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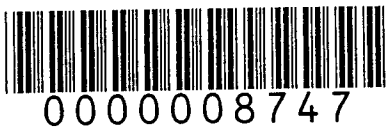

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MEMORANDUM

TO: Docket Control

FROM: Ernest G. Johnson
Director
Utilities Division

DATE: May 27, 2004

RE: STAFF REPORT ANALYZING TUCSON ELECTRIC POWER AND UNISOURCE ENERGY SERVICES RESPONSE TO DECISION NO. 66615 REGARDING THE TEP AND CITZENS COMMUNICATION COMPANY JOINT APPLICATION FOR DELAY OF IN-SERVICE DATE OR WAIVER OF PENALTIES (DOCKET NO. E-01032A-99-0401)

Attached is an Arizona Corporation Commission Staff ("Staff") Report regarding the sufficiency of the Tucson Electric Power Company ("TEP") and UniSource Energy Services ("UES") response to Commission Decision No. 66615. This report supplements and augments a March 11, 2004 Staff Report and considers both the February 9, 2004 filed TEP and UES response and their April 30, 2004 supplemental response with an associated May 3, 2004 errata.

The April 30, 2004 filed TEP and UES supplemental response satisfactorily responds to deficiencies noted by Staff in its March 11, 2004 Staff Report regarding the companies' prior response to questions raised by the Commission in Decision No. 66615. The TEP and UES supplemental response also satisfactorily:

1. Updates the power plant operations procedure and the transmission service restoration procedures previously approved as elements of Citizens' Outage Response Plan, and

2. Modifies the UES Switching Procedures by refining the expected time required to restore service following a transmission line outage with the proposed 46 kV TEP emergency feeder tie to Kantor and all proposed remote controlled transmission and/or distribution feeder switching improvements.

It is Staff's opinion that TEP and UES have taken all reasonable steps in their Outage Response Plan to improve their ability to restore service following an existing transmission line outage. On this basis, Staff finds the TEP and UES Outage Response Plan to be sufficient. However, the Commission ordered UES' predecessor, Citizens, to build facilities that assure electric customers in Santa Cruz County have reliable service founded on the principle of **continuity** of service for outage of a transmission line as opposed to restoration of service. This requirement can only be achieved via a second transmission line to Nogales. Even with the new transmission line, a Reliability Must Run ("RMR") condition is expected to exist in Santa Cruz County by the summer of 2008 per the new UES forecast. In fact, the RMR operation of the Valencia generating units becomes inadequate when the Santa Cruz County load reaches

approximately 75 MW. According to the UES forecast (Exhibit 2) the 75 MW load level may be experienced by the summer of 2010.

Therefore, Staff recommends that this matter appear on an open meeting so the Commission may make a determination that the TEP and UES updated Outage Response Plan for Santa Cruz County is sufficient. Staff further recommends the Commission approve and order the following items:

1. Continued waiver of penalties, first authorized by Decision No. 66615, retroactive to June 1, 2004, conditioned upon achievement of the following improvements solely under the control of the applicants:

    a. UES documented construction completion and operation of 25 megavolt-amperes reactive ("MVAR") of new shunt capacitors dispersed among feeders originating from each UES distribution substation in Santa Cruz County by July 1, 2004.

    b. TEP demonstrated remote control startup of Valencia generating units and synchronization with the Western Interconnection transmission system by July 1, 2004.

    c. TEP demonstrated remote emergency restorative switching capability to serve Kantor and Cañez substations from Canoa and remote switching for service restoration to Sonoita and Valencia substations via Valencia generators by July 1, 2004.

    d. TEP documented construction completion of a 46 kV emergency tie line, of at least 20 megawatt ("MW") capacity, between the TEP Canoa Substation and the UES Kantor Substation. ($1.9 million by August 31, 2004)

    e. TEP documented completion of GIS data conversion to Smallworld (July 2004), STORMS (October 2004), and Outage Management System (December 2004) software by January 1, 2005.

2. Waiver of penalties after August 1, 2004 be further conditioned upon completion of the following processes which are not solely under the control of the applicants:

    a. The annual TEP and UES self-certification letter due to the Commission on August 1 per Certificate of Environmental Compatibility ("CEC") Condition 29 must include:

        i. Documentation by TEP and UES of how they have expended every reasonable effort to expedite the timely resolution of the Federal EIS and permitting processes.

        ii. Documentation by TEP and UES of how they have expended every reasonable effort to expedite and timely obtain from all state, county and

local governmental agencies, especially the State Land Department, all required approvals and permits necessary to construct the project as defined in Condition 1 of their CEC.

b. Given that the second transmission line to Nogales will not be constructed by January 15, 2005, the Commission expects TEP and UES to seek an extension of time for their CEC before it expires. According to Condition 17 of the CEC granted by Decision No. 64356, TEP and UES authorization to construct the subject transmission facilities expires three years from the date (January 15, 2002) the CEC was approved by the Commission.

c. Any TEP and UES request for extension of time of their CEC granted by Decision No. 64356 must be accompanied by:

   i. Filing of a completed Federal Final EIS and associated Records of Decision from the various Federal Agencies with the Commission in accordance with Condition 15 of their CEC, and

   ii. Revised project completion dates reflecting the outcome of the federal, state and local permitting processes.

3. Waiver of the storm season spinning reserve requirement of Valencia generating units approved by Decision No. 62011 shall become effective once the above conditions 1.a through 1.d are all met.

4. Waiver of monthly black start testing of turbines once they are tested in accordance with Southwest Reserve Sharing Group ("SRSG") requirements and are found to be in compliance as documented by correspondence from SRSG and continue to be so tested.

5. TEP and UES shall commence data collection and retention to document annual distribution system reliability indices System Average Interruption Frequency Index ("SAIFI") System Average Interruption Duration Index ("SAIDI") and Customer Average Interruption Duration Index ("CAIDI") as defined by Institute of Electrical and Electronic Engineers ("IEEE") 1366, on an on-going basis for each distribution feeder and distribution substation. Such data must also be aggregated to establish the distribution system reliability indices for each division or geographical sub-region of their respective service areas. This annual reliability data is to be made available upon request by Staff.

6. TEP and UES shall document, upon request of Commission Staff, enforcement of its customer power factor requirements and all system improvements made to assure appropriate system voltage control within Western Electricity Coordinating Council ("WECC") and National Electric Safety Code ("NESC") requirements.

7. RMR Studies are to be performed and solutions necessary to resolve system RMR deficiencies currently forecast for 2008 are to be determined and reported as part of the TEP and UES ten year transmission plan by January 31, 2005.

The above recommendations presume an on-going process for continued Commission oversight of TEP and UES compliance with its order to construct a second transmission line to serve electric customers in Santa Cruz County and the City of Nogales. The proposed process is founded on the principle that a waiver of penalty granted to TEP and UES in Decision No. 66615 will continue in effect as long as TEP and UES comply with the conditions recommended above. Compliance with conditions requiring demonstration of construction and operation of new facilities will be verified by the Utilities Division Engineering Staff. Compliance with conditions requiring documentation by TEP and UES will be determined by the Utilities Division Compliance Office. TEP or UES failure to satisfactorily comply with any of the above recommended conditions may warrant the Commission initiating new proceedings to rescind the waiver of penalties.

EGJ:JDS:rdp

Originator: Jerry D. Smith

Attachment: Original and thirteen copies

Service List for:
TUCSON ELECTRIC POWER COMPANY and UNISOURCE ENERGY SERVICES
Docket No. E-01032A-99-0401

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STAFF REPORT
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION

STAFF SUFFICIENCY ASSESSMENT OF
TEP AND UNISOURCE ENERGY SERVICES
RESPONSE TO DECISION NO. 66615
DOCKET NO. E-01032A-99-0401

TEP AND UNISOURCE ENERGY SERVICES
APPLICATION FOR A DELAY OF IN-SERVICE DATE
OR WAIVER OF PENALTIES

MAY 20, 2004

STAFF ACKNOWLEDGMENT

This report concerns the Tucson Electric Power ("TEP") and Citizens Communication Company ("Citizens") application for delay of in-service date or waiver of penalties, Docket No. E-01032A-99-0401 and was prepared by Jerry Smith. Subsequent to the original application, UniSource Energy Services ("UES") acquired the Citizens Communications Company electric facilities in Arizona in August 2003. This Staff Report provides an analysis of the TEP and UES response to Commission questions contained in Decision No. 66615. It also addresses the sufficiency of the applicants' updated power plant and transmission service restoration procedures previously approved as elements of Citizens' Outage Response Plan.

Mr. Smith was Staff's witness in all other proceedings regarding this matter and for the siting of the required second transmission line to Nogales. He was responsible for the review and analyses of the companies' application, review of the Commission's records of each company, determining their compliance with Commission policies/rules and reviewing customer complaints filed with the Commission regarding this matter. Mr. Smith also performed the engineering and technical analysis, and recommended action appropriate for pending delays in the construction of a second transmission line to serve Santa Cruz County in a prior Staff Report dated October 31, 2003. This report also supplements the Staff findings documented in a Staff Report filed on March 11, 2004.

Jerry D. Smith
Electric Utility Engineer

TABLE OF CONTENTS

EXHIBITS

PURPOSE OF STAFF REPORT

This Staff Report supplements and augments a March 11, 2004 Staff Report and has a four fold purpose. It critiques Tucson Electric Power Company ("TEP") and UniSource Energy Services, Inc. ("UES") responses to Commission questions posed in Decision No. 66615. Secondly, it contains Staff's comments on the sufficiency of TEP's and UES' updated Outage Response Plan for Santa Cruz County filed on April 30, 2004. This report also gives an update on the various federal processes to permit the proposed transmission line from TEP's South Substation to the new TEP Gateway Substation and from Gateway Substation to UES' Valencia Substation in Nogales, Arizona. Finally, this report recommends a process that will a) assure that the TEP and UES Outage Response Plan remains sufficient, b) provides for future updates on the federal permitting processes and c) addresses a means of administering future waiver of penalties first prescribed in Decision No. 66615.

CRITIQUE OF RESPONSES TO COMMISSION QUESTIONS

On February 9, 2004, TEP and UES filed a response to Commission Decision No. 66615. Subsequently, Staff filed a Staff Report on March 11, 2004, that recommended that TEP and UES file supplemental information by April 30, 2004 to:

1. Resolve deficiencies, noted by Staff in its March 11, 2004 report, in the TEP and UES response to questions raised by the Commission in Decision No. 66615.

2. Update the power plant operations procedure and the transmission service restoration procedures previously approved as elements of Citizens' Outage Response Plan.

3. Modify the UES Switching Procedures by refining the time required to restore service following a transmission line outage with the proposed 46 kV TEP emergency feeder tie to Kantor and all proposed remote controlled transmission and /or distribution feeder switching improvements.

TEP and UES did file supplemental information on April 30, 2004 as requested. Staff has reviewed the TEP and UES supplement response to the Commission's questions raised in Decision No. 66615 and offers the following observations and comments.

a. Can Citizens' operating procedures be improved to shorten the restoration time for transmission outage events utilizing TEP's operations center and field personnel?

Several items reported by TEP and UES will directly affect their ability to improve operating procedures for Santa Cruz County. Integrating operational control of UES' facilities via TEP's operation centers and utilizing both TEP and UES field personnel has the potential to shorten the service restoration time following transmission outage events. The updated UES Service

Restoration Procedures (Exhibit 1) now incorporates the operational effects of integrating the following operational tasks from TEP's operation control centers:

Table 1
Integration of UES into TEP's Operation Control Centers

Task	Time Savings	Est. Cost	When
Remote monitoring and control of Santa Cruz County substations.	5-10 minutes	$60,000	May 2004
Remote startup, control & synchronization Of Valencia generating units.	45 minutes	$40,000	May 2004
GIS data conversion to: SmallWorld	-	+	July 2004
STORMS	-	+	Oct. 2004
Outage Management System (OMS)	-	$300,000	Dec. 2004

Completion of the above operational integration improvements is critical if a reduction in time to restore service to customers following outage of the existing transmission line serving Santa Cruz County is to be achieved.

The updated UES Service Restoration Procedures (Exhibit 1) now reflects restorative time savings achievable with the remote control of distribution feeders and the startup and control of the Valencia units from the TEP control centers. In addition, TEP proposes to construct a 46 kV emergency tie line between Canoa Substation and the UES Kantor Substation to facilitate service restoration to Kantor and Cañez substations during the interim time it takes to construct the second transmission line to Nogales. Table 2 is provided below to document the restoration time benefits that UES customers will experience from each of these capital investments.

Table 2
Service Restoration Time (Minutes)
Following Outage of Existing 115 kV Transmission Line

Substation	Existing	Table 1 Improvements	46 kV Emergency Tie Addition	Second Line to Nogales
Valencia	110	45	45	0*
Sonoita	150	55	55	0*
Cañez	190	60	10	10
Kantor	245	65	5	5

Notes:
1. Source - TEP and UES Supplemental Response, April 30, 2004, page 9.
2. Assumes evening or weekend event for "existing" restoration time.
*** Continuity of service for transmission line outage**

b. Are any of the following improvements cost effective as interim restoration of service solutions to the construction of a second transmission line?

i. A limited number of automated or remote controlled distribution feeder ties between substations.

ii. Improved remote electronic dispatch control capability of the Valencia generators or improved generator controls.

Staff agrees with the TEP and UES assessment that the operational time savings documented in Table 1 do warrant and justify the estimated capital expenditures associated with the proposed operational integration improvements.[1] The $400,000 of operational integration costs result in significant reductions in the interim service restoration times. This is evident when comparing the restoration times in the "Existing" and "Table 1 Improvements" columns of Table 2. The operational integration improvements of Table 1 have long term system and customer service benefits that go beyond just restoring service following a transmission outage. They allow real time monitoring and control of the UES transmission and distribution system for daily operation; planned switching for maintenance and repairs; and emergency response for all types of outages.

Implementation of TEP's remote starting capability of the Valencia units and remote control of transmission and distribution devices also result in a 65 minute improvement in the service restoration of the Valencia Substation. In turn, these operational integration improvements yield a 95 minute service restoration time improvement for the Sonoita Substation.[2] However, these service restoration improvements are merely an interim benefit to customers served from the Valencia and Sonoita Substations. With the construction of the second transmission line, Valencia and Sonoita Substation customers can expect continuity of service for outage of a transmission line.

The interim service restoration improvements for Valencia and Sonoita are not affected by the construction of a 46 kV emergency tie line to Kantor. However, Kantor and Cañez substation customers do benefit from TEP's contemplated use of the new 46 kV TEP emergency feeder tie to restore service. The cost of this emergency tie is estimated to be $1.9 million. It will enable service to be restored within 5 to 10 minutes to the two substations following any outage of the existing transmission line to Nogales. With a 46 kV emergency tie, service restoration to Kantor and Cañez can proceed concurrently with efforts to restore service at Valencia and Sonoita. This represents an additional 60 minute and 50 minute service restoration time savings, respectively,[3] over the time otherwise required to restore service from Sonoita once it is re-energized. These service restoration time savings are a long term benefit that will exist for Kantor and Cañez even when the second transmission line is constructed to Nogales. This long term benefit seems to marginally justify the $1.9 million expenditure for a 46 kV emergency tie line. This expenditure is off-set by all avoided operational cost of the Valencia generation units for standby or emergency service. Staff continues to believe the 3 to 4 hours presently required to restore

[1] TEP and UES Supplemental Response, April 30, 2004, page 10.
[2] ibid, page 9.
[3] Table 2: Table 1 Improvements vs. 46 kV Emergency Tie.

service to Kantor and Cañez customers following a transmission line outage is an unacceptable level of service.

e. How much emergency service is available from TEP via a 46 kV line to Kantor?

TEP reports that it could provide approximately 20 MW of emergency service to UES via a new 46 kV tie line with Kantor Substation. However, due to longstanding TEP two-county financing limitations, the 46 kV switch must remain normally open between the two systems. This means such service is strictly of a service restoration character and cannot assure continuity of customer service for outage of the existing 115 kV line to Nogales. Given that the Valencia generating units are rated at 46 MW, the maximum load that could then be served for outage of the existing transmission line is 67 MW with the construction of the 46 kV emergency tie.

c. What refinements are appropriate in Citizens' RAC-2 peak load forecast? Please define the annual hours of exposure when load is forecast to exceed the capacity of the existing transmission line.

TEP has refined Citizens' RAC-2 peak load forecast for UES customers in Santa Cruz County (Exhibit 2). The "normal" forecast is similar to Citizens' RAC-2 forecast, but UES's "high" forecast is somewhat lower. TEP and UES report[4] their "high" forecast incorporates the most recent peak and corresponding weather history and utilizes actual load and weather data for the years 1999 – 2003. Weather in Nogales during July 2003 reportedly was the hottest in ten years. According to UES the most recent data indicates a weather impact of 0.84 MW per cooling degree-day for Santa Cruz County customers' peak load. Utilization of this factor with extreme weather produced an UES "high" forecast of 64.4 MW for 2004. Forecasted customer and sales growth were applied by TEP to the UES 2004 "high" forecast to obtain "high" forecast peak load for future years.

TEP and UES provided in their Supplemental Response the annual hours of exposure when the UES load is forecast to exceed the UES load serving capability. An estimate of the number of hours that the UES "normal" forecast Santa Cruz County load will exceed 60 MW and 67 MW, respectively, are indicated in the following table.

Table 3
Annual Duration (Hours)
Load Exceeds Service Capability

Load Capability (MW)	2004	2005	2006	2007
60	10	58	116	182
67	0	0	0	5

Notes:

[4] TEP and UES Supplemental Response, April 30, 2004, pages 10 and 11.

1. The existing transmission line limitation was estimated to be 60 MW in RAC-2.
2. The 67 MW limit assumes 46 MW of generation and 20 MW of emergency tie.

d. Is the proposed interconnection with Mexico at the Gateway substation an interim service restoration solution for delay of the proposed South to Gateway transmission line through the Coronado National Forest?

TEP and UES report[5] that construction of the Gateway Substation to Valencia Substation 115 kV line and the 345 kV Gateway interconnection with Mexico could legally proceed once a Presidential Permit is issued by the U. S. Department of Energy ("DOE"). Such construction is not dependent upon permitting by the Bureau of Land Management ("BLM") or U.S. Forest Service ("USFS") because such facilities do no traverse federal lands. However, such an interconnection with Mexico would require an agreement with Comisión Federal de Electricidad ("CFE") that owns and operates the national electric utility of Mexico. TEP and UES doubt that such an agreement with CFE is likely for an interconnection that is solely for emergency restoration of the UES system.

TEP and UES also report a variety of technical obstacles to establishing an interconnection with Mexico solely for the purpose of restoring service to Santa Cruz County. They cite concerns about the capacity of the Mexican system in Nogales, Sonora. While there is sufficient capacity in Santa Ana, it would require construction of approximately 60 miles of 345 kV line in Mexico at a cost of approximately $60 million. The CFE would have to see merit in the proposed emergency interconnection to justify such an expenditure.

Staff agrees with the legal and technical conclusions offered by TEP and UES. It appears an interconnection with Mexico at Gateway Substation is not economically justified without the commercial benefits of mutual wholesale power exchanges. Such an interconnection is only achievable once the northern Sonora portion of Mexico's system is operated in synchronism with the Western Interconnection grid of the United States. Therefore Staff does not consider the interconnection with Mexico as a viable interim service restoration solution for Santa Cruz County.

SUFFICIENCY OF UPDATED OUTAGE RESPONSE PLAN

The Citizens Outage Response Plan approved and adopted by the Commission in Decision No. 62011 included power plant operations procedures and three procedures for restoring transmission service following a transmission line outage. TEP and UES have updated the UES Service Restoration Procedures for loss of the 115 kV line to Nogales to reflect utilization of 1) the proposed 46 kV emergency feeder tie to Kantor, 2) automated or remote controlled switching devices that enable service restoration without depending on dispatching of field personnel, and 3) remote controlled startup and synchronization of the Valencia generating units. These

[5] Ibid, pages 11-12.

procedures are provided as Staff Exhibit 1. The TEP and UES updated procedures reflect significant reductions in the time to restore service following an existing 115 kV transmission line outage.

The UES reliability must–run ("RMR") generation study report (Exhibit 3) indicates that the pre-Gateway Simultaneous Import Limit ("SIL") is 65 MW. However, UES is expending $270,000 to install 24.6 MVARs of shunt capacitors dispersed on feeders of each UES substation by June 1, 2004. This increases the pre-Gateway SIL to 70 MW.[6] Utilizing the UES "normal" load forecast implies UES can meet its load serving requirements without having to run the Valencia turbines through summer peak 2007. Therefore, a RMR condition is expected to exist in Santa Cruz County by the summer of 2008 per the new forecast.

The economic impact of such RMR operation of the Valencia units is significant because UES has a full requirements power purchase contract with Pinnacle West Capital Corporation ("PWEC"). Therefore, operating expenses of the Valencia units occur on top of and above the cost of the power otherwise purchased and contracted for via PWEC. Operating the Valencia units during summer storm season in preparation for restoring service following a transmission line outage has the same cost impacts even when the load is below the 65 MW pre-Gateway SIL.

TEP and UES have requested elimination of the Commission requirement that the Valencia units be operated in standby (spinning reserve) mode during any period storms poses a threat. They argue that there is little system benefit from such a practice given the service restoration improvements achieved in the revised procedures. Furthermore, they point out there are fuel consumption costs, higher emission implications, and loss of turbine life associated with such operation. Staff is convinced by their argument given that the TEP and UES updated procedures reflect significant reductions in the time to restore service following a 115 kV transmission line outage. Therefore, Staff agrees that the requirement to operate the Valencia units in standby during storm season should be rescinded once all of the 25 MVAR of capacitors, Table 1 improvements and the 46 kV emergency tie are constructed, installed and operational.

TEP and UES have also requested that they be allowed to discontinue the monthly black start testing of the Valencia generating units. Instead the companies propose the black start capability of the turbines be tested in accordance with Southwest Reserve Sharing Group ("SRSG") requirements. Staff concurs with this proposal as it aligns with the general provisions that have been imposed on merchant power plants in recent plant siting cases. Compliance with SRSG requirements assures application of a consistent standard of performance for all generation used in the reserve sharing pool.

It is Staff's opinion that TEP and UES have taken all reasonable steps in their Outage Response Plan to improve their ability to restore service following an existing transmission line outage. On this basis, Staff finds the TEP and UES Outage Response Plan to be sufficient. However, the Commission ordered UES' predecessor, Citizens, to build facilities that assure

[6] ibid, page 4.

electric customers in Santa Cruz County have reliable service founded on the principle of continuity of service for outage of a transmission line as opposed to restoration of service. None of the aforementioned operational improvements achieve that purpose. In fact, the UniSource Energy Services RMR Study filed on February 9, 2004, indicates that, even with the proposed new 115 kV transmission line from Gateway to Valencia, a system voltage violation would occur for the outage of the new line or the Valencia to Sonoita line.

The RMR study indicates that this service concern can be managed technically via the RMR operation of the Valencia generating units until the Santa Cruz County load reaches approximately 75 MW. According to the UES forecast (Exhibit 2) the 75 MW load level may be experienced by the summer of 2010. TEP and UES have committed to studying and analyzing in 2004 the merits of a second 115 kV line from Gateway to either Valencia or Sonoita. Staff would expect TEP and UES to file such study results with their ten year transmission plan in January 2005.

In addition, Staff needs the ability to monitor the quality of service being provided by TEP and UES on an on-going basis. Judging the level of service provided in the past has been difficult given that no specific reliability performance standards have been endorsed by the Commission. Many utilities use numerical indices as a measure of an average customer's distribution service reliability. Such reliability indices are typically computed on an annual basis. A utility may then set reliability targets based upon benchmarked data from its own system. The Institute of Electrical and Electronic Engineers ("IEEE") has adopted a standard definition of several reliability indices for electric distribution systems and established a national benchmark data base via a 1995 IEEE survey of the electric utility industry.

The most commonly used IEEE reliability indices are System Average Interruption Frequency Index ("SAIFI"), System Average Duration Index ("SAIDI"), and Customer Average Interruption Duration Index ("CAIDI"). Staff recommends that TEP and UES begin collecting system data to establish SAIDI, SAIFI, and CAIDI as defined per IEEE 1366 for their respective systems on an on-going basis. This will allow Staff to ascertain whether TEP and UES distribution service reliability is improving or deteriorating over time.

TEP and UES have also identified system voltage as quality of service concerns for Santa Cruz County. This is demonstrated by the need for the 25 MVAR of shunt capacitors in 2004, and the need for RMR operation of the Valencia units beginning in 2008 and a voltage criteria violation when Santa Cruz County load reaches approximately 75 MW In order to assure these voltage concerns are being properly managed by the respective utilities, Staff proposes that TEP and UES must provide documentation upon request of how they are enforcing their customer power factor requirements and what system improvements they are making to assure system voltage is within Western Electricity Coordinating Council ("WECC") and National Electric Safety Code ("NESC") requirements.

FEDERAL PERMITTING PROCESS UPDATE

Composing the final Environmental Impact Statement ("EIS") for the Gateway Project is a detailed and comprehensive process involving several federal agencies. As explained to Staff, the EIS is a disclosure document highlighting the environmental reviews conducted pursuant to the National Environmental Policy Act ("NEPA"). The requirements under NEPA for a certain project depend on the particulars of each case and what federal lands and/or agencies are implicated by the project. For the Gateway Project, while the Department of Energy ("DOE") is the lead agency for the EIS, the United States Forest Service ("USFS") and Bureau of Land Management ("BLM") have vital and key roles in the EIS' composition. The United State Fish and Wildlife Service ("USFW") and the U.S. Section of the International Boundary Water Commission ("USIBWC") also have significant roles in the process. These agencies are hereafter collectively referred to as the "Federal Agencies." Each agency must ensure that all of its requirements are incorporated in the NEPA process and the EIS.

Currently, the DOE, USFS and BLM are analyzing the abundance of comments submitted on the Draft EIS. The Draft EIS was noticed August 27, 2003. Commission Staff submitted comments on the Draft EIS on October 14, 2003. Staff's comments focused on the need for the Gateway Project to improve the reliability of electric service to UES customers in Santa Cruz County. Staff attached portions of the transcript in the proceedings before the Power Plant and Transmission Line Siting Committee ("Line Siting Committee") in Docket No. L-00000C-01-0111 detailing the need for the Gateway Project to reliably serve customers. Staff indicated in its comments that neither new local generation nor other means would preempt the need for a second transmission line.

On February 25, 2004, Staff met with representatives of UES and TEP, USFS, BLM and DOE to gain a better understanding of the federal process and to explore and encourage ways to expedite the process while still ensuring a thorough analysis. Staff understands that the Final EIS ("FEIS") is now expected to be issued in the July - August 2004 time frame.[7] The Federal Agencies indicated that they each intend to issue a Record of Decision ("ROD") concurrent with the FEIS ROD. The USFS also indicated it intends to issue a Plan Amendment for the Coronado National Forest concurrent with its ROD. Staff also informed the USFS, BLM and DOE regarding the Arizona siting process for power plants and transmission lines.

The concurrent action offered by Federal Agencies is viewed as a positive response to Commission criticism concerning delays posed by the federal environmental and permitting processes. The Federal Agencies have not indicated which route(s) they will support so there remains a possibility that they may disagree among themselves as to the preferred route. Staff pledges to continue to be active in discussions with the Federal Agencies and believes that they have been receptive to Staff's comments and suggestions.

[7] Ibid, page 14.

The Arizona State Land Department filed comments to the latest draft EIS with Dr. Mark Blauer of TetraTech, the DOE's EIS contractor, in March. The Arizona State Land Department provided a copy of their EIS comments to Staff at a meeting on April 29, 2004. Those comments are attached as Exhibit 4. It is unknown how the Federal Agencies will view the comments submitted by the State Land Department.

STAFF CONCLUSIONS AND RECOMMENDATIONS

The April 30, 2004 filed TEP and UES supplemental response satisfactorily responds to deficiencies noted by Staff in its March 11, 2004 Staff Report regarding the companies' prior response to questions raised by the Commission in Decision No. 66615. The TEP and UES supplemental response also satisfactorily:

1. Updates the power plant operations procedure and the transmission service restoration procedures previously approved as elements of Citizens' Outage Response Plan, and

2. Modifies the UES Switching Procedures by refining the expected time required to restore service following a transmission line outage with the proposed 46 kV TEP emergency feeder tie to Kantor and all proposed remote controlled transmission and/or distribution feeder switching improvements.

It is Staff's opinion that TEP and UES have taken all reasonable steps in their Outage Response Plan to improve their ability to restore service following an existing transmission line outage. On this basis, Staff finds the TEP and UES Outage Response Plan to be sufficient. However, the Commission ordered UES' predecessor, Citizens, to build facilities that assure electric customers in Santa Cruz County have reliable service founded on the principle of continuity of service for outage of a transmission line as opposed to restoration of service. This requirement can only be achieved via a second transmission line to Nogales. Even with the new transmission line, a RMR condition is expected to exist in Santa Cruz County by the summer of 2008 per the new UES forecast. In fact, the RMR operation of the Valencia generating units becomes inadequate when the Santa Cruz County load reaches approximately 75 MW. According to the UES forecast (Exhibit 2) the 75 MW load level may be experienced by the summer of 2010.

Therefore, Staff recommends that this matter appear on an open meeting so the Commission may make a determination that the TEP and UES updated Outage Response Plan for Santa Cruz County is sufficient. Staff further recommends the Commission approve and order the following items:

1. Continued waiver of penalties, first authorized by Decision No. 66615, retroactive to July 1, 2004 conditioned upon achievement of the following improvements solely under the control of the applicants:

a. UES documented construction completion and operation of 25 megavolt-amperes reactive ("MVAR") of new shunt capacitors dispersed among feeders originating from each UES distribution substation in Santa Cruz County by July 1, 2004.

b. TEP demonstrated remote control startup of Valencia generating units and synchronization with the Western Interconnection transmission system by July 1, 2004.

c. TEP demonstrated remote emergency restorative switching capability to serve Kantor and Cañez substations from Canoa and remote switching for service restoration to Sonoita and Valencia substations via Valencia generators by July 1, 2004.

d. TEP documented construction completion of a 46 kV emergency tie line, of at least 20 megawatt ("MW") capacity, between the TEP Canoa Substation and the UES Kantor Substation. ($1.9 million by August 31, 2004)

e. TEP documented completion of GIS data conversion to Smallworld (July 2004), STORMS (October 2004), and Outage Management System (December 2004) software by January 1, 2005.

2. Waiver of penalties after August 1, 2004 be further conditioned upon completion of the following processes which are not solely under the control of the applicants:

a. The annual TEP and UES self-certification letter due to the Commission on August 1 per Certificate of Environmental Compatibility ("CEC") Condition 29 must include:

i. Documentation by TEP and UES of how they have expended every reasonable effort to expedite the timely resolution of the Federal EIS and permitting processes.

ii. Documentation by TEP and UES of how they have expended every reasonable effort to expedite and timely obtain from all state, county and local governmental agencies, especially the State Land Department, all required approvals and permits necessary to construct the project as defined in Condition 1 of their CEC.

b. Given that the second transmission line to Nogales will not be constructed by January 15, 2005, the Commission expects TEP and UES to seek an extension of time for their CEC before it expires. According to Condition 17 of the CEC granted by Decision No. 64356, TEP and UES authorization to construct the subject transmission facilities expires three years from the date (January 15, 2002) the CEC was approved by the Commission.

c. Any TEP and UES request for extension of time of their CEC granted by Decision No. 64356 must be accompanied by:

i. Filing of a completed Federal Final EIS and associated Records of Decision from the various Federal Agencies with the Commission in accordance with Condition 15 of their CEC, and

ii. Revised project completion dates reflecting the outcome of the federal, state and local permitting processes.

3. Waiver of the storm season spinning reserve requirement of Valencia generating units approved by Decision No. 62011 shall become effective once the above conditions 1.a through 1.d are all met.

4. Waiver of monthly black start testing of turbines once they are tested in accordance with Southwest Reserve Sharing Group ("SRSG") requirements and are found to be in compliance as documented by correspondence from SRSG and continue to be so tested.

5. TEP and UES shall commence data collection and retention to document annual distribution system reliability indices (SAIFI, SAIDI, and CAIDI), as defined by IEEE 1366, on an on-going basis for each distribution feeder and distribution substation. Such data must also be aggregated to establish the distribution system reliability indices for each division or geographical sub-region of their respective service areas. This annual reliability data is to be made available upon request by Staff.

6. TEP and UES shall document, upon request of Commission Staff, enforcement of its customer power factor requirements and all system improvements made to assure appropriate system voltage control within Western Electricity Coordinating Council ("WECC") and National Electric Safety Code ("NESC") requirements.

7. RMR Studies are to be performed and solutions necessary to resolve system RMR deficiencies currently forecast for 2008 are to be determined and reported as part of the TEP and UES ten year transmission plan by January 31, 2005.

The above recommendations presume an on-going process for continued Commission oversight of TEP and UES compliance with its order to construct a second transmission line to serve electric customers in Santa Cruz County and the City of Nogales. The proposed process is founded on the principle that a waiver of penalty granted to TEP and UES in Decision No. 66615 will continue in effect as long as TEP and UES comply with the conditions recommended above. Compliance with conditions requiring demonstration of construction and operation of new facilities will be verified by the Utilities Division Engineering Staff. Compliance with conditions requiring documentation by TEP and UES will be determined by the Utilities Division Compliance Office. TEP or UES failure to satisfactorily comply with any of the above

recommended conditions may warrant the Commission or Staff initiating new proceedings to rescind the waiver of penalties.

EXHIBIT 1

STAFF EXHIBIT 1

UniSource Service Restoration Procedures
(UES April 30, 2004 Exhibits A, B and C)

EXHIBIT A

SANTA CRUZ DISTRICT

UniSourceEnergy SERVICES	Power Plant Black Start Remote Process	Issue Date 04/26/99	Revision Date	Page 1 of 1
		Approved: M. Flores		

Process

1. Initiate remote start on one (1) turbine.
2. Call substation crew to Valencia Substation.
3. Ensure all feeder breakers are open, bus tie breaker is closed, and 115kV high side circuit switchers are open remotely via SCADA at Valencia Substation.
4. Initiate remote start on 2nd turbine - approximately 5 minutes after 1st turbine starts.
5. Turbine bus breaker number 122 will automatically close to dead bus - approximately 15 minutes from Step 1.
6. Increase bus frequency remotely to 60.5 Hz .
7. Close breaker 6241 remotely to pick up turbine auxiliaries.
8. 2nd turbine will synchronize to 1st turbine and to feeder 6241.
9. Balance load and adjust frequency to 60.5 Hz.
10. If additional load is picked up by the turbines, frequency needs to be adjusted accordingly before feeder breakers are closed - see Note 1.
11. Remote start of the 3rd turbine will be initiated if it is required to pick up Sonoita Substation load.

Note 1: When turbine loading is 5MW, switch fuel to diesel and gas (50/50).
Note 2: The time from Step 1 to Step 9 is approximately 30 minutes.

Feeder Priority List

Valencia Substation	Sonoita Substation	Cañez Substation	Kantor Substation
6241	6207	8201	7201
6245	6204	8202	7202
6242	6203	8203	7203
6244	6206		
6243	6205		
6246			

Exhibit B
UNS Electric Inc.
Santa Cruz County System Overview

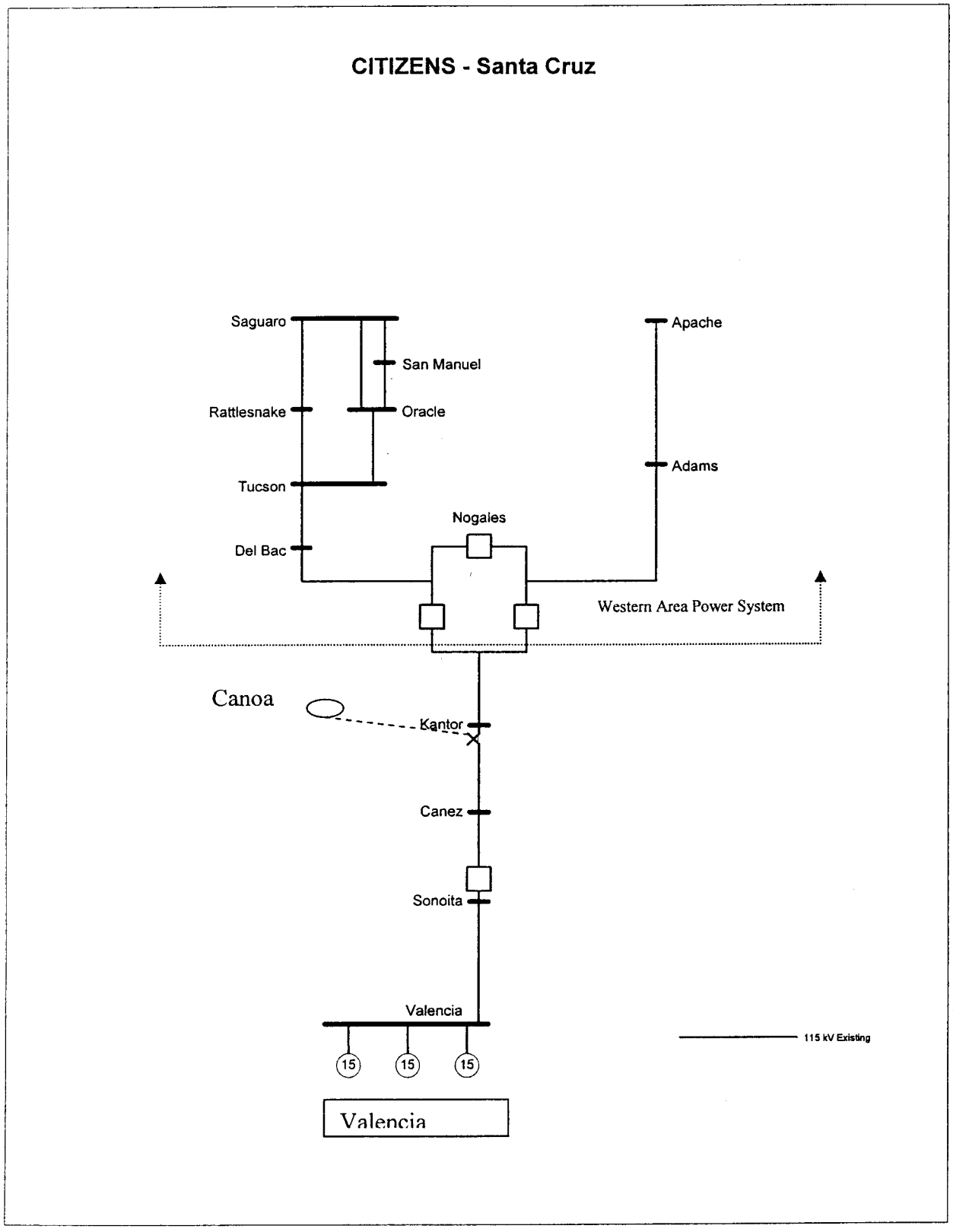
CITIZENS - Santa Cruz
Saguaro
San Manuel
Rattlesnake
Oracle
Tucson
Del Bac
Apache
Adams
Nogales
Western Area Power System
Canoa
Kantor
Canez
Sonoita
Valencia
15
15
15
115 kV Existing
Valencia

Exhibit C

UniSourceEnergy SERVICES	Loss and Restoration of 115kV Transmission Line	Issue Date 04/26/99	Revision Date	Page 1 of 1
		Approved: M. Flores		

Duties

Generation Systems Supervisor- Black start turbines per UES Power Plant Black Start Procedure (Remote).
Transmission Systems Supervisor - Restore 115kV, interconnect 46kV line to 115kV line, and coordinate with WALC.
Transmission Systems Supervisor will notify the Rocky Desert Reliability Coordinator (RDRC).
Distribution Systems Supervisor - Coordinate with Generation Systems Supervisor to pick-up distribution load and balance load with turbine generation.

Assumption

- Turbines are off and there is no ability to interrogate fault distance relay at the Nogales Tap Substation.
- When Valencia turbines are greater than 5MW per turbine each turbine will be switched to 50/50 fuel mix.

115kV Fault Location

Transmission - verify location of fault.

Scenario A: Fault north of Sonoita Substation - Nogales Tap Substation breakers will trip for the fault, de-energizing the 115kV line and the Sonoita Substation circuit switchers S115-CB2 and CB1 remain closed.

Scenario B: Fault south of Sonoita Substation - Nogales Tap Substation breakers remain closed and the Sonoita Substation circuit switcher S115-CB2 trips and de-energizes the 115kV line south of Sonoita Substation.

For either Scenario A or Scenario B, Generation Systems Supervisor will immediately refer to UES Power Plant Black Start Procedure (Remote) to begin restoring Valencia Substation load.

Scenario A

1. Send trouble/substation crew to Kantor Substation.

2. Transmissions Systems Supervisor coordinates with Distribution Systems Supervisor to remotely open distribution breakers and the 115kV breakers at Valencia Substation.

3. Transmissions System Supervisor will open Sonoita Substation circuit breaker S115-CB1 remotely.

4. Troubleman/Substation crew to verify whether fault is north or south of Kantor Substation by reading the fault indicators on K115-S2 at Kantor Substation.

   • If fault is north of Kantor Substation:

   a. Trouble/substation crew will open switch K115-S1 at Kantor Substation.
   b. Transmissions System Supervisor will close 46kV breaker K46-CB1 remotely. Kantor Substation and Cañez Substation load restored.

   • If fault is south of Kantor Substation:

   a. Trouble/substation crew will open switch K115-S2 at Kantor Substation.
   b. Transmission System Supervisor will close 46kV breaker K46-CB1 remotely. Kantor load restored.
   c. Transmission System Supervisor will open C115-CS1 at Cañez Substation remotely.
   d. Distribution System Supervisor will pick up Cañez Substation load through field switching (tie Kantor circuit 7201 to Cañez circuit 8203).

5. Transmission Systems Supervisor will open S115-CB2 at Sonoita Substation remotely.

6. Once the Valencia turbines are on line and feeding distribution circuits at Valencia Substation and the Generation Systems Supervisor is ready for additional load restoration, the Transmission System Supervisor will close V115-CS1 at Valencia Substation (this energizes the 115kV line between Sonoita and Valencia Substations).

7. Distribution Systems Supervisor will open all distribution feeder breakers, open S115-CS1 circuit switcher, and close the bus tie breaker at Sonoita Substation.

8. Transmission Systems Supervisor will close S115-CB2 at Sonoita Substation remotely (energizes T1 and distribution bus).

9. Distribution Systems Supervisor will coordinate with Generation Systems Supervisor while closing feeder breakers at Sonoita Substation to ensure generation and load balance.

Scenario B

Distribution Systems Supervisor will coordinate with Generation Systems Supervisor while closing feeder breakers at Valencia Substation to ensure generation and load balance.

Restoration of 115kV Line (fault cleared)

Scenario A

Assumption:
Valencia Substation and Sonoita Substation are on the Valencia turbines and TEP is carrying Kantor and Cañez Substation's load.

1. Transmission Systems Supervisor to ensure K115-S1 and K115-S2 are closed.
2. TEP and WALC will sync at the Nogales Tap.
3. Transmission Systems Supervisor will open 46kV breaker K46-CB1 remotely.
4. Transmission Systems Supervisor in coordination with WALC will sync at Sonoita Substation S115-CB1.

Scenario B

Assumption:
WALC is carrying Kantor, Cañez, and Sonoita Substation's and Valencia Substation is on the Valencia turbines.

1. Transmission Systems Supervisor will close V115-CS1 at Valencia Substation. (This energizes the 115kV line between Sonoita and Valencia Substations.)
2. Transmission Systems Supervisor in coordination with WALC will sync at Sonoita Substation S115-CB2

EXHIBIT 2

STAFF EXHIBIT 2

UES Load Forecast
(UES February 10, 2004 Exhibit 4)

Exhibit 4
UES Load Forecast

Year	Actual	TEP Forecast	TEP High Forecast	RAC 2 Normal	RAC 2 hot
1999 Actual	50.4				
2000 Actual	52.6				
2001 Actual	51.5				
2002 Actual	58.0				
2003 Actual	59.1	59.1			
2004 Fcst		61.4	64.4	62.0	67.0
2005 Fcst		63.6	66.8	64.0	69.0
2006 Fcst		65.8	69.0	66.0	72.0
2007 Fcst		67.9	71.3	68.0	74.0
2008 Fcst		70.1	73.5	70.5	76.0
2009 Fcst		72.2	75.8	73.0	78.0
2010 Fcst		74.5	78.2	74.0	80.0
2011 Fcst		76.8	80.6		
2012 Fcst		79.2	83.1		
2013 Fcst		81.6	85.7		
2014 Fcst		84.1	88.3		
2015 Fcst		86.7	91.0		

TEP Load forecast for Nogales

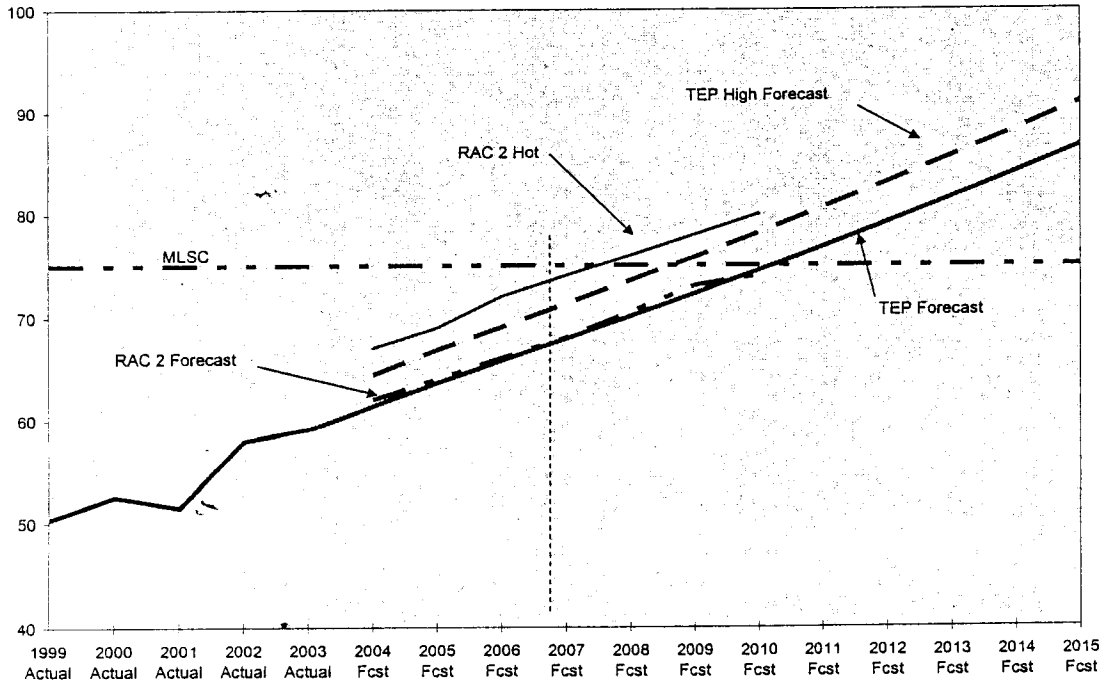

EXHIBIT 3

STAFF EXHIBIT 3

UniSource Energy Services
Santa Cruz County
Reliability Must Run Generation Study
(UES February 10, 2004 Exhibit 5)

Exhibit 5
RMR analysis

UniSourceEnergy SERVICES

RELIABILITY REQUIRED MUST-RUN GENERATION

UNS ELECTRIC (SANTA CRUZ) SYSTEM

FOR THE YEARS 2005, 2008, 2012

PREPARED FOR THE ARIZONA CORPORATION COMMISSION

TEP
Transmission System Planning

February 9, 2004

Introduction

The Santa Cruz County UNS Electric system is currently a radial system interconnected to the Western Area Power Administration 115 kV transmission system. From the interconnection point at Nogales Tap near Tucson, the UNS Electric 115 kV system proceeds down to Kantor substation – then Canez, Sonoita, and Valencia substations in that order (see exhibit 1).

Approximately 50% of UNS Electric load is located at Valencia substation and 25% at Sonoita substation. Hence, 75% of the total UNS Electric load is located on the last 8.5 miles of the system. Due to the long section of 115 kV from Nogales Tap and the lengthy 115 kV ties ultimately connecting the Saguaro and Apache generating stations to Nogales Tap, the bulk of the UNS Electric load is located at the weakest point on the system.

Because of the weak nature of the 115 kV transmission network, low voltage becomes an issue at higher loads. Presently, this problem has been mitigated by dispatching local gas turbine generators located at Valencia substation during peak load periods. These turbines not only supply some power locally which helps reduce loading on the 115 kV network, but they also enhance voltage support by contributing a modest amount of reactive power (VARs).

When the gas turbines are used to support the system in this manner, they are acting as Reliability Must-Run (RMR) generation. The purpose of this study is to quantify the necessity and effectiveness of the RMR aspect of this generation.

Study Power Flow Case Assumptions

The existing Santa Cruz UNS Electric system was explicitly modeled within the 2005 RMR case that was jointly prepared by TEP, APS, SRP, SWTC, and WAPA. Since the system changes made by outside entities during the entire 2005 – 2012 study period were located a considerable distance from the UNS Electric system, an assumption was made that such changes would have little impact to the UNS Electric system and therefore the 2005 case was used throughout. Additionally, 5.0 MVAR 13.2 kV substation capacitor banks were added on the distribution side of each load-serving transformer in each substation. This reflects planned improvements scheduled to be implemented by summer of 2004.

UNS Electric system load was assumed to be distributed in the following manner:

Substation loads with 0.95 p.f. lagging	
Substation	Percentage of total
Kantor	12.5%
Canez	12.5%
Sonoita	25%
Valencia	50%

The Valencia gas turbines were rated as follows in the case:

Turbine	Maximum Power Output[1]	Maximum Reactive Output[2]
Valencia turbine #1	14 MW	8 MVAR
Valencia turbine #2	16 MW	8 MVAR
Valencia turbine #3	16 MW	8 MVAR

1 Based upon GE testing work performed in 1999

2 Estimate based upon total MVA rating and max. power output of each generator

The forecasted peak demand for the three study years is:

Santa Cruz UNS Electric Peak Demand [1]	
Year	Demand
2005	63.6 MW
2008	70.1 MW
2012	79.2 MW

1 UNS Electric prepared by TEP forecasting dept. 2004

Results

The Santa Cruz county UNS Electric system was studied with two basic configurations. The first configuration was the existing system. The second configuration was the existing system with the addition of a 115 kV connection from Valencia substation to the future Gateway substation.

Pre-Gateway

For N-0 (no contingencies) the Simultaneous Import Limit (SIL) was calculated to be 65 MW. At this load, substation voltage regulators reach the top of their range and substation distribution voltage begins to go sub-nominal. It was assumed that a substation feeder voltage of 1.0 pu would translate into 0.95 pu at the remote end of feeders – the minimum permissible customer voltage.

With all three Valencia turbines dispatched at maximum, the Maximum Load-Serving Capability (MLSC) for an N-0 condition was determined to be 75 MW. The limiting factor in this case was the Valencia distribution transformers. The MLSC increases to approximately 100 MW for an N-0 condition assuming the transformer overloads can be mitigated. This could potentially be accomplished by replacing the transformers, or busing the two transformers together on the low side and installing a paralleling tap-synchronization device on the voltage regulators.

N-1 scenarios were not considered for this configuration since the system is radial prior to the Gateway interconnection. Any contingency will result in at least partial loss of load; however, load restoration plans are in place. The plans include dispatching the Valencia turbines and will be modified to include closing in an emergency 46 kV connection between the southern TEP system and Kantor substation once that connection is established.

Post-Gateway

With the Gateway station and Gateway – Valencia line in service, the Santa Cruz UNS Electric system becomes a looped system. Consequently, RMR analysis can be performed considering N-1 (single-contingency) scenarios.

Assuming all Valencia turbines off, the maximum load that can be served (SIL) was calculated to be 50 MW. The limiting factor is a delta voltage violation (5% or greater) on at least one bus due to loss of the Gateway – Valencia 115 kV line.

When all three Valencia turbines are fully dispatched, the maximum load that can be served (MLSC) was calculated to be 75 MW. The limiting factor was overloading on the Valencia distribution transformers. If this overloading is discounted as previously discussed, the limit becomes 90 MW. The limit for this latter scenario is a delta voltage violation for loss of the Gateway – Valencia line.

Once the Santa Cruz UNS Electric system becomes looped, the critical outage becomes loss of the Gateway – Valencia 115 kV line. To mitigate the effects of the outage, a completely redundant circuit from Gateway to Valencia was added for study purposes.
With that circuit in place, the SIL rose to 80 MW. Again, the Valencia distribution transformers were the limiting factor. Discounting the transformer overloads, the SIL rose to 95 MW. The limiting factor this time was a delta

voltage violation for loss of the Valencia – Sonoita 115 kV line. By 2012 the load has grown to the point that Sonoita, Canez, and Kantor experience a significant voltage drop because the relatively weak 115 kV WAPA system cannot maintain voltage for loss of Valencia – Sonoita. Additionally, RMR generation is ineffective because it is on the wrong side of the disturbance. Building a Gateway – Sonoita 115 kV line instead of a 2nd Gateway – Valencia 115 kV line might improve this situation and is something that TEP will study in 2004.

Based upon the limits and assumptions discussed above the following table summarizes the results:

Year	# of Gateway-Valencia ckts.	Forecast Peak	SIL	MLSC	RMR Generation at Peak
2005	1	63.6 MW	50 MW	75 MW	14 MW
2008	1	70.1 MW	50 MW	75 MW	20 MW
2012	1	79.2 MW	50 MW	75 MW	30 MW
2012	2	79.2 MW	80 MW	95 MW[1]	0 MW

1 Assumes Valencia transformer overloads eliminated

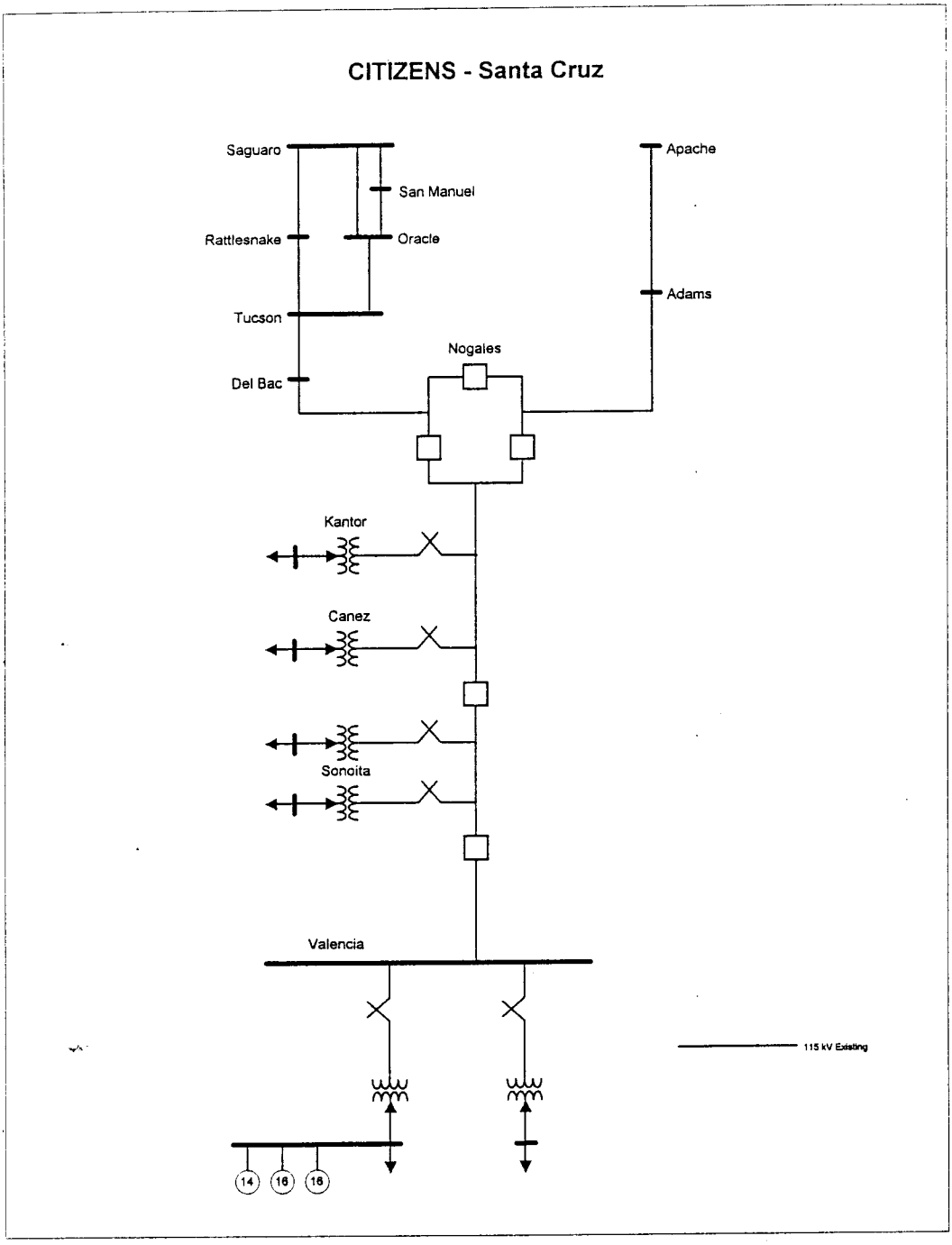
CITIZENS - Santa Cruz
Saguaro
San Manuel
Rattlesnake
Oracle
Tucson
Del Bac
Apache
Adams
Nogales
Kantor
Canez
Sonoita
Valencia
14
16
18
115 kV Existing

Exhibit 1

EXHIBIT 4

STAFF EXHIBIT 4

Federal EIS Comments
Arizona State Land Department
March 2004

From: Linda Beals
To: Mark -- Tt, Inc. Blauer
Subject: TEP-DOE Siting

The Arizona State Land Department is still in the process of reviewing the Draft Environmental Impact Statement prepared by the DOE for the TEP Sahuarita-Nogales Transmission Line.

Our initial observations are as follows:

1.) There is a significant amount of Arizona State Trust Land impacted by all of the proposed alignments. (Approximately 30% of the alignment in each of the proposes routes.) We are concerned about the limited discussion of the State Trust and would propose the following language by incorporated into the EIS under (Section 1.2.2):

The Arizona State Land Department manages approximately 9.3 million acres of State owned "Trust" lands. These lands were granted to the State of Arizona under provisions in the federal Enabling Act that provided for Arizona's statehood in 1912. The lands are held in trust for fourteen public beneficiaries including Arizona's public schools and several state supported institutions.

The Department functions as the trustee of the State Land and it's natural resources. The Department's management of the trust is governed by extensive and detailed provisions in the Enabling Act (Sections 24-30), Act June 20, 1910, ©. 310,36 U.S. Stat. 557, 568-579). The Arizona Constitution (Article 10), and statutes in A.R.S. Titles 27 and 37. In addition there is extensive case law which governs the Department's procedures and management of the Trust.

The role, in this instance, of the State Land Department is to determine whether to approve an easement for the preferred right of way alignment for a power transmission line as well as a fiber optic communication line incorporated in the power line. In processing an application for a right of way, the Department will consider land status, current uses, existing lessees, affected resources, environmental issues, local and regional land use plans and comments from interested parties as well as other issues that may present themselves in the application process.

2.) Each of the alignments will have some degree of impact on trust land. The Department's mission is to manage State Trust Lands and resources to enhance value and optimize economic return for the Trust's beneficiaries consistent with sound stewardship, conservation and business management principles. The central alignment would have the greatest impact on the monetary value/income producing ability of the trust land. This is the land closer to the highway, portions of which are anticipated to be developed in the foreseeable future. However, the proposed Western and Crossover corridors cross approximately five miles of trust land and the proposed Central corridor crosses approximately 6.5 miles of trust land in the Tinaja Hills area (Pima County) identified as "conservation option lands" under the proposed State Trust Land Reform package to be presented to Arizona's voters in 2004. A goal of the State Trust Land Reform package is to improvement management and planning of trust lands and to conserve significant lands. The "Conservation Option" trust lands impacted are as follows:

WESTERN AND CROSSOVER CORRIDORS

Township 19 South, Range 12 East
* S2, Section 5; All Section 6
  S2, Section 7;
  N2, Section 8;
* All, Section 16; All Section 17
* E2, Section 19; All Section 20
  All, Section 32

Township 20 South, Range 12 East

N2NE, Section

CENTRAL CORRIDOR

Township 18 South, Range 12 East
S2S2, Section 23
All, Section 26
All, Section 35

Township 19 South, Range 12 East
* All, Section 2; All, Section 3
* All, Section 10; All, Section 11
* All, Section 14; All, Section 15
N2N2 Section 22

*Proposed corridor alignment appears to follow section line boundaries between the parcels identified.

3.) Existing Leases- There are a number of existing leases within the proposed alignments. Most of them are grazing leases and proposed corridor should be able to co-exist these. There are minor accommodations for fencing, ranch roads, water facilities and similar grazing improvements that we need to consider. However, as we have previously discussed, the Arizona State Land Department currently leases approximately 4,500 acres of land to Caterpillar Corporation for their proving grounds and training center. With the majority of the buildings and other significant improvements are on their fee land. The leased land is utilized in conjunction with the fee land for testing and demonstration purposes. This lease could be jeopardized if the proposed power lines created a physical restriction/constraint on the use of the facility or if the aesthetic view corridor Caterpillar uses as a backdrop for its facility were to be severely impacted by the power lines. In either case, the income producing ability of the lease would be jeopardized, as well as the significant financial benefit to the local community. Caterpillar has outlined their economic benefit to the community in a previous correspondence to the DOE.

4.) Acquisition of State Trust Lands - Under Chapter 9 (applicable Environmental Laws, Regulations, Permits and DOE Orders) it is indicated that TEP would acquire access across State Trust lands via condemnation. This is incorrect. Only the federal government may exercise it's power of eminent domain and condemn State Trust lands. TEP does not have condemnation power on trust lands. It should also be noted, that the Arizona State Corporation Commission has no authority to require the Arizona State Land Department to issue a right of way across trust lands.

As initially stated, we are still in the process of analyzing the impacts of the proposed routes and since TEP has not formally filed an application to purchase the required easement no final determination can or will be made at this time. Based upon our current mission and the laws governing the Trust we cannot endorse the central alignment. But as stated, there are concerns regarding both of the other proposed alignments, not the lease of which is the Caterpillar Lease. These concerns could become more acute if the proposed legislation for conservation of these land is passed.

Hopefully this information can and will be incorporated into the final EIS report and taken into consideration in any recommendations made by the DOE.

If you need any clarification on the matter herein for any additional information, please do not hesitate to call me at 602-542-2648.

Linda R. Beals, Manager
Right of Way Section
Arizona State Land Department
>>> "Blauer, Mark -- Tt, Inc." <Mark.Blauer@tetratech.com> 03/25 6:21 AM >>>
Linda

It was very informative talking with you yesterday. Quite an eye opener on how AZ does [or doesn't] do business. Anyway, I just wanted to make sure that you had my contact info and if there is any thing I can do for you, please don't hesitate to call or email me. Also, please let me know if you get this email [sometimes my server doesn't like government servers and my emails get rejected]. Thanks.

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703-931-9301 x590
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CC: Greg Keller; James Rees; Jerry Pell; Jim Adams;...