

Draft National Interest Electric Transmission Corridor (NIETC)
Designations;
Comments Received in Public Meeting,
Phoenix, AZ, Thursday 21 June 2007

Marshall Magruder
Oral Presentation at the DOE National Corridor Public Comments
Phoenix, Arizona on 21 June 2007

I am Marshall Magruder, a resident of Tubac, Arizona and a member of the Joint City of Nogales, Santa Cruz County Energy Commission, speaking as an individual.

I would like to comment on the application of the National Power Act section 216 on the possible designation of a National Corridor between Tucson and Mexico to import electricity generated in Mexico. There will be a substation in Nogales, Arizona.

The Arizona Corporation Commission (ACC), in its letter of 27 January 2007 to the DOE, considered this proposed corridor of more importance than the DOE Congestion Study's designated Area of Concern between Phoenix and Tucson.

The Tucson-Nogales-Mexico corridor fails to meet all five of the Energy Policy Act criteria to be considered for such a designation.

First, the Tucson-Nogales-Mexico corridor would not increase energy independence in the United States; nor would it enhance our national defense or homeland security. The opposite would be true: Foreign dependence would be increased.

Second, a specific proposal to build a line between the US and Mexico, was approved by the ACC. It would reduce reliability of the Western Interconnection by synchronically connecting the States of Sonora and Sinaloa, Mexico, via one 345 kV system, with the United States and Canada. High potential would be created for cascading blackouts extending from 700 miles south of the US-Mexican border through 13 US states onto British Columbia. The DOE international reliability review has not been done. I believe that, in all likelihood, it will find reliability in the United States and Canada degraded and deny a Presidential permit.

Third, there is no infrastructure for 345 kV transmission lines in Sonora and Sinaloa, Mexico. Nor are there international agreements with Mexico, a country with no experience in the electrical market, trading or ethical practices employed in the United States.

Fourth, The ACC approval preceded a DOE Environmental Impact Statement. This EIS caused US Forest Service to deny the ACC-designated route. An ACC approved route does not exist anywhere.

Fifth, the proposed 345 kV, dual-circuit line, will have a capacity of 2,000 MW total. The public was told this line was needed to improve reliability in Santa Cruz County. Our county's peak demand is 73 MW.

Sixth, yes, there is congestion between Phoenix and Tucson, as your study reported. Some is congestion on a WAPA transmission line used to meet our electrical demand. The Energy Policy Act, in Section 1222(g), allocated \$100 million a year to improve WAPA and should be used to eliminate this congestion.²⁰

The Arizona Corporation Commission has tried to support the local utility's proposed Tucson - Mexico 345 kV line. However, designation of National Corridor for this proposed route violates all the precepts and intentions of the Energy Policy Act's definition of a National Corridor.

I will also submit a written response. Thank you for an opportunity to present this issue. It is very important for our country, to Arizona, and to my county, the smallest in Arizona.

Endnotes

¹ *National Electric Transmission Congestion Study*, by the DOE, August 2006.

² “Comments of the Arizona Corporation Commission” on the National Electric Transmission Congestion Study filed with the Department of Energy, 27 February 2007, hereafter “ACC Comments”, and page 2. These comments were in response to the *Federal Register* Vol. 71, NO. 22, of 2 February 2006, et al, “Considerations for Transmission Congestion Study and Designation of National Interest Electric Transmission Corridors” requesting comments.

³ In ACC Decision and Order No. 62011 of 2 November 1998, Citizens was ordered to have in-service by 31 December 2003 a second transmission line or face a punitive damages penalty of \$30,000 per month. In 1998 and 1999, Citizens Utility’s radial 115 kV transmission line and other outages caused the City of Nogales to file an official Complaint with the ACC. When it became obvious that the in-service date would not be accomplished, in mid-December 2003, the Company requested and the ACC waived along the \$30,000 per month penalty.

This Complaint concerned poor service and excessive outages which was resolved with a Settlement Agreement between Citizens and the City that was approved by the ACC. This agreement included a provision for a second transmission line and many other system improvements. Tucson Electric Power Company (TEP) saw this as an opportunity to also add a 345 kV, double-circuit, transmission line between Tucson and Santa Anna, Sonora, Mexico, about 60-miles south of the US-Mexican Border.

This required filing a Presidential permit with DOE on 17 August 2000 (DOE Docket No. PP-229) and an Application with the Arizona Power Plant and Transmission Line Siting Committee (Line Siting Committee) as Case No. 111 for a Certification of Environmental Compatibility (CEC) in March 2001. The DOE in September 2000 determined that an Environmental Impact Statement (EIS) would be required for the Presidential permit as multiple federal agencies were required to issue permits, including the Coronado National Forest, Bureau of Land Management, and the International Boundary Water Commission. TEP pursued the CEC application, which has a mandated 180-day review cycle, knowing that the EIS could no be completed in time to meet the ACC 31 December 2003 in-service deadline.

The Line Siting Committee did not wait for the EIS being coordinated by the DOE to be completed and approved the new transmission line route through the Coronado National Forest that was outside the designated utility corridor. The ACC in January 2002 approved the CEC and stipulated only the new “western” route through the National Forest could be used and all other alternatives were denied.

In March 2005, the Final EIS was released with a statement by the Coronado National Forest that the new “western” route would not be approved with strong basis for its decision. Thus, no approved routes in Santa Cruz County exist.

⁴ The Energy Policy Act of 2005 (EPAct), section 1221(a) which amended the Federal Power Act (FPA) by adding a new section 216 which requires the Secretary of Energy to conduct a nationwide study of electric transmission congestion and issue a report based on the study in which the Secretary may designate “any geographic areas experiencing electric energy transmission capacity constraints or congestion that adversely effects consumers as a national interest electric transmission corridor.”

⁵ FPA, Title of section 216.

⁶ FPA section 216(a)(4)(A).

⁷ The TEP 345 kV, double-circuit transmission line is “to tie with generation sources in Mexico” [ACC letter to DOE of 27 Feb 2007, page 2]. This issue was not brought up nor assessed during the Line Siting hearings or the DOE EIS process. TEP repeatedly testified during Line Siting hearings that it was only providing a “superhighway” so anyone could use this line and TEP would be compensated by “wheeling fees” to pay for the line.

Electricity for Nogales, Arizona, with over 65 MW of local generation, has experienced a peak demand of 73 MW, well within limits of the existing 115 kV transmission line’s capabilities. The TEP 345kV line has a 1,000 MW capacity per circuit or a 2,000 MW capacity, about 20 times the maximum peak demand in Nogales, which would only be needed for backup when the primary 115 kV line fails, annually less than 2 hours a year for the past decade including ling outages in 1998 and 1999. Proposed backup transmission lines include double-circuit the existing transmission line considers to reconductor to 138 kV or adding an independent 46 or 69 kV double-circuit backup subtransmission line.

⁸ FPA section 216(a)(4)(B)(i) and (ii).

⁹ *National Energy Transmission Congestion Study*, pages 48 and 49.

¹⁰ *Tucson Electric Power Company Sahuarita-Nogales Transmission Line Final Environmental Impact Statement*, DOE/EIS-0336, BLM Reference No. AZA 31746, dated January 2005, notices in the *Federal Register* in March 2005.

¹¹ ACC Decision No. 64356 of 15 January 2002.

¹² FPA section 216(a)(4)(C).

¹³ FPA section 216(a)(4)(D).

¹⁴ These DOE documents are readily available and neither discusses any Arizona-Mexico transmission needs or requirements, Federal Energy Regulatory Commission Order 890, Western Electricity Coordination Council (WECC) website has no Arizona-Mexico proposals or studies, the WCATF report was specifically developed to provide WECC’s input into the DOE Congestion Study has no Arizona-Mexico proposals or studies, National Energy Reliability Organization (NREC) does not mention any connections between Arizona and Mexico, Western Governors Association (WGA) has no Arizona-Mexico proposals or studies, the ACC has no Arizona-Mexico studies or proposals other than what TEP has submitted in Case No. 111

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Docket No 2007-CE-02

**Designation of a National Interest Electric Transmission Corridor (NIETC)
in Santa Cruz County, Arizona**

Background. On 27 February 2007, the Arizona Corporation Commission (ACC) in its response to the Department of Energy (DOE) Congestion Study of August 2006¹ stated “we consider this Tucson to Nogales to be of greater concern to the Arizona transmission grid than the Phoenix to Tucson Congestion Area of Concern in the DOE Study.”² An “early designation” as a NIETC was not requested.

My comments are in response to this ACC letter about a possible Tucson-Nogales-Mexico NIETC National Corridor designation. No transmission lines presently go between Arizona and Mexico.

In 2000, the ACC ordered Citizens Utilities, serving parts of Santa Cruz County, Arizona, to construct a second transmission line between Tucson and Nogales to improve local service reliability.³

1. Proposed Tucson to Mexico Corridor **fails** to meet the Energy Policy Act NIETC **designation criteria.**⁴

The Energy Policy Act of 2005 added Section 216 to the Federal Power Act, to establish “Siting of Interstate Electric Transmission Facilities”⁵ and gives the Secretary of Energy the following considerations for such designations:

a. ***“The economic vitality and development of the corridor, of the end markets served by the corridor, maybe constrained by lack of adequate or reasonably priced electricity.”***⁶

Comment: The ultimate US-Mexican market is not constrained since no such market exists. The Tucson-Nogales constraints are solved by a much smaller line.⁷

b. ***“The economic growth in the corridor or the end markets served by the corridor, maybe jeopardized by reliance on limited sources of energy, and a diversification of supply is warranted.”***⁸

Comment: In the past five years, the Mexican industry has suffered due to extreme competition with a decline in production that is independent of electricity sources of energy. Tucson, in the Arizona market, has numerous sources; however, constraints between Tucson and Phoenix inhibit importation.⁹ One is the Western Area Power Administration (WAPA) transmission lines that are at or near capacity which constrains imports to Nogales; however, EPAct section 1222 allocates WAPA \$100 million annually specifically to reduce transmission constraints. Mexican generated electricity impacts were not considered in the DOE EIS¹⁰ or Line Siting Committee’s CEC.¹¹

c. ***“The energy independence of the United States would be served by the designation.”***¹²

Comment. Energy from Mexico will increase the United States energy dependence on Mexico.

d. ***“Designation would be in the interest of national energy policy,”***¹³ and

Comment: A review of DOE’s *National Energy Policy* (May 2001), *National Transmission Grid Study* (May 2002), FERC including Order 689, WECC, Western Congestion Analysis Task Force (WCATF), NERC, WGA, ACC, and any other transmission activities¹⁴ including Mexican documentation reveals that none promote the proposed 345 kV line or anything similar. There is no interest in this line from a national energy policy view.

e. ***“The designation would enhance national defense and homeland security.”***¹⁵

Comment: Any transmission line connecting to energy sources outside the United States will weaken the national defense and homeland security as forces not under the US control could

easily terminate this energy source, and in Sonora, Mexico, drug cartels are capable now. Further, any large row of transmission line structures provides a trail for border crossers.

2. Proposed Tucson-Mexico Corridor fails the reliability criteria for an international transmission line.

- a. The proposed 345 kV transmission line will have a synchronous interconnection with the Mexican grid. This will be accomplished by the removal of all generation and transmission resources in the Mexican states of Sonora and Sinaloa from the Mexican grid and interconnecting these two states to the US Western Interconnection, using this one transmission line system.

Comment: During the April 2001 Line Siting hearings, a major 24-hour blackout occurred throughout Sonora due to a cascading synchronization failure. Large-scale failures are frequent in Mexico. If interconnected to the Western Interconnect, 13 US States and two Canadian Provinces will be vulnerable to uncontrolled risks from Mexican generation and transmission resources. At all other Western Interconnect boundaries, an asynchronous AC-DC-AC converter exists to prevent cascading outages do not cross a boundary. No such protection is provided by the TEP proposed 345 kV transmission line.

- b. DOE requires an ‘international reliability’ assessment during its Presidential permit review process.

Comment: This has not accomplished; however, any degradation in reliability in the United States as a result of an international interconnection requires DOE to deny a Presidential permit.

- c. Western Electrical Coordination Council (WECC), its related organizations, and the National Electricity Reliability Council (NERC) have never reported the proposed 345 kV scheme is reliable.

Comment: It is doubtful if any such analysis has been accomplished at any level but by TEP.

- d. Mexican Department of Energy and C.F.E. have not participated in any hearings or analysis to date, nor have any facilities been developed in Mexico for this system.

Comment: No agreements have been signed between the two countries. The political process in Mexico considers energy a national resource.

3. NIETC National Corridors must comply with ALL Environmental and Federal and State Laws.

- a. NPA section 216(j)(1) states “nothing in this section affects any requirements of any environmental law of the United States including NEPA.”¹⁶ Section 216(j)(2) states that DOE/FERC coordination does not apply at numerous national protective areas.¹⁷

- b. EPAct does not require NEPA actions for designation of a NIETC.¹⁸ State Laws must be followed.¹⁹

- c. A portion of the National Forest Tucson-Nogales corridor approved by the ACC is being nominated to be a National Wilderness Area in the next month or so which would exclude it as a NIETC..

Sincerely,

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(note: the Line Siting Committee did not assess “need” for the TEP 345 kV line in Case No. 111); however the ACC Biennial Transmission Assessment repeated TEP’s proposal but fails to show any Arizona-Mexico transmission needs, and other activities including the Southwest Area Transmission (SWAT) regional planning group has no Arizona-Mexico proposals or studies, and the Arizona

¹⁵ FPA section 216(a)(4)(E).

¹⁶ FPA section 216(j)(1) states “except as specifically provided, nothing in this section affects any requirements of any environmental law of the United States including the National Environmental Policy Act of 1969.” IN addition, any permits issued by FERC will require approvals from “Fish and Wildlife Service, and from State agencies that administer the Clean Water Act, the Clean Air Act and the Coastal Zone Management Act (which are Federal statutes administered by State agencies).” [from Frequently Asked Questions, at <http://nietc.anl.gov/faq/index.cfm#Sensitive>] Also, “any routing of a transmission facility through property owned by the United States or a State would be subject to the consent of the appropriate Federal or State land-managing agency, because the statute does not grant the holder of a FERC permit the right of eminent domain over such land.” [from Frequently Asked Questions, at <http://nietc.anl.gov/faq/index.cfm#Sensitive>] Also, FPA section 612(g) states “nothing in this section precludes any person from constructing or modifying any transmission facility in accordance with State law.” FPA section 216(h)(5)(B) states the Secretary of Energy “and heads of other agencies shall streamline the review and permitting of transmission within corridors designated under section 503 of the Federal Land Policy and Management Act of 1976 by fully taking into account prior analysis and decisions relating to corridors.” The NEPA Scoping Document for EPAct section 368 national utility corridors on Federal lands cited section 503 when the National Forest covered a natural gas pipeline utility corridor for TEP in the designated utility corridor area (now the western route) for TEP.

¹⁷ FPA section 216(j)(2) states that the DOE and FERC coordination roles in 216(h), coordination “shall not apply to any unit of the National Park System, the National Wildlife Refuge System, the National Wild and Scenic Rivers System, the National Trails System, the National Wilderness Preservation System, or a National Monument.”

¹⁸ FPA section 216(a)(2) does not require a Programmatic EIS under the National Environmental Policy Act (NEPA), since section 102(2)(C) of NEPA requires that all Federal agencies include an environmental impact statement in “every recommendation or report on proposals for legislation other major Federal actions significantly affecting the quality of the human environment.” A National Corridor designation is not a determination that transmission or even should, be built; it is not a proposal. It should be noted that all proposals for Federal siting permits will be subject to, as appropriate, project-specific NEPA review Nothing in FPA section 216 alters the applicability of Federal Environmental and cultural statutes and regulations. [from Frequently Asked Questions, at <http://nietc.anl.gov/faq/index.cfm#PEIS>

¹⁹ FPA section 216(g) states “nothing in this section precludes any person from constructing or modifying any transmission facility in accordance with state law.”

²⁰ EPAct section 1222(a)(1)(A) permits WAPA to fund a projected project “located in a national interest electric transmission corridor designated under section 216(a) of the Federal Power Act and will reduce congestion of electric transmission in interstate commerce.” The funding for such projects is provided in EPAct section 1222(g). Also, EPAct section 1222(c)1) permits WAPA to “accept and use funds contributed by another entity for the purpose of carrying out the Project.” Using the later quote, then TEP could fund all or part of a WAPA expansion projected between Phoenix to Tucson which will provide a greater supply capability for the Tucson-Nogales existing 115 kV line.