

Comments to the Interagency Task Force On Energy Project Streamlining Sonora-Arizona Interconnection Project

Name of the project: Sonora-Arizona Interconnection Project

Entity proposing the project: Public Service Company of New Mexico (PNM). PNM is a regional investor-owned public utility company headquartered in Albuquerque, New Mexico. PNM has ownership interests in generation and transmission facilities in Arizona and New Mexico and currently provides retail electric and gas service in New Mexico. PNM has also been a major player in the southwestern wholesale market for over 25 years.

PNM is highly experienced in the construction and operation of generating plants and transmission lines with over 15 years of experience in construction and operation of DC Interconnections between large systems (WSCC and Southwest Power Pool). PNM is committed to operating profitably to the benefit of our communities while achieving superior levels of environmental performance and to be recognized as a leader in environmental stewardship.

Category of the project: Electricity Transmission

Brief description of the project: PNM's \$390 million Sonora-Arizona Interconnection Project will promote trade and exchange of electrical energy and provide mutual support and assistance between the national electrical systems in Mexico and the United States. This project will create the first high-capacity electrical interconnection between the two systems. PNM proposes to construct two 345,000-volt (345 kV) high voltage transmission circuits between the two systems, each circuit measuring approximately 300 miles in length. Upon completion, the capacity of this interconnection is expected to be 1000 megawatts (MWs).

Both transmission circuits would originate at the High Voltage Switchyard adjacent to the Palo Verde Nuclear Generating Station, a major trading "hub" for electricity in the United States, located approximately 50 miles west of Phoenix, Arizona. In Mexico, the facilities would connect with complimentary transmission facilities of the Comisión Federal de Electricidad (CFE), the national electric utility of Mexico, at the existing Santa Ana substation located approximately 60 miles south of the international border.

In order to allow these two major electrical systems to be interconnected successfully, while maintaining a high degree of reliability and security, an AC-DC-AC converter station (commonly referred to as a back-to-back converter) would be installed on the lines somewhere in the vicinity of the international border, possibly Nogales, Arizona. This costly (\$180M) technical feature would allow for the isolation of electrical disturbances on either side of the converter and control the flow of power between the two systems, thus enhancing and assuring continued reliability of both the US and the Mexican electrical systems.

As stated, the overall purpose of PNM's project is to promote trade and exchange of electrical energy. As proposed, PNM's project will be the first high-capacity electrical interconnection between the two countries and will also provide mutual support and assistance between the systems. The timing for the development of this project is driven both by the overall purpose

and several near term needs that enhance its current economic viability and add synergetic benefits. It is primarily the growing demand for electric service in Mexico, and more specifically, the need for new resources in the State of Sonora, which drives the timing for the development of this project. Electricity demand in Mexico is growing at an annual rate of approximately 6.6%; in the border region the rate is as high as 8.8%. Mexico's ability to meet its growing demand using internal financial resources is being strained.

Arizona also has a demonstrated need to improve electrical reliability, supply, and delivery in its central and southern regions. This project can also provide a means by which electricity from both in- and out-of-state resources could be transmitted to demand centers in Arizona before the line terminates in Mexico. By design, the configuration of the project will allow interaction with the existing transmission systems in Arizona and coordination with future planned development.

Agencies that must be consulted and agencies from which approval is needed: Consistent with NEPA's implementing regulations, DOE as the Lead Agency for the Sonora-Arizona Interconnection Project EIS, invited numerous federal agencies to become cooperating agencies. Three agencies responded to DOE's request: the U.S. Forest Service, Bureau of Land Management, and Bureau of Reclamation. The proposed transmission line has the potential to impact up to 17.5 miles of land under control of the U.S. Forest Service, 60.5 miles under control of the Bureau of Land Management, and up to 5.5 miles of land under control of the Bureau of Reclamation.

The Forest Service and Bureau of Land Management have agreed to cooperating agency status for preparation of the EIS. The Bureau of Reclamation declined to participate as a cooperating agency based on its opposition to the project due primarily to potential conflicts with a 12-year old commitment (not law) offsetting construction impacts of the Central Arizona Project aqueduct. PNM on the other hand believes that the intended use of these lands for our project would not be in conflict with the original purpose and intent of these commitments and that the EIS currently under development will confirm this belief.

In addition to permitting requirements of federal agencies, the Arizona Corporation Commission (ACC), and in particular its Power Plant and Transmission Line Siting Committee must approve the project. (The project must obtain a certificate of environmental compatibility from the ACC. The ACC process has an environmental review component very similar in scope to a Federal EIS, including public hearings.) A more complete list of all other known major permits, licenses, and approvals required in the United States for construction and operation of the project are listed in the attached Table A. Other minor permits or authorizations not listed in Table A may be required.

Reason for bringing the project to the task force's attention: As can be seen from the project description and list of agencies requiring either consultation or approval, the Sonora-Arizona Interconnection Project is an expansive international undertaking of a complicated nature, involving multiple federal, state and local agencies. PNM has been in the process of identifying and obtaining agency concurrences and approvals since it applied to DOE for a Presidential permit in December 1998. While the EIS process is hopefully nearing its end, it is just beginning the most critical phase, interagency concurrence and coordination. In addition, the ongoing activities of obtaining the numerous federal, state and local permits that follow the EIS but must precede construction are about to begin. The coordination and streamlining of these activities are

essential to the timely and efficient completion of energy projects such as this one. Indeed, the length of time required to negotiate separate agreements and coordinate activities with each involved agency has proven to be so burdensome that the government of Mexico asserts that it is the U.S. regulation of cross border projects that is preventing increased U.S. and Mexico electricity trade.

Suggestions for improving federal agencies processes: PNM believes that each agency with a permitting role is striving to do the best job possible in their respective areas. However the process of dealing individually with so many agencies is time consuming and frustrating. If the intent of the task force is to streamline the coordination of these multi-agency processes for the purpose of expediting reviews, these agencies must establish overlapping rather than sequential processes. Agencies must become early participants in the preparation of NEPA documents to prevent costly (timing) delays later.

The need to complete individual agreements and funding arrangements with each of the agencies, separately, before any coordination activities can begin is burdensome and duplicative in nature. While the majority of agencies that could ultimately be affected are agreeable to participating on a cooperative agency basis, there are at times undue delays in such agreements while the agencies contemplate their participation or role. In the PNM project, the Forest Service became an early participant, BLM became a cooperating agency but did not initially believe it to have a role until several new National Monuments and special use lands were created late in the Clinton Administration. Bureau of Reclamation did not respond to DOE until November, 2000, and when it responded it refused to become a cooperating agency.

PNM considers BOR's public refusal to participate as a means to avoid the perception that such participation may be viewed as their agreement or support for the project being proposed. The anticipation being that such a perception may cause friction with the parties involved in the BOR's previous mitigation commitments. Such political considerations should not play a part in the participation of these agencies in the overall evaluation of individual projects.

To remedy these problems we believe that agencies should be compelled to come to the table as early as possible in the process once their potential need for involvement has been identified. Agencies should be required to acknowledge receipt of the lead agency's request and indicate their potential role regarding the permitting. Furthermore, cooperation with the "lead agency" should not be held up pending funding arrangements with the applicant to cover the follow-on work that may be required. PNM believes that the political considerations of an agencies participation in evaluation of a project's attributes can be removed by compelling the agencies acceptance of cooperating agency status once the need for such involvement has been identified by the lead agency.

Additional Material attached: Table A: Listing of additional major permits, licenses and approvals for the Sonora-Arizona Interconnection Project.

Table A. Additional Major Permits, Licenses, and Approvals Required for the Sonora-Arizona Interconnection Project

Requirement	Citation ^a	Responsible Agency	Explanation
Federal Statutes			
American Indian Religious Freedom Act	42 U.S.C. 1996	Department of Energy and other land management agencies	Consider Native American religious values when undertaking federal projects
Antiquities Act	16 U.S.C. 431 et seq.	Department of the Interior	Consider whether to grant permission to proceed if proposed project would cause adverse effects to historic or prehistoric ruins, monuments, paleontological resources on public lands
Atomic Energy Act	42 U.S.C. 2011 et seq.	Nuclear Regulatory Commission	Issue right-of-way permit
		Bureau of Reclamation	Issue right-of-way permit
Clean Air Act	42 U.S.C. 7609	Environmental Protection Agency	Review and comment on draft EIS
Clean Water Act	33 U.S.C. 1344	Army Corps of Engineers	Issue permit(s) for placement of dredge or fill in waters of the United States, including wetlands; issue permit(s) for structures affecting navigable waters of the United States
River and Harbors Act	33 U.S.C. 401-413		
Endangered Species Act	16 U.S.C. 1531 et seq.	Department of the Interior, Fish and Wildlife Service	Determine impacts to threatened or endangered species; issue Biological Opinion, if necessary
Farmland Protection Policy Act	7 U.S.C. 4201 et seq.	Department of Agriculture, Soil Conservation Service	Evaluate impacts to farmland
Federal-Aid Highway Act	23 U.S.C. 111	Department of Transportation, Federal Highway Administration	Authorize crossing of federal interstate highways
Federal Aviation Act	49 U.S.C. 44718	Federal Aviation Administration	Review plans to determine if transmission lines would impede the approach or takeoff path of aircraft
Federal Land Policy and Management Act	43 U.S.C. 1701 et seq.	Department of the Interior, Bureau of Land Management	Issue right-of-way grants to cross public lands managed by Bureau of Land Management
Federal Power Act	16 U.S.C. 824a(e)	Department of Energy	Issue Export Authorization
Fish and Wildlife Coordination Act	16 U.S.C. 661 et seq.	Department of the Interior, U.S. Fish and Wildlife Service	Consult on impoundments, modifications, or diversions of streams or other water bodies in excess of 10 acres of surface area

Table A. Additional Major Permits, Licenses, and Approvals Required for the Sonora-Arizona Interconnection Project (continued)

Requirement	Citation	Responsible Agency	Explanation
Migratory Bird Treaty Act	16 U.S.C. 703 et seq.	Department of the Interior, U.S. Fish and Wildlife Service	Consult on ways to avoid or minimize effects on migratory birds
National Forest Organic Act	16 U.S.C. 521	Department of Agriculture, U.S. Forest Service	Issue right-of-way or special use permit to cross National Forest System land
National Historic Preservation Act	16 U.S.C. 470 et seq.	Advisory Council on Historic Preservation	Consult on impacts to properties listed or eligible to be listed on National Register of Historic Places
Taylor Grazing Act	43 U.S.C. 315-316	Department of the Interior, Bureau of Land Management	Issue right-of-way grants across grazing allotments, if any
Wild and Free-Roaming Horses and Burros Act	16 U.S.C. 1331 et seq.	Department of the Interior, Bureau of Land Management	Consult on potential impacts of proposed actions on wild horses or burros on public lands managed by Bureau of Land Management
Executive Order 11988, Floodplain Management	42 FR 26951 (1977)	Department of Energy	Evaluate floodplain effects
Executive Order 11990, Protection of Wetlands	42 FR 26961 (1977)	Department of Energy	Evaluate potential wetland effects
Executive Order 12038, Relating to Certain Functions Transferred to the Secretary of Energy by the Department of Energy Organization Act	43 FR 4957 (1978)	Department of Energy	Issue Presidential permit
Environmental Protection	A.R.S. 49-101 et seq.	Department of Environmental Quality	May require additional environmental assessment
Game and Fish	A.R.S. 17-101 et seq.	Game and Fish Department and Game and Fish Commission	Issue Biological Opinion on state rare and endangered wildlife, if necessary
Historic Preservation	A.R.S. 41-511 et seq.	Arizona State Historic Preservation Officer	Issue cultural resources clearance prior to construction
Mines and Minerals	A.R.S. 27-101 et seq.	Department of Mines and Mineral Resources	Assess impacts to mining operations
Native Plants	A.R.S. 3-901 et seq.	Department of Agriculture	Provide native plant clearance prior to construction
Power Plant and Transmission Line Siting	A.R.S. 40-360	Arizona Corporation Commission	Issue Certificate of Environmental Compatibility, approving location of transmission lines

**Table A. Additional Major Permits, Licenses, and Approvals R
required for the
Sonora-Arizona Interconnection Project (continued)**

Requirement	Citation ^a	Responsible Agency	Explanation
State Lands	A.R.S. 37-101, 461	State Land Department	Issue right-of-way permit across state-owned lands
State Parks	A.R.S. 41-511.05	Arizona Parks Board	Issue use permits to cross state parks
State Roads	23 U.S.C. 111; A.R.S. 28-7045 et seq.	Department of Transportation	Approve structure location and issue road crossing permits for state roads and interstate highways
Water Resources	A.R.S. 45-101 et seq.	Department of Water Resources	Issue water use permit
County Requirements			
Maricopa County			Issue permit for transmission line crossings of public roads or streets within the county
Pinal County			Issue permit for transmission line crossings of public roads or streets within the county
Pima County			Issue permit for transmission line crossings of public roads or streets within the county
Santa Cruz County			Issue permit for transmission line crossings of public roads or streets within the county

a. U.S.C. = United States Code; FR = Federal Register; A.R.S = Arizona Revised Statute.