allow future lines to be sited in a manner that minimizes impact to the environment and ensures system reliability. The following paragraphs set forth specific examples where such issues may arise

- **National Recreation Areas** – National recreation areas, currently under the management of the National Park Service, should allow for future lines through wider corridor widths of three to five miles
- **National Monuments** – Recently designated (2001) National Monuments in the west contained corridors critical to future transmission line projects. Currently, however, the National Monument designations prohibit any new transmission lines. APS encourages the Department to consider widening the existing corridors and opening them to new lines.
- **Military Lands** – Military lands have blocked potential transmission lines or have low height restrictions across vacant lands that prohibit future line development. It is important for the Departments to work with the military facilities to identify utility corridors to allow siting of new facilities while protecting military uses.
- **U.S. Fish and Wildlife Service Lands** – U.S. Fish and Wildlife Service lands currently have restrictions that block future lines and should be evaluated for possible corridor widening
- **Other Federal Designations** – Lines in proximity to certain federal land designations, such as wilderness areas, generally are forced to locate elsewhere regardless of the cost and environmental impacts (even when an area currently has existing lines).

Alternatives to expensive bypass routing should be given serious consideration by the Departments.

- Indian Reservations – Numerous lines cross reservations and more will be needed in the future for wheeling of energy throughout the west. APS strongly urges the Departments to invite the tribes throughout the west to participate in the planning process and to encourage those tribes to designate utility corridors that coincide with utility corridors designated on adjacent federal lands. The designation of corridors three to five miles wide would allow for alternatives to be evaluated that can accommodate the needs and desires of the tribes impacted by a transmission line. In addition, however, alternatives that bypass the reservations should be planned and included in the PEIS. For example, between Arizona, Utah, Colorado, or New Mexico, numerous reservations restrict new lines traveling north/south and east/west. Alternatives are necessary to avoid these reservations while serving the growing needs of the southwest.
- State Lands – APS also urges the Departments to invite the western states to participate in the PEIS process. Because of the large amount of state land in Arizona, the Departments should work with the Arizona State Land Department to identify state preferences for the location of utility corridors.
- Zoning – Corridor designations should take into account local and county plans and zoning decisions wherever possible

### **TransWest Express Project**

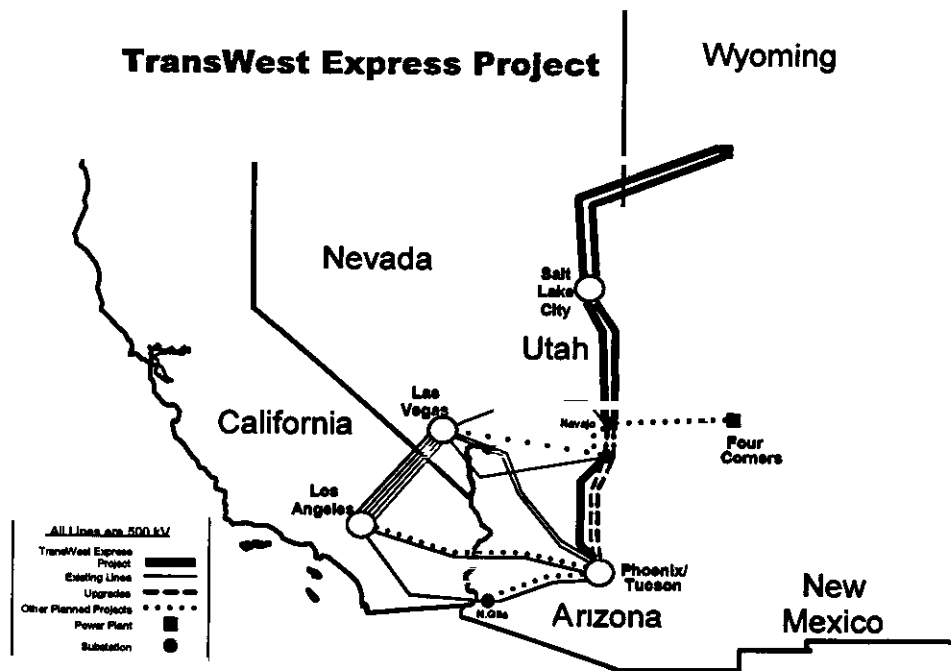
As mentioned above, APS recently announced the TransWest Express Project. APS is seeking input and participation of interested parties to jointly examine the technical and economic feasibility of the Project, as well as the relevant environmental and regulatory considerations. This joint feasibility analysis will be performed within the various regional and sub-regional transmission planning groups and reliability organizations in the West. An open stakeholder project kick-off meeting was held in Phoenix on November 17, 2005 and was attended by approximately 75 interested parties.

The Project initially will be modeled as two parallel 500kV AC transmission lines starting at the Jim Bridger station in Southwestern Wyoming. The Project seeks to access coal, wind and other resources in Wyoming and there may be additional transmission included in the Project into that region. From Jim Bridger, the Project could go into the Wasatch Front area of Utah to serve load in the Salt Lake City area and then go south through Utah across the Arizona border to terminate at the Navajo 500kV station. The Project will be a minimum of 600 miles in length depending on the route(s) selected and where the Project terminates in Wyoming. The Project cost is estimated to be in excess of \$3 billion.

In addition to the new transmission lines, the feasibility study will also assess the benefits of integrating these new facilities with other transmission projects already announced or planned, including the Dine Navajo Transmission Project, the Palo Verde – Devers #2 Project, the Palo Verde - North Gila #2 Project, and planned upgrades to the existing Navajo Transmission System lines and the Mead – Phoenix line. It is anticipated that with these existing planned transmission projects, the TransWest Express Project also will provide significant benefit and opportunity for remote resource access to Southern Nevada and Southern California. The feasibility study also will assess the benefits of a third line from the Navajo Generating Station in northern Arizona to the Phoenix area (see map below).

The Phase 1 feasibility study is expected to take about one year. Phase 2 of the Project would include obtaining required permits and other approvals and a WECC Project rating. Phase 3 would include construction and operation of the Project, with an expected in-service date of 2013.

Below is a conceptual line route. As the feasibility analysis is completed, a more definite route will be identified and, if the project proceeds, a final route will be pursued. APS will keep the Agencies informed as the Project route develops and will pursue siting through the regulatory process in each of the affected states.





Ms. Julia Souder  
November 28, 2005  
Page 8

Also included at Attachment 4 is a map that, in addition to reflecting the same corridors shown on Attachment 3, identifies additional potential corridors for the TransWest Express Project. APS requests that the Departments widen all of the existing corridors indicated on the map and designate the additional proposed corridors as utility corridors in the PEIS.

APS looks forward to working with you and the Departments throughout the preparation of the PEIS. As indicated above, APS will provide additional information as it completes its current assessment of corridor needs. In the meantime, if you have any questions, please feel free to contact me.

Sincerely,

Arizona Public Service Company

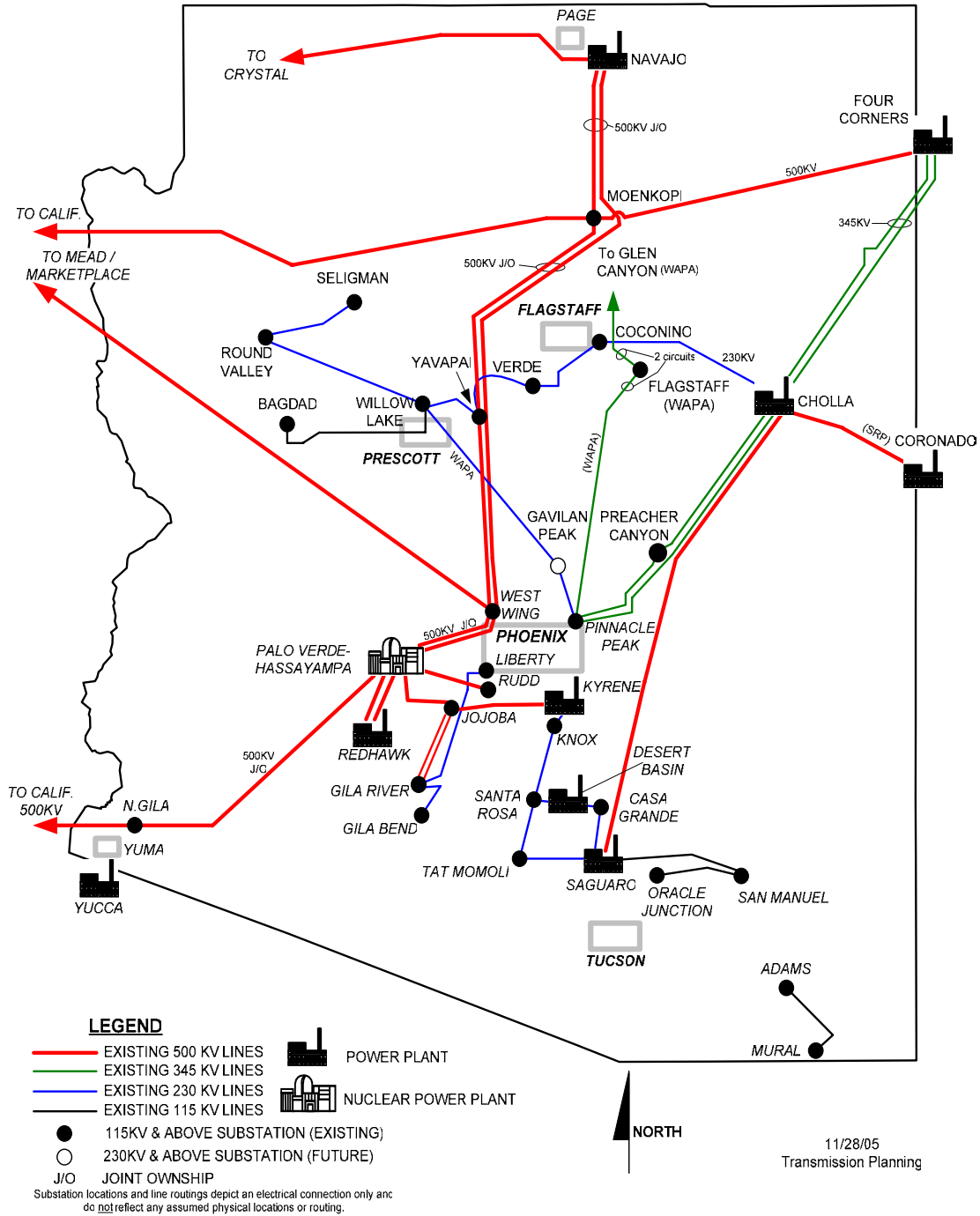


By Karlee S. Ramaley

cc: Robert D. Smith, APS  
Paul E. Herndon, APS

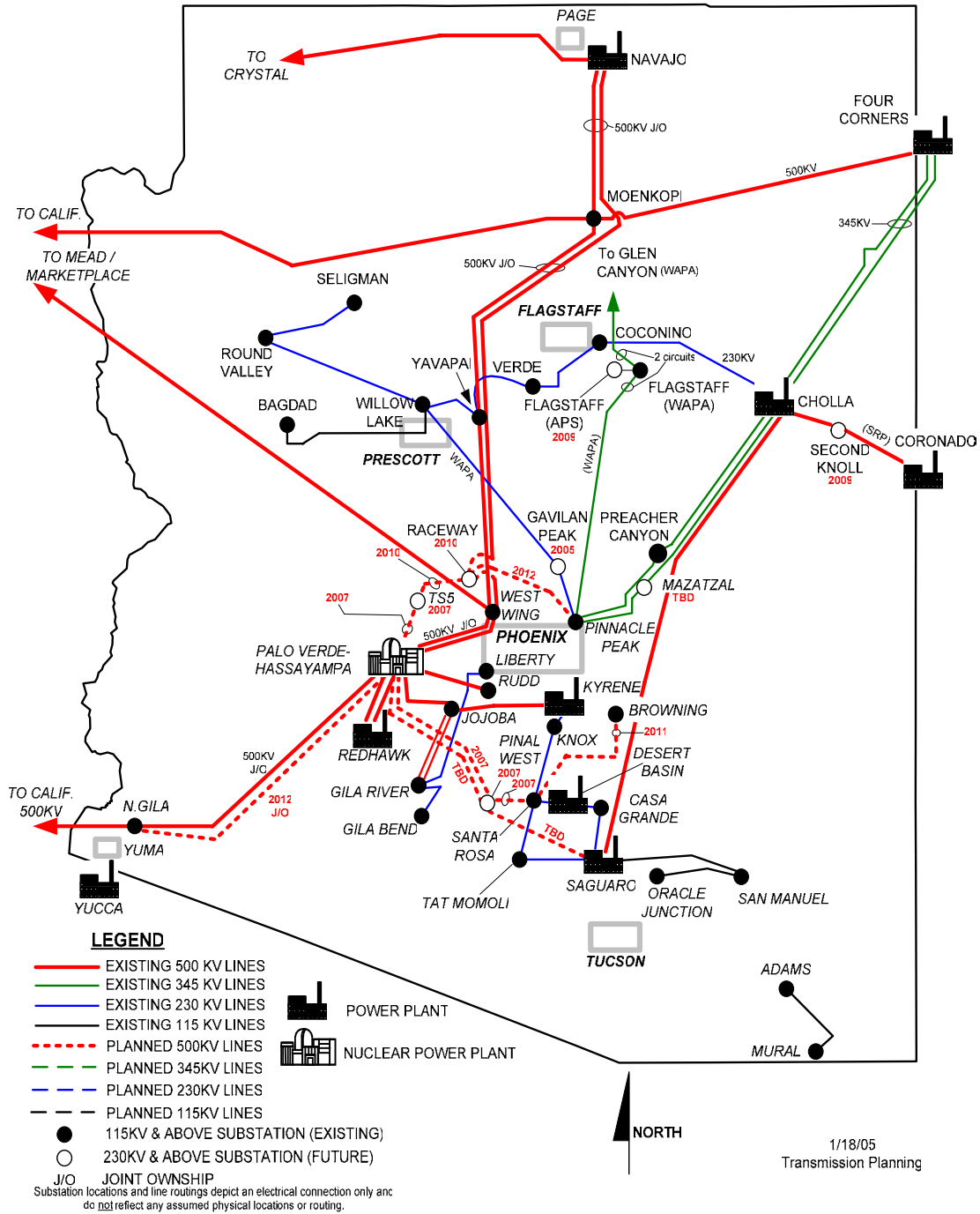
# ATTACHMENT 1

## 2005 APS TRANSMISSION SYSTEM



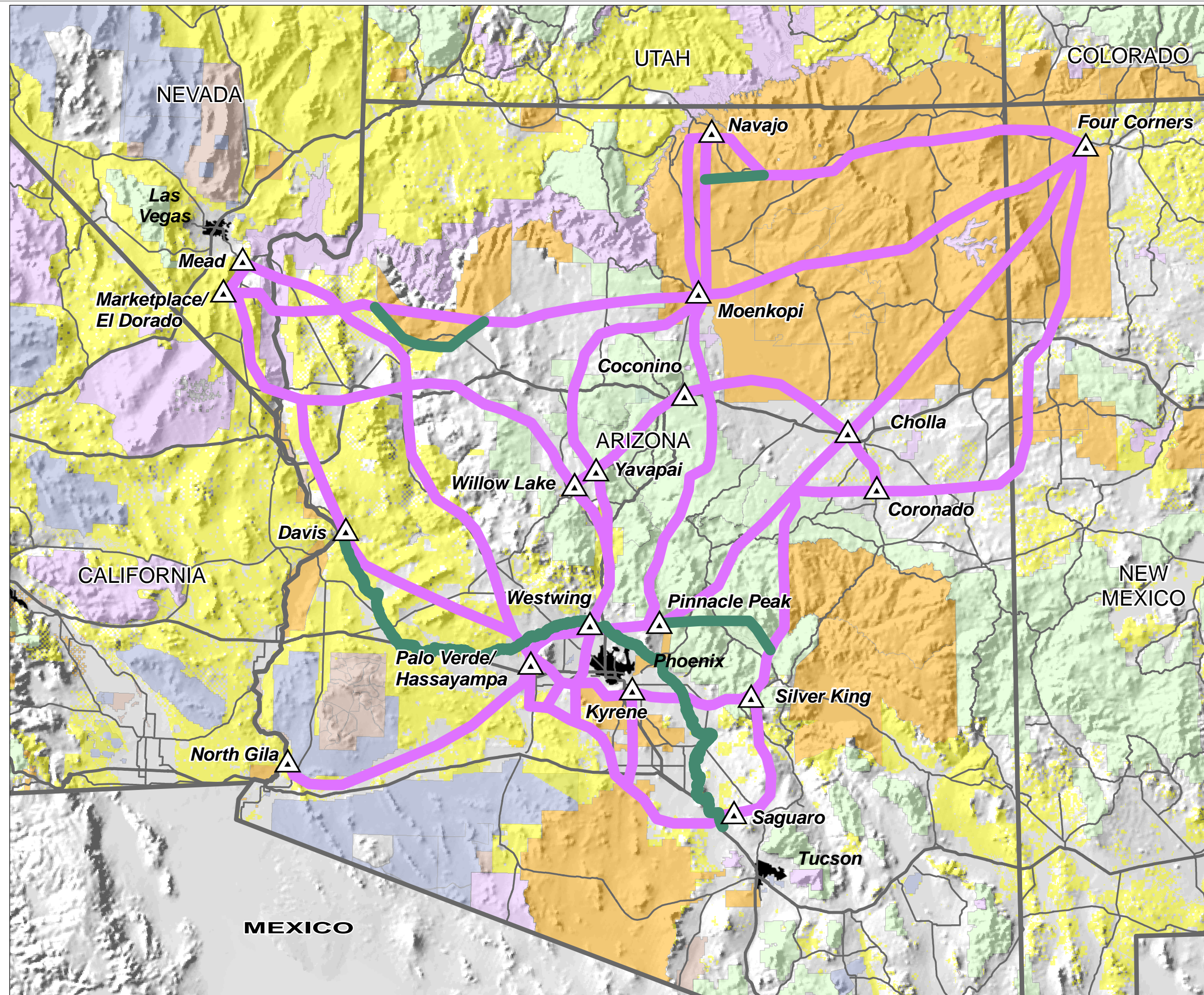
## ATTACHMENT 2

# APS EHV & OUTER DIVISION 115/230 KV TRANSMISSION PLANS 2005 - 2014



# APS EXISTING AND PROPOSED PROJECTS/CORRIDORS

## Attachment 3

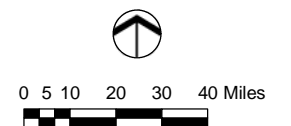


### LEGEND

- Corridors containing existing transmission facilities that should be widened
- Corridors with no existing transmission facilities that should be designated for future facilities
- Bureau of Land Management
- Bureau of Indian Affairs
- U.S. Forest Service
- National Park Service
- Department of Defense
- U.S. Fish & Wildlife Service
- State/Private

### REFERENCE FEATURES

- State Boundary
- Major Interstate/Highway
- Substation



### Data Source Information

Land Ownership and BLM Field Office Boundaries: BLM Denver Service Center, 2004.

NOTE: Transmission corridors and substation locations are schematics and do not necessarily represent precise locations.

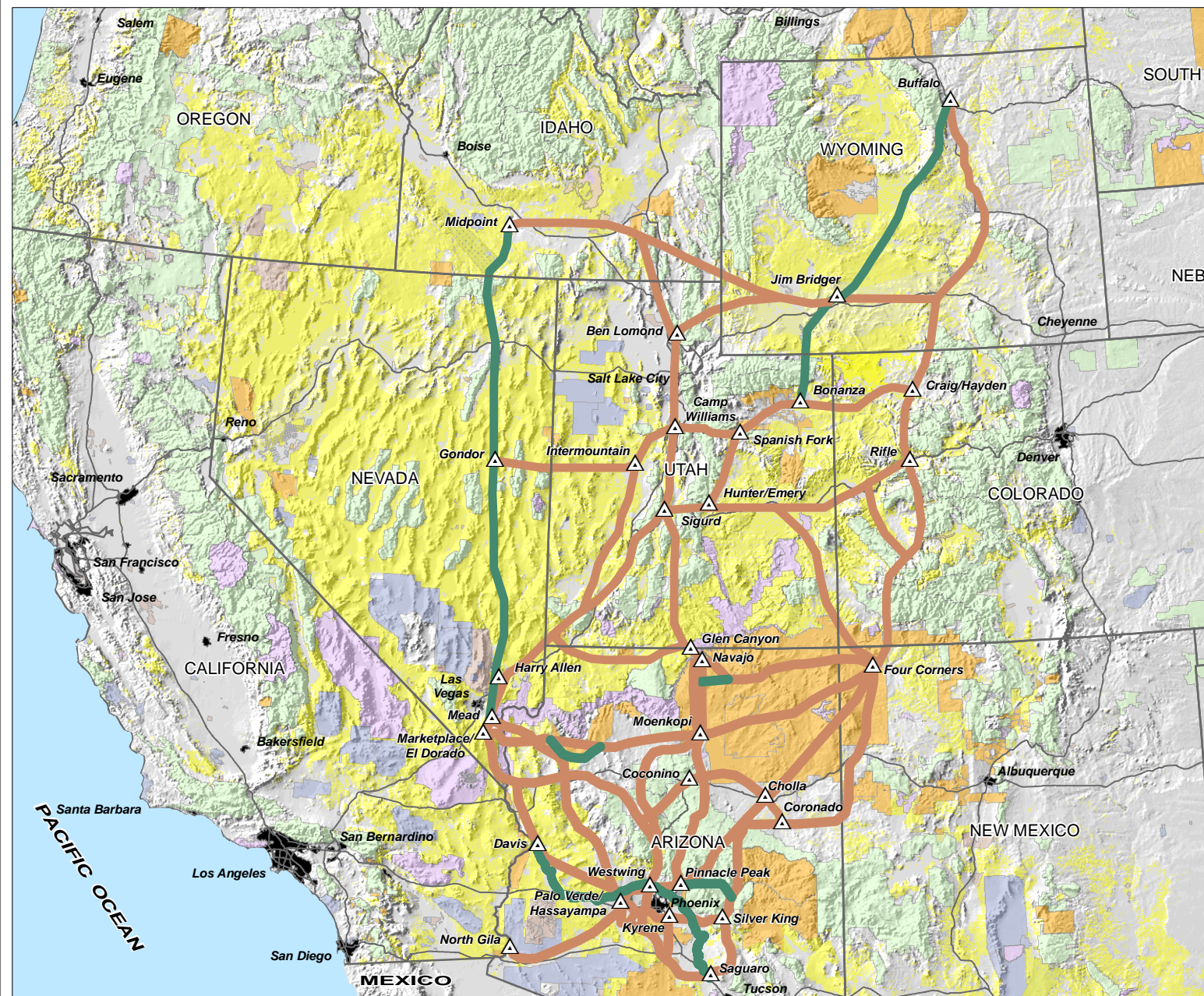
November 28, 2005



# TransWest Express Project

## Potential Corridors

### Attachment 4



#### LEGEND

- Corridors containing existing transmission facilities that should be widened
- Corridors with no existing transmission facilities that should be designated for future projects

- Bureau of Land Management
- Bureau of Indian Affairs
- U.S. Forest Service
- National Park Service
- Department of Defense
- U.S. Fish & Wildlife Service
- State/Private

#### REFERENCE FEATURES

- State Boundary
- Major Interstate
- Major Substation



#### Data Source Information

Land Ownership and BLM Field Office Boundaries: BLM Denver Service Center, 2004.

NOTE: Transmission corridors and substation locations are schematics and do not necessarily represent precise locations.

November 28, 2005

