BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF SOUTHWESTERN PUBLIC SERVICE COMPANY'S APPLICATION FOR: (1) ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY AUTHORIZING CONSTRUCTION AND OPERATION OF TWO 230 KV TRANSMISSION LINES AND ASSOCIATED SUBSTATION FACILITIES IN CURRY AND ROOSEVELT COUNTIES, NEW MEXICO; (2) APPROVAL OF THE LOCATION OF THE 230 KV TRANSMISSION LINES AND ASSOCIATED FACILITIES; AND (3) AUTHORIZING ACCRUAL OF AN ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION FOR THE TRANSMISSION LINES AND ASSOCIATED FACILITIES,	)	**CASE NO. 12-_____-UT**
SOUTHWESTERN PUBLIC SERVICE COMPANY,	)	
APPLICANT.	)	

DIRECT TESTIMONY

of

JOHN S. FULTON

on behalf of

SOUTHWESTERN PUBLIC SERVICE COMPANY

February 7, 2012

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GLOSSARY OF ACRONYMS AND DEFINED TERMS

Acronym/Defined Term	Meaning
AFUDC	Allowance for Funds Used During Construction
Commission	New Mexico Public Regulation Commission
CCN	Certificate of Convenience and Necessity
FEC	Farmers Electric Cooperative
kV	Kilovolt
NTC	Notification to Construct issued by SPP
PSCo	Public Service Company of Colorado
Proposed Project	230/115 kV Pleasant Hill Substation and two 230 kV transmission lines and associated substation facilities in Curry and Roosevelt Counties, New Mexico
SPP	Southwest Power Pool
SPS	Southwestern Public Service Company
STEP	SPP Transmission Expansion Plan
Xcel Energy	Xcel Energy Inc.

LIST OF ATTACHMENTS

Attachment	Description
JSF-1	Pleasant Hill Project One-Line Diagram
JSF-2	SPP Notification to Construct Letter, SPP-NTC-20084
JSF-3	SPP Notification to Construct Letter, SPP-NTC-20130

Case No. 12-____-UT
Direct Testimony
of
John S. Fulton

I. WITNESS IDENTIFICATION AND QUALIFICATIONS

Q. Please state your name and business address.

A. My name is John S. Fulton, and my business address is 600 S. Tyler Street, Amarillo, Texas 79101.

Q. On whose behalf are you testifying?

A. I am filing testimony on behalf of Southwestern Public Service Company, a New Mexico corporation ("SPS"), a wholly owned subsidiary of Xcel Energy Inc. ("Xcel Energy"). Xcel Energy is a registered holding company that owns several electric and natural gas utility operating companies and a regulated natural gas pipeline company.[1]

Q. By whom are you employed and in what position?

A. I am employed by SPS as Manager Transmission Asset Management.

Q. Please briefly outline your responsibilities as Manager Transmission Asset Management.

A. I provide overall management direction for the SPS transmission planning group in Amarillo. The transmission planning group's duties include

[1] Xcel Energy is the parent company of four electric and gas utility operating companies: Northern States Power Company, a Minnesota corporation; Northern States Power Company, a Wisconsin corporation; Public Service Company of Colorado, a Colorado corporation ("PSCo"); and SPS. Xcel Energy's gas pipeline subsidiary is WestGas InterState, Inc.

planning new transmission facilities required for generation and customer additions. I also direct SPS's involvement with the Southwest Power Pool's ("SPP") transmission planning activities. I direct the preparation of the SPS transmission capital budget. I also interface with retail and wholesale customers seeking new service, as well as wind developers working on interconnections with the SPS transmission system.

Q. Describe your educational background.

A. I received my Bachelor of Science degree in Electrical Engineering in 1974 from New Mexico State University. In 1977, I received a Master of Science in Electrical Engineering from New Mexico State University.

Q. Please describe your professional experience.

A. From 1974 to 1977, I was employed as an electrical distribution engineer with International Minerals and Chemical Corporation. In 1977, I joined West Texas Utilities Company as a planning engineer. I joined SPS as Supervisory Engineer, Electrical Operations, in 1979, and served in that capacity until 1982, when I became System Operations Supervisor, Electrical Operations. In 1992, I became Principal Engineer, System Planning, and in 1997, I assumed my current position, supervising the transmission planning staffs for SPS and for PSCo. In 2001, transmission

planning activities for PSCo required a local manager and my position was changed to focus only on the SPS operating company.

Q. Do you hold any professional licenses?

A. Yes. I am a Registered Professional Engineer in the State of New Mexico.

Q. Are you a member of any professional organizations?

A. Yes. I am a member of the Institute of Electrical and Electronic Engineers.

Q. Have you testified before any regulatory authorities?

A. Yes. I have testified before the New Mexico Public Regulation Commission ("Commission"), the Public Utility Commission of Texas, the Colorado Public Utilities Commission, and the Federal Energy Regulatory Commission.

II. ASSIGNMENT AND OVERVIEW OF THE FILING

Q. What is the purpose of your testimony?

A. My testimony supports SPS's application for Commission approval of a certificate of public convenience and necessity ("CCN") for the proposed construction and operation of two 230 kilovolt ("kV") transmission lines, and the associated substation facilities in Curry and Roosevelt Counties ("Proposed Project"), as well as the related location approval of the two 230 kV transmission lines. The existing transmission lines from Farmer's Electric Cooperative ("FEC") Clovis Substation to Curry County Substation and the line from Curry County Substation to Norton Substation will be routed through the new 115 kV bus at Pleasant Hill Substation. I will explain SPS's need for the Proposed Project, describe the proposed transmission lines and substation facilities, and discuss how SPS's filing satisfies the Commission requirements for issuance of a CCN for the Proposed Project and for location approval of the two proposed 230 kV transmission lines and associated substation facilities.

Q. Briefly describe the facilities that are associated with the Proposed Project.

A. SPS proposes to locate, construct and operate the Proposed Project that will connect the Roosevelt County Substation to the proposed Pleasant Hill Substation to the Oasis Substation in order to provide increased reliability for SPS's northeastern New Mexico transmission system. The proposed connection at 230 kV will provide three separate 230/115 kV transformers at different locations and will provide multiple 230 kV transmission paths to those substation. By not locating all of the transformation equipment in one substation, the reliability should be increased by providing geographic diversity to the transmission sources.

Q. Please identify the other SPS witnesses who provide testimony in support of SPS's application, and generally describe the subjects they will address.

A. In addition to my pre-filed testimony, the following witnesses are filing testimony in support of SPS's Application: (1) Jeffrey B. Stebbins' testimony discusses SPS's route selection and easement width for the two proposed 230 kV transmission lines and modification to two existing 115 kV transmission lines, location approval of the proposed 230 kV

transmission lines, and the circuit design and construction for the Proposed Project; (2) Kelli D. Boren's testimony discusses the route selection, and rights-of-way; and (3) Howard C. Higgins' testimony discusses the potential environmental impacts of the Proposed Project and supports SPS's request for location approval.

III. DESCRIPTION OF THE PROPOSED PROJECT

Q. Please describe the transmission lines and associated substation facilities that are included in the Proposed Project.

A. The Proposed Project will involve the construction of two 230 kV transmission lines. The first 230kV line will connect SPS's existing Roosevelt County Substation, located five miles south of Clovis, New Mexico, to the proposed Pleasant Hill Substation to be located northeast of Clovis, New Mexico. The second 230 kV line will connect the proposed Pleasant Hill Substation to the existing Oasis Substation located approximately nine miles southwest of Clovis, New Mexico. Mr. Stebbins' testimony addresses the mileage and type of transmission construction required.

At the Roosevelt County Substation, a 230 kV breaker will be added to the existing straight bus structure to connect the proposed new line to the Pleasant Hill Substation. The Pleasant Hill Substation will be constructed as a three (3) terminal breaker and a half design to accommodate the 230 kV lines from Roosevelt County Substation and Oasis Substation, and also the 230/115 kV 252 MVA autotransformer. At Oasis Substation, a 230 kV line breaker will be added to connect the

Pleasant Hill Substation 230 kV line. The Pleasant Hill Substation 115 kV bus will be designed as a breaker and a half design and will intercept the existing Curry – Norton 115 kV line and also the Curry – FEC Switching Station 115 kV line. This will provide four 115 kV outlet lines for the 230/115 kV autotransformer. Attachment JSF-1 is the electrical one-line diagram of the Proposed Project.

Q. When does SPS expect the Proposed Project to be placed in service?

A. SPS plans to have the Proposed Project in service on or before December 2014. Individual lines and bus structures may be completed in stages before that date.

IV. POWER SYSTEM STUDIES TO EVALUATE THE NEED FOR THE PROJECT

Q. Describe the studies that have been performed to evaluate SPS's need for the proposed project?

A. The studies to evaluate the need for the Proposed Project were done by SPP in coordination with SPS as part of the SPP Transmission Expansion Plan ("STEP") analysis process. In the 2009 STEP study, SPP identified the need for several projects in the Clovis area, which included the following projects:

- Construction of a 345 kV line from Amarillo – Clovis;
- Installation of a 345/230 kV 560 MVA transformer at the new station;
- Addition of a 230/115 kV 252 MVA autotransformer;
- Construction of 230 kV transmission lines from Oasis and Roosevelt County substations to the new 230 kV Pleasant Hill Substation; and
- Construction of 115 kV lines from the new station to integrate into the existing 115 kV transmission system in the Clovis area.

The Proposed Project was referred to as the "Frio Draw Projects" because the location of the substation facilities at the time had been generally assumed to be northwest of Clovis, near the Frio Draw on the topographic maps. The SPP Notification to Construct ("NTC") letter is provided as Attachment JSF-2. The specific NTC for this project is Project ID 795, on page 10 of the letter.

Q. What SPS reliability needs will be addressed by the project?

A. The Proposed Project addresses the following SPS reliability needs: (1) the overload of the Curry – Roosevelt 115 KV line for loss of the 230 kV Oasis – Roosevelt or Oasis 230/115 kV transformer; and (2) the overload of the Roosevelt – Tolk 230 kV line for loss of the other Roosevelt – Tolk 230 kV line. As stated previously, the following lines will be relocated to the new Pleasant Hill Substation - from FEC's Clovis Substation to Curry County Substation and the line from Curry County Substation to Norton Substation. This 115 kV line work is required to allow the new 230/115 KV transformer at Pleasant Hill to be integrated into the transmission system in the Clovis area and be able to eliminate the contingency overloads listed above.

Q. Did SPP change its original NTC for this project?

A Yes. SPS requested reconsideration of these upgrades that were developed in the 2009 STEP due to a change in the internal generation available in the models that SPP used. In the 2009 STEP, no new generation was shown in the SPS footprint which meant SPP had to assume imports of generation to serve SPS area load from adjacent areas such as Oklahoma and Kansas. SPP's assumptions on the import situation appear to influence its determination about the need for the Frio Draw Project as defined by SPP in its original NTC letter in Attachment JSF-2. When SPS announced the addition of Jones Unit 3 and Golden Spread Electric Cooperative announced the addition of its Antelope Gas Turbine, then the SPS area was not as deficient in future generation as the original 2009 STEP study assumed. SPS requested SPP re-evaluate the need for this project along with several other projects. In the 2010 STEP analysis, SPP stated that the 345 kV line from Potter County to Pleasant Hill (formerly Frio Draw) that was included in its original NTC letter was no longer needed in the planning horizon. The withdrawal of this part of the project is shown on page 12 of Attachment JSF-3. The remaining parts of the

Proposed Project are still needed for reliability and remain a part of the NTC.

Q. **Does the process between SPP and SPS allow for SPS to question the NTC?**

A. Yes. It is a normal part of the management of capital project construction that SPS questions the need for a certain project(s) when receiving the NTC from SPP. SPS wants to be assured that the need is really there especially if there have been changes in the models or the physical world which might alter the need for a project. SPS wants to make sure that the projects requested by SPP are improving the reliability of the network and are necessary additions, especially in situations where the construction may be impacted by other systems changes or may be difficult to permit and construct. This interaction between SPS and SPP shows a healthy dialogue that benefits SPS's New Mexico retail customers by making sure that capital expenditures are properly justified.

Q. Can the SPP issue a NTC in the future for the withdrawn element of the project (i.e the Potter County Substation to Pleasant Hill Substation 345 kV line)?

A. Yes. Through SPP's planning processes and its transmission service and generation interconnection processes, the SPP can determine that the 345 kV line between Potter County Substation to Pleasant Hill Substation is required to meet some future system need.

Q. Has SPS conducted any additional studies related to the proposed project?

A. SPS participated in the SPP STEP studies and reviewed their conclusions, but SPS has not conducted any additional studies.

V. ESTIMATED COSTS ASSOCIATED WITH PROPOSED PROJECT

Q. What is the total estimated cost of the Proposed Project?

A. The total estimated cost for the Proposed Project is approximately $59,832,000.00. The estimated costs for each component and the Proposed Project are tabulated below.

Substation		
	Roosevelt County Substation	$ 640,000.00
	Pleasant Hill Substation	$10,750,000.00
	Oasis Substation	$ 688,000.00
Land		$ 224,000.00
Total Substation Cost		**$12,302,000.00**
Transmission		
	Roosevelt -Pleasant Hill 230kV	$18,000.000.00
	Pleasant Hill-Oasis 230kV	$12,550.000.00
	Curry-Norton 115kV Interception	$ 1,260,000.00
	Curry-FEC Switch Sub. 115kV Line Re-route	$ 6,400,000.00
Total Transmission Cost		**$38,210,000.00**
Right of Way		$ 5,380,000.00
AFUDC		$ 3,940,000.00
Estimated Total Project Cost		**$59,832,000.00**

The estimated costs include Allowance for Funds Used During Construction ("AFUDC") and are based on 2011 dollars, with a plus or minus 20 percent deviation. SPS calculated an estimated AFUDC for each element of the Proposed Project and the total AFUDC is 7.05 percent of the estimated cost. The actual AFUDC will be calculated at the completion of the Proposed Project.

Q. Is SPS requesting approval of AFUDC in this proceeding?

A. Yes. The AFUDC costs are an eligible expense. When the final costs are reported on the Proposed Project, the AFUDC costs incurred in the construction of the project will be included in the final project cost.

VI. CONCLUSION

Q. Please summarize the conclusion reached in your testimony.

A. Based on my testimony and the testimony of SPS witnesses Stebbins, Boren and Higgins, it is clear that: (1) the Proposed Project will serve the public convenience and necessity in New Mexico by providing needed transmission capacity to maintain the reliability of SPS's transmission system in the Clovis and Portales areas of eastern New Mexico; and (2) the Proposed Project will not unduly impact environmental values in the project area. Therefore, I recommend that the Commission grant a CCN for the Proposed Project, which authorizes the construction and operation of the requested facilities. Finally, I recommend that the Commission grant location approval for the proposed 230 kV transmission lines and associated facilities based on the testimony filed in this case and the associated environmental report.

Q. Were Attachments JSF-1 through JSF-3 prepared by you or under your supervision?

A. Yes.

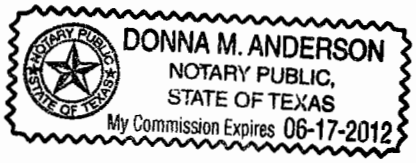
Q. Does this conclude your testimony?

A. Yes, it does.

VERIFICATION

STATE OF TEXAS)
) **ss.**
COUNTY OF POTTER)

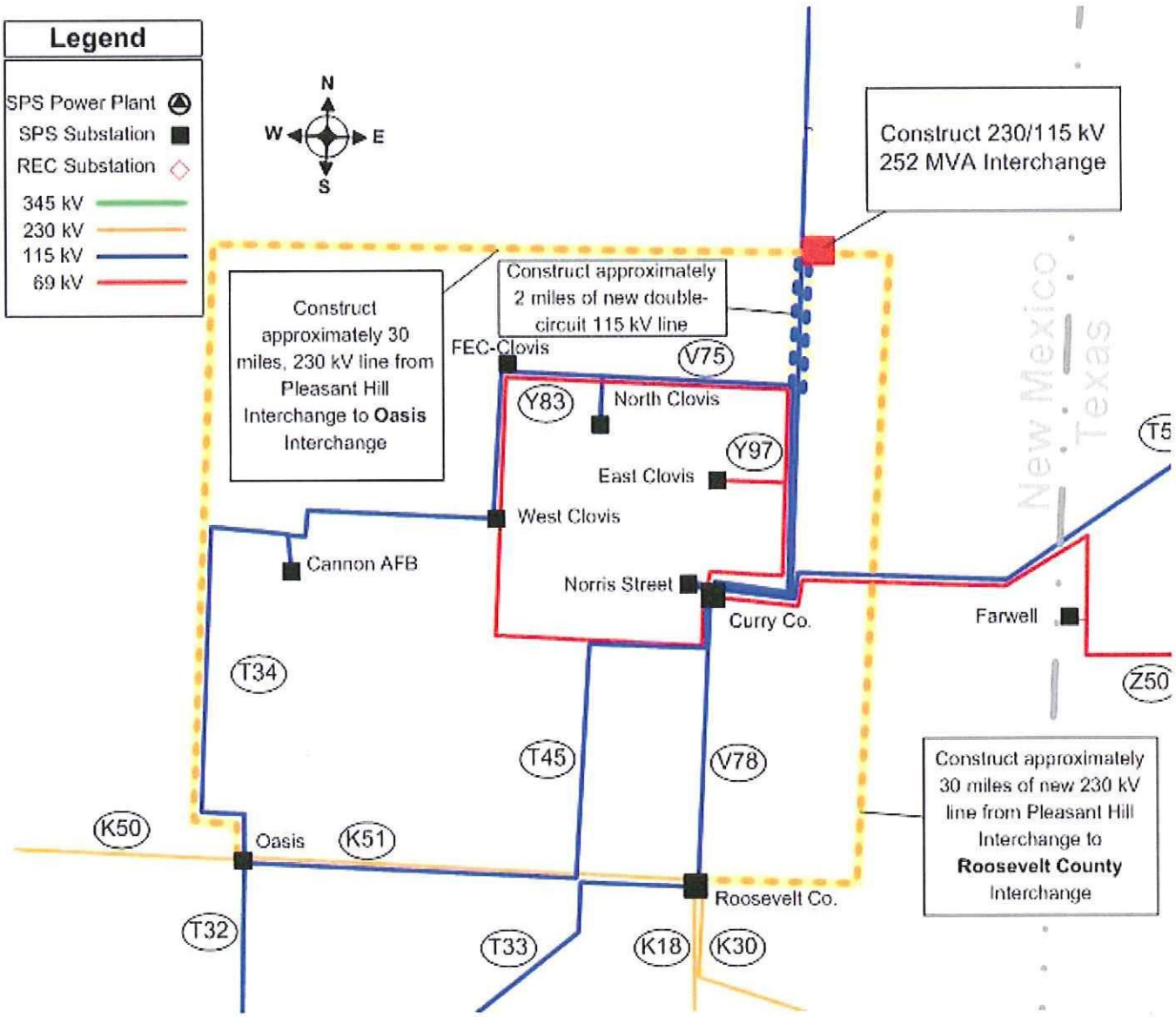
John S. Fulton being first duly sworn on oath, deposes and states that he is the witness identified in the foregoing prepared testimony, that he has read the testimony and is familiar with its contents, and that the facts set forth are true to the best of his knowledge, information, and belief.



J. S. Fulton

SUBSCRIBED AND SWORN TO before me this 2 day of February, 2012

Donna M. Anderson
Notary Public
My Commission Expires: 6/17/2012


Legend
SPS Power Plant
SPS Substation
REC Substation
345 kV
230 kV
115 kV
69 kV
N
W
E
S
Construct 230/115 kV 252 MVA Interchange
Construct approximately 30 miles, 230 kV line from Pleasant Hill Interchange to Oasis Interchange
Construct approximately 2 miles of new double-circuit 115 kV line
FEC-Clovis
V75
Y83
North Clovis
Y97
East Clovis
West Clovis
Cannon AFB
Norris Street
Curry Co.
Farwell
T5
Z50
T34
T45
V78
Construct approximately 30 miles of new 230 kV line from Pleasant Hill Interchange to Roosevelt County Interchange
K50
Oasis
K51
Roosevelt Co.
T32
T33
K18
K30
New Mexico
Texas

Southwest Power Pool

HELPING OUR MEMBERS WORK TOGETHER
TO KEEP THE LIGHTS ON... TODAY AND IN THE FUTURE

SPP
Notification to Construct

February 8, 2010 SPP-NTC-20084

Mr. John Fulton
Southwestern Public Service Company
PO Box 1261
Amarillo, TX 79170

RE: Notification to Construct Approved Reliability Network Upgrades

Dear Mr. Fulton,

Pursuant to Section 3.3 of the Southwest Power Pool, Inc. ("SPP") Membership Agreement and Attachment O, Section VIII, of the SPP Open Access Transmission Tariff ("OATT"), SPP provides this Notification to Construct ("NTC") directing Southwestern Public Service Company, as the Designated Transmission Owner, to construct the Network Upgrade(s).

On January 26, 2010, the Southwest Power Pool ("SPP") Board of Directors approved the Network Upgrade(s) listed below to be constructed.

New Network Upgrades

Project ID: 773
Project Name: XFR - Roosevelt 230/115 kV Ckt 2
Need Date for Project: 6/1/2010
Estimated Cost for Project: $5,670,000

Network Upgrade ID: 11018
Network Upgrade Description: Add second 230/115 kV transformer at Roosevelt.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Install the transformer for emergency rating 289 MVA.
Network Upgrade Justification: To address the overload of either the Oasis Interchange 230/115 kV or Roosevelt County Interchange 230/115 kV transformer for the outage of the other transformer.
Need Date for Network Upgrade: 6/1/2010

Estimated Cost for Network Upgrade (current day dollars): $5,670,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 774
Project Name: Multi - Cherry Sub add 230 kV source and 115 kV Hastings Conversion
Need Date for Project: 6/1/2010
Estimated Cost for Project: $13,980,000

Network Upgrade ID: 11019
Network Upgrade Description: Tap Potter - Harrington East 230 kV line at Cherry and bring 230 kV into Cherry substation.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Maintain the line at emergency rating 239 MVA.
Network Upgrade Justification: To address the system-intact overload of Cherry - Nichols Station 115 kV due to load growth in the Amarillo area.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $112,500
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Network Upgrade ID: 11020
Network Upgrade Description: Install 230/115 kV autotransformer at Cherry substation.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Install the transformer for emergency rating 239 MVA.
Network Upgrade Justification: To address the system-intact overload of Cherry - Nichols Station 115 kV due to load growth in the Amarillo area.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $4,905,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Network Upgrade ID: 11021
Network Upgrade Description: Convert Hastings substation from 69 kV to 115 kV.
Network Upgrade Owner: Southwestern Public Service Company

MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Justification: To address the system-intact overload of Cherry - Nichols Station 115 kV due to load growth in the Amarillo area.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $5,062,500
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Network Upgrade ID: 11022
Network Upgrade Description: Build new 5 mile Hastings - Bush 115 kV line.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Build the line to emergency rating 173 MVA.
Network Upgrade Justification: To address the system-intact overload of Cherry - Nichols Station 115 kV due to load growth in the Amarillo area.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $2,200,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Network Upgrade ID: 11023
Network Upgrade Description: Build new 3.7 mile Hastings - East Plant 115 kV line.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Build the line to emergency rating 173 MVA.
Network Upgrade Justification: To address the system-intact overload of Cherry - Nichols Station 115 kV due to load growth in the Amarillo area.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $1,700,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 776
Project Name: Line - Deaf Smith - Panda 115 kV
Need Date for Project: 6/1/2010
Estimated Cost for Project: $600,000

Network Upgrade ID: 11026
Network Upgrade Description: Build new 1 mile Deaf Smith - Panda 115 kV line.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Build the line to emergency rating 154 MVA.
Network Upgrade Justification: To address the overload of Canyon East Sub - Osage Switching Station 115 kV for outage of Deaf Smith – Hereford 115 kV.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $600,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 777
Project Name: Line - East Plant - Manhattan 115 kV
Need Date for Project: 6/1/2010
Estimated Cost for Project: $1,100,000

Network Upgrade ID: 11027
Network Upgrade Description: Reconductor 2.24 mile East Plant - Manhattan 115 kV line.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Upgrade the line to emergency rating 249 MVA.
Network Upgrade Justification: To address the overload of East Plant Interchange - Manhattan 115 kV for outage of East Plant Interchange - Pierce Street Tap 115 kV.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $1,100,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 779
Project Name: Line - Maddox - Sanger SW 115 kV
Need Date for Project: 6/1/2010
Estimated Cost for Project: $3,000,000

Network Upgrade ID: 11029
Network Upgrade Description: Reconductor 6.15 mile Maddox - Sanger Switching Station 115kV line.
Network Upgrade Owner: Southwestern Public Service Company

MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Upgrade the line to emergency rating 249 MVA.
Network Upgrade Justification: To address the overload of Maddox - Sanger SW 115 kV for outage of Hobbs Interchange - Millen 115 kV, Maddox Station - Monument 115 kV, or Monument - West Hobbs Switching Station 115 kV.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $3,000,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 782
Project Name: Line - South Georgia Interchange - Osage Switching Station 115 kV
Need Date for Project: 6/1/2010
Estimated Cost for Project: $1,687,500

Network Upgrade ID: 11032
Network Upgrade Description: Rebuild 4 mile Osage Switching Station - South Georgia Interchange 115 kV with 795 ACSR.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Upgrade the line to emergency rating 249 MVA.
Network Upgrade Justification: To address the overload of South Georgia Interchange - Osage Switching Station 115 kV for an outage of either Amarillo South Interchange - Farmers 115 kV or Cherry - Nichols Station 115 kV.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $1,687,500
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 783
Project Name: XFR - Randall 230/115 kV Ckt 2
Need Date for Project: 6/1/2010
Estimated Cost for Project: $11,250,000

Network Upgrade ID: 11033
Network Upgrade Description: Install second 230/115 kV transformer in Randall substation.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant

TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Install the transformer for emergency rating 239 MVA.
Network Upgrade Justification: To address the overload of the Randall County Interchange 230/115 kV transformer for the loss of Amarillo South - Nichols Station 230 kV or East Plant Interchange - Harrington Station 230 kV.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $11,250,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 786
Project Name: Line - Maddox Station - Monument 115 kV
Need Date for Project: 6/1/2011
Estimated Cost for Project: $1,417,500

Network Upgrade ID: 11036
Network Upgrade Description: Reconductor 3.36 mile Maddox Station - Monument 115 kV with 795 ACSR.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Upgrade the line to emergency rating 249 MVA.
Network Upgrade Justification: To address the overload of Maddox Station - Monument 115 kV for the outage of Maddox Station - Sanger Switching Station 115 kV or East Sanger - Taylor Switching Station 115 kV Ckt 2.
Need Date for Network Upgrade: 6/1/2011
Estimated Cost for Network Upgrade (current day dollars): $1,417,500
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 789
Project Name: Line - Brasher Tap - Roswell Interchange 115 kV
Need Date for Project: 6/1/2012
Estimated Cost for Project: $114,000

Network Upgrade ID: 11038
Network Upgrade Description: Reconductor 0.27 mile Roswell Interchange - Brasher Tap 115 kV with 397 kcmil conductor.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant

TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Upgrade the line to emergency rating 161 MVA.
Network Upgrade Justification: To address the overload of Roswell Interchange - Brasher Tap 115 kV for the loss of Chaves County Interchange - Urton 115 kV.
Need Date for Network Upgrade: 6/1/2012
Estimated Cost for Network Upgrade (current day dollars): $114,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 791
Project Name: Multi - New Hart Interchange 230/115 kV
Need Date for Project: 6/1/2010
Estimated Cost for Project: $53,164,688

Network Upgrade ID: 11040
Network Upgrade Description: Tap the Potter Interchange - Plant X Station 230 kV line for new Newhart Substation and install 230/115 kV transformer.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Install the transformer for emergency rating 173 MVA.
Network Upgrade Justification: To address the overload of Happy Interchange - Palo Duro 115 kV for the loss of Kress Interchange - Swisher County Interchange 115 kV or the Swisher County Interchange 230/115 kV transformer.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $11,250,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Network Upgrade ID: 11041
Network Upgrade Description: Build new 19 mile Swisher County Interchange - Newhart 230 kV line.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Build the line to emergency rating 541 MVA.
Network Upgrade Justification: To address the overload of Happy Interchange - Palo Duro 115 kV for the loss of Kress Interchange - Swisher County Interchange 115 kV or the Swisher County Interchange 230/115 kV transformer.

Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $16,031,250
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Network Upgrade ID: 11042
Network Upgrade Description: Build new 18 mile Kress - Newhart 115 kV line.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Build the line to emergency rating 173 MVA.
Network Upgrade Justification: To address the overload of Happy Interchange - Palo Duro 115 kV for the loss of Kress Interchange - Swisher County Interchange 115 kV or the Swisher County Interchange 230/115 kV transformer.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $10,125,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Network Upgrade ID: 11043
Network Upgrade Description: Build new 24 mile Castro County Interchange - Newhart 115 kV line.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Build the line to emergency rating 173 MVA.
Network Upgrade Justification: To address the overload of Happy Interchange - Palo Duro 115 kV for the loss of Kress Interchange - Swisher County Interchange 115 kV or the Swisher County Interchange 230/115 kV transformer.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $13,500,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Network Upgrade ID: 11044
Network Upgrade Description: Build new 4 mile Hart Industrial - Newhart 115 kV line.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability

Network Upgrade Specification: Build the line to emergency rating 173 MVA.
Network Upgrade Justification: To address the overload of Happy Interchange - Palo Duro 115 kV for the loss of Kress Interchange - Swisher County Interchange 115 kV or the Swisher County Interchange 230/115 kV transformer.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $2,250,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Network Upgrade ID: 11045
Network Upgrade Description: Build new 15 mile Lampton Interchange - Hart Industrial 115 kV line.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Build the line to emergency rating 173 MVA.
Network Upgrade Justification: To address the overload of Happy Interchange - Palo Duro 115 kV for the loss of Kress Interchange - Swisher County Interchange 115 kV or the Swisher County Interchange 230/115 kV transformer.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $8,438
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 793
Project Name: Line - Gains - Legacy 115 kV reconductor
Need Date for Project: 6/1/2013
Estimated Cost for Project: $2,320,300

Network Upgrade ID: 11047
Network Upgrade Description: Reconductor 5.5 mile Gaines County Interchange - Legacy 115 kV line.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Upgrade the line to emergency rating 154 MVA.
Network Upgrade Justification: To address the overload of Gains County Interchange - Legacy 115 kV for the loss of Doss Interchange - Seminole 115 kV.
Need Date for Network Upgrade: 6/1/2013
Estimated Cost for Network Upgrade (current day dollars): $2,320,300
Cost Allocation of the Network Upgrade: Base Plan

Estimated Cost Source: SPP

Project ID: 794
Project Name: XFR - Grave 115/69 kV Ckt 2
Need Date for Project: 6/1/2013
Estimated Cost for Project: $900,000

Network Upgrade ID: 11049
Network Upgrade Description: Add a second Grave 115/69 kV transformer.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Install the transformer for emergency rating 40 MVA.
Network Upgrade Justification: To address the system-intact overload of the Graves 115/69 kV transformer Ckt 1.
Need Date for Network Upgrade: 6/1/2013
Estimated Cost for Network Upgrade (current day dollars): $900,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 795
Project Name: Multi - Frio - Draw - Potter 345 kV
Need Date for Project: 6/1/2011
Estimated Cost for Project: $204,187,500

Network Upgrade ID: 11050
Network Upgrade Description: Build new 130 mile 345 kV line from Potter to new Frio - Draw substation near Roosevelt.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Build the line to emergency rating 1793 MVA.
Network Upgrade Justification: To address the overload of Curry - Roosevelt 115 kV Ckt 2 for the loss of Oasis - Roosevelt 230 kV Ckt 1 or Oasis 230/115 kV transformer Ckt 1. Also to address the overload of Roosevelt North - Tolk West 230 kV Ckt 2 for the loss of Roosevelt South - Tolk East 230 kV Ckt 1 and vice versa.
Need Date for Network Upgrade: 6/1/2013
Estimated Cost for Network Upgrade (current day dollars): $146,250,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Network Upgrade ID: 11051
Network Upgrade Description: Build new Frio - Draw substation and install 345/230 kV transformer.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Install the transformer to emergency rating 560 MVA.
Network Upgrade Justification: To address the overload of Curry - Roosevelt 115 kV Ckt 2 for the loss of Oasis - Roosevelt 230 kV Ckt 1 or Oasis 230/115 kV transformer Ckt 1. Also to address the overload of Roosevelt North - Tolk West 230 kV Ckt 2 for the loss of Roosevelt South - Tolk East 230 kV Ckt 1 and vice versa.
Need Date for Network Upgrade: 6/1/2013
Estimated Cost for Network Upgrade (current day dollars): $11,250,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Network Upgrade ID: 11052
Network Upgrade Description: Install 230/115 kV transformer at Frio - Draw substation.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Install the transformer for emergency rating 252 MVA.
Network Upgrade Justification: To address the overload of Curry - Roosevelt 115 kV Ckt 2 for the loss of Oasis - Roosevelt 230 kV Ckt 1 or Oasis 230/115 kV transformer Ckt 1. Also to address the overload of Roosevelt North - Tolk West 230 kV Ckt 2 for the loss of Roosevelt South - Tolk East 230 kV Ckt 1 and vice versa.
Need Date for Network Upgrade: 6/1/2011
Estimated Cost for Network Upgrade (current day dollars): $11,250,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Network Upgrade ID: 11053
Network Upgrade Description: Build new 16 mile Frio - Draw - Oasis 230 kV line.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Build the line to emergency rating 546 MVA.

Network Upgrade Justification: To address the overload of Curry - Roosevelt 115 kV Ckt 2 for the loss of Oasis - Roosevelt 230 kV Ckt 1 or Oasis 230/115 kV transformer Ckt 1. Also to address the overload of Roosevelt North - Tolk West 230 kV Ckt 2 for the loss of Roosevelt South - Tolk East 230 kV Ckt 1 and vice versa.
Need Date for Network Upgrade: 6/1/2011
Estimated Cost for Network Upgrade (current day dollars): $13,500,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Network Upgrade ID: 11054
Network Upgrade Description: Build new 26 mile Frio - Draw - Roosevelt County 230 kV line.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Build the line to emergency rating 546 MVA.
Network Upgrade Justification: To address the overload of Curry - Roosevelt 115 kV Ckt 2 for the loss of Oasis - Roosevelt 230 kV Ckt 1 or Oasis 230/115 kV transformer Ckt 1. Also to address the overload of Roosevelt North - Tolk West 230 kV Ckt 2 for the loss of Roosevelt South - Tolk East 230 kV Ckt 1 and vice versa.
Need Date for Network Upgrade: 6/1/2011
Estimated Cost for Network Upgrade (current day dollars): $21,937,500
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 797
Project Name: XFR - Borden 230/138 kV Ckt #2
Need Date for Project: 6/1/2010
Estimated Cost for Project: $11,250,000

Network Upgrade ID: 11056
Network Upgrade Description: Add second 230/138 kV transformer at Borden County.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Install the transformer for emergency rating 168 MVA.
Network Upgrade Justification: To address the overload of the Midland County Interchange 230/138 kV transformer for the loss of Grassland Interchange - Jones Station 230 kV Ckt 1.
Need Date for Network Upgrade: 6/1/2010

Estimated Cost for Network Upgrade (current day dollars): $11,250,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 821
Project Name: Line - Randall Co - Osage 115 kV
Need Date for Project: 6/1/2010
Estimated Cost for Project: $1,125,000

Network Upgrade ID: 11084
Network Upgrade Description: Reconductor 2 mile Osage Switching Station - Randall County Interchange 115 kV line with 795 ACSR.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Upgrade the line to emergency rating 160 MVA.
Network Upgrade Justification: To address the overload of the Osage - Randall 115 kV for loss of Manhattan Tap - Randall County Interchange 115 kV.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $1,125,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 824
Project Name: Multi - Hobbs - Midland 230 kV to 345 kV Conversion
Need Date for Project: 6/1/2010
Estimated Cost for Project: $27,225,000

Network Upgrade ID: 11089
Network Upgrade Description: Convert existing 89.22 mile Hobbs Interchange - Midland 230 kV line to operate at 345 kV.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Upgrade the line to emergency rating 1623 MVA.
Network Upgrade Justification: To address overloads in Cap Rock area due to load growth for various contingencies, such as Grassland - Jones Station 230 kV Ckt 1 or Borden County – Grassland 230 kV contingency.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $4,725,000
Cost Allocation of the Network Upgrade: Base Plan

Estimated Cost Source: SPP

Network Upgrade ID: 11090
Network Upgrade Description: Install new 345/230 kV transformer at Hobbs Interchange.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Install the transformer for emergency rating 560 MVA.
Network Upgrade Justification: To address overloads in Cap Rock area due to load growth for various contingencies, such as Grassland - Jones Station 230 kV Ckt 1 or Borden County – Grassland 230 kV contingency.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $11,250,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Network Upgrade ID: 11091
Network Upgrade Description: Install new 345/138 kV transformer at Midland.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Install the transformer for emergency rating 440 MVA.
Network Upgrade Justification: To address overloads in Cap Rock area due to load growth for various contingencies, such as Grassland - Jones Station 230 kV Ckt 1 or Borden County - Grassland 230 kV contingency.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $11,250,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 829
Project Name: XFR - Kingsmill 115/69 kV Ckt 2
Need Date for Project: 6/1/2011
Estimated Cost for Project: $1,935,000

Network Upgrade ID: 11096
Network Upgrade Description: Install a second 115/69 kV transformer at Kingsmill.
Network Upgrade Owner: Southwestern Public Service Company

MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Install the transformer for emergency rating 86 MVA.
Network Upgrade Justification: To address overload of the Kingsmill 115/69 kV transformer Ckt 1 for loss of Gray County Interchange - Hutchinson County Interchange South 115 kV.
Need Date for Network Upgrade: 6/1/2011
Estimated Cost for Network Upgrade (current day dollars): $1,935,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 830
Project Name: Line - Randall - Manhattan Tap 115 kV
Need Date for Project: 6/1/2010
Estimated Cost for Project: $900,000

Network Upgrade ID: 11097
Network Upgrade Description: Reconductor 1.6 mile Manhattan - Randall County Interchange 115 kV line with 795 ACSR.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Upgrade the line to emergency rating 271 MVA.
Network Upgrade Justification: To address overloads for loss of Osage Switching Station - Randall County Interchange 115 kV.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $900,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 834
Project Name: Line - Portales - Zodiac 69 kV to 115 kV Conversion
Need Date for Project: 6/1/2013
Estimated Cost for Project: $3,487,500

Network Upgrade ID: 11101
Network Upgrade Description: Convert existing 3 mile Portales Interchange - Zodiac 69 kV line to operate at 115 kV.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton

Categorization: Regional reliability
Network Upgrade Specification: Upgrade the line to emergency rating 173 MVA.
Network Upgrade Justification: To address overloads for loss of either of the Portales 115/69 kV transformers.
Need Date for Network Upgrade: 6/1/2013
Estimated Cost for Network Upgrade (current day dollars): $3,487,500
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 839
Project Name: Multi - Kress Interchange - Plainview County 115 kV
Need Date for Project: 6/1/2014
Estimated Cost for Project: $15,727,500

Network Upgrade ID: 11107
Network Upgrade Description: Build new 22.2 mile Kress Interchange - Plainview County 115 kV.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Build the line to emergency rating 173 MVA.
Network Upgrade Justification: To address overloads and low voltage in Kress - Plainview areas due to area load growth.
Need Date for Network Upgrade: 6/1/2014
Estimated Cost for Network Upgrade (current day dollars): $14,737,500
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Network Upgrade ID: 11108
Network Upgrade Description: Install new Plainview County 115/69 kV transformer.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Install the transformer for emergency rating 50 MVA.
Network Upgrade Justification: To address overloads and low voltage in Kress - Plainview areas due to area load growth.
Need Date for Network Upgrade: 6/1/2014
Estimated Cost for Network Upgrade (current day dollars): $990,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 840
Project Name: Line - Cox - Plainview 115 kV
Need Date for Project: 6/1/2014
Estimated Cost for Project: $7,762,500

Network Upgrade ID: 11109
Network Upgrade Description: Build new 9.8 mile Cox - Plainview 115 kV line.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Build the line to emergency rating 173 MVA.
Network Upgrade Justification: To address overloads and low voltage in Plainview - Cox areas due to area load growth.
Need Date for Network Upgrade: 6/1/2014
Estimated Cost for Network Upgrade (current day dollars): $7,762,500
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 851
Project Name: Line - Harrington - Randall County 230 kV
Need Date for Project: 6/1/2010
Estimated Cost for Project: $225,000

Network Upgrade ID: 11121
Network Upgrade Description: Replace existing 800 A Harrington 230 kV wave trap with 1200 A minimum-rated wave trap.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Upgrade the line to emergency rating 502 MVA.
Network Upgrade Justification: To address overload of Harrington - Randall County 230 kV for loss of Nichols Station - Randall County Interchange 230 kV.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $225,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 857
Project Name: Line - East Plant - Pierce 115 kV
Need Date for Project: 6/1/2011
Estimated Cost for Project: $596,250

Network Upgrade ID: 11196
Network Upgrade Description: Reconductor 1.06 mile East Plant - Pierce 115 kV with 795 ACSR.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Upgrade the line to emergency rating 271 MVA.
Network Upgrade Justification: To address overloads due to various contingencies in the Manhattan and Randall area.
Need Date for Network Upgrade: 6/1/2011
Estimated Cost for Network Upgrade (current day dollars): $596,250
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 883
Project Name: Line - Jones - Grassland 230 kV Ckt 2
Need Date for Project: 6/1/2011
Estimated Cost for Project: $30,395,000

Network Upgrade ID: 11172
Network Upgrade Description: Build new second 26.7 mile Jones - Grassland 230 kV line.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Build the line to emergency rating 541 MVA.
Network Upgrade Justification: To address overloads and low voltages during the contingency of Grassland - Jones Station 230 kV Ckt 1.
Need Date for Network Upgrade: 6/1/2011
Estimated Cost for Network Upgrade (current day dollars): $30,395,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 887
Project Name: Line - Canyon West - Spring Draw 115 kV
Need Date for Project: 6/1/2010
Estimated Cost for Project: $7,762,500

Network Upgrade ID: 11176

Network Upgrade Description: Build new 9 mile Canyon West - Spring Draw 115 kV line.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Build the line to emergency rating 173 MVA.
Network Upgrade Justification: To address overloads and low voltages during the contingency of Osage - Canyon East 115 kV.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $7,762,500
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 888
Project Name: Line - Randall - Amarillo South 230 kV
Need Date for Project: 6/1/2010
Estimated Cost for Project: $27,450,000

Network Upgrade ID: 11177
Network Upgrade Description: Build new 20 mile Randall County - Amarillo South 230 kV line.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Build the line to emergency rating 541 MVA.
Network Upgrade Justification: To address overloads and low voltages during the contingency of Osage - Canyon East 115 kV.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $27,450,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 30213
Project Name: Device - East Plant 115 kV
Need Date for Project: 6/1/2010
Estimated Cost for Project: $2,025,000

Network Upgrade ID: 50217
Network Upgrade Description: Install 50 Mvar capacitor bank at East Plant 115 kV bus configured as two blocks of 25 Mvar.
Network Upgrade Owner: Southwestern Public Service Company

MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Install capacitor of size 50 Mvar.
Network Upgrade Justification: To address low voltage during various contingencies in Cap Rock area.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $2,025,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 30244
Project Name: Line - Harrington - Mid - Randall 230 kV Ckt 1
Need Date for Project: 6/1/2010
Estimated Cost for Project: $225,000

Network Upgrade ID: 50257
Network Upgrade Description: Replace 800 A wave trap with 1200 A at Harrington Station Mid Bus 230 kV.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Install wave trap of size 1200 A.
Network Upgrade Justification: To address the overload of the existing Harrington Station Mid Bus 800 A wave trap for loss of Nichols Station - Randall County Interchange 230 kV.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $225,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 30246
Project Name: Device - Kress Rural 69 kV
Need Date for Project: 6/1/2011
Estimated Cost for Project: $583,200

Network Upgrade ID: 50259
Network Upgrade Description: Install two blocks of 7.2 Mvar capacitors at Kress Rural 69 kV bus.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton

Categorization: Regional reliability
Network Upgrade Specification: Install capacitor of size 14.4 Mvar.
Network Upgrade Justification: Voltage support at Kress Rural 69 kV during several contingencies including Kress Interchange - Swisher County Interchange 115 kV.
Need Date for Network Upgrade: 6/1/2011
Estimated Cost for Network Upgrade (current day dollars): $583,200
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Upgrades with Modifications

Previous NTC number: 20004
Previous NTC Issue Date: 2/13/2008
Project ID: 156
Project Name: Multi - Hitchland - Texas Co. 230 kV and 115 kV
Need Date for Project: 6/1/2009
Estimated Cost for Project: $120,875,414 (this project cost contains Network Upgrades not included in this NTC)

Network Upgrade ID: 10329
Network Upgrade Description: Build new 35 mile Sherman - Dallam 115 kV line.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Reason For Change: Modify Scope. The termination of this line was changed from Dalhart substation to Dallam County Interchange because the Dallam site has expansion room and can easily accommodate the additional line terminals and Dalhart does not.
Categorization: Regional reliability
Network Upgrade Specification: Build the line to emergency rating 161 MVA.
Network Upgrade Justification: To address overloads and low voltage issues for system-intact conditions and due to the loss of Spearman - Spearman Substation 115 kV, Moore-Potter 230 kV, or various other contingencies.
Need Date for Network Upgrade: 6/1/2010
Estimated Cost for Network Upgrade (current day dollars): $10,771,825
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPS

Previous NTC number: 20043
Previous NTC Issue Date: 6/19/2009
Project ID: 704
Project Name: XFR - Tuco 345/230 kV Ckt 2
Need Date for Project: 6/1/2012

Estimated Cost for Project: $11,250,000

Network Upgrade ID: 11085

Network Upgrade Description: Add second 345/230 kV transformer at Tuco Interchange.
Network Upgrade Owner: Southwestern Public Service Company
MOPC Representative: William Grant
TWG Representative: John Fulton
Reason For Change: 2009 STEP identified 2012 reliability need date for the installation of the Tuco 345/230 kV transformer Ckt 2.
Categorization: Balanced Portfolio
Network Upgrade Specification: Install the transformer for emergency rating 560 MVA.
Network Upgrade Justification: To address the overload of the Tuco Interchange 345/230 kV transformer due to load growth in the Tuco area.
Need Date for Network Upgrade: 6/1/2012
Estimated Cost for Network Upgrade (current day dollars): $11,250,000
Cost Allocation of the Network Upgrade: Region-wide charge as specified by Attachment J, SPP OATT
Estimated Cost Source: SPP

Commitment to Construct

Please provide to SPP a written commitment to construct the Network Upgrade(s) within 90 days of the date of this Notification to Construct, pursuant to Attachment O, Section VIII.6 of the SPP OATT, in addition to providing a construction schedule for the Network Upgrade(s). Failure to provide a written commitment to construct as required by Attachment O could result in the Network Upgrade(s) being assigned to another entity.

Mitigation Plan

The Need Date represents the timing required for the Network Upgrade(s) to address the identified need. Your prompt attention is required for formulation and approval of any necessary mitigation plans for the Network Upgrade(s) if the Need Date is not feasible. Additionally, if it is anticipated that the completion of any Network Upgrade will be delayed past the Need Date, SPP requires a mitigation plan be filed within 60 days of the determination of expected delays.

Notification of Commercial Operation

Please submit a notification of commercial operation for each listed Network Upgrade to SPP as soon as the Network Upgrade is complete and in-service. Please provide SPP with the actual costs of these Network Upgrades as soon as possible after completion of construction. This will facilitate the timely billing by SPP based on actual costs.

Notification of Progress

On an ongoing basis, please keep SPP advised of any inability on Southwestern Public Service Company's part to complete the approved Network Upgrade(s). For project tracking purposes, SPP requires Southwestern Public Service Company to submit updates on the status of the Network Upgrade(s) on a quarterly basis in conjunction with the SPP Board of Directors meetings. However, consistent with Sections 20.1 and 32.10 of the SPP OATT, Southwestern Public Service Company shall also advise SPP of any inability to comply with the Project Schedule as soon as the inability becomes apparent.

All terms and conditions of the SPP OATT and the SPP Membership Agreement shall apply to this Project, and nothing in this NTC shall vary such terms and conditions.

Don't hesitate to contact me if you have questions or comments regarding these instructions. Thank you for the important role that you play in maintaining the reliability of our electric grid.

Sincerely,

Bruce A. Rew

Bruce Rew
Vice President, Engineering
Phone (501) 614-3214 • Fax: (501) 821-3198 • BRew@spp.org

cc: Carl Monroe, Les Dilahunty, Pat Bourne, Jay Caspary, Keith Tynes, John Mills, SPPprojecttracking@spp.org, William Grant

Southwest Power Pool

HELPING OUR MEMBERS WORK TOGETHER
TO KEEP THE LIGHTS ON... TODAY AND IN THE FUTURE

SPP-NTC-20130

SPP
Notification to Construct

February 14, 2011

Mr. John Fulton
Southwestern Public Service Company
PO Box 1261
Amarillo, TX 79170

RE: Notification to Construct Approved Reliability Network Upgrades

Dear Mr. Fulton,

Pursuant to Section 3.3 of the Southwest Power Pool, Inc. ("SPP") Membership Agreement and Attachment O, Section VI, of the SPP Open Access Transmission Tariff ("OATT"), SPP provides this Notification to Construct ("NTC") directing Southwestern Public Service Company ("SPS"), as the Designated Transmission Owner, to construct the Network Upgrade(s).

On January 25, 2011, the Southwest Power Pool ("SPP") Board of Directors approved the Network Upgrade(s) listed below to be constructed.

New Network Upgrades

Project ID: 156
Project Name: Multi – Hitchland - Texas Co. 230 kV and 115 kV
Need Date for Project: 6/1/2011
Estimated Cost for Project: $ 110,134,171 (this project cost contains Network Upgrades not included in this NTC)

Network Upgrade ID: 11389
Network Upgrade Description: Install 0.19-mile Ochiltree - Perryton 115 kV line and the necessary terminal equipment at Ochiltree and Perryton Substations.
Network Upgrade Owner: SPS
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Build line to 173 MVA emergency rating.
Network Upgrade Justification: This upgrade is part of the Ochiltree upgrade and is required because the Perryton Substation cannot accommodate a new 230/115 kV transformer. The original upgrade was approved in the 2009 STEP.
Need Date for Network Upgrade: 6/1/2011

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Estimated Cost for Network Upgrade (current day dollars): $1,181,400
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 764
Project Name: XFR – Happy County 115/69 kV transformers
Need Date for Project: 6/1/2012
Estimated Cost for Project: $3,780,000

Network Upgrade ID: 11007
Network Upgrade Description: Upgrade Happy County 115/69 kV transformer Ckt 1.
Network Upgrade Owner: SPS
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Upgrade transformer to 96 MVA emergency rating.
Network Upgrade Justification: To address overload of the Happy County 115/69 kV transformer Ckt 1 for the loss of Happy County transformer Ckt 2.
Need Date for Network Upgrade: 6/1/2012
Estimated Cost for Network Upgrade (current day dollars): $1,890,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Network Upgrade ID: 11009
Network Upgrade Description: Upgrade Happy County 115/69 kV transformer Ckt 2.
Network Upgrade Owner: SPS
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Upgrade transformer to 96 MVA emergency rating.
Network Upgrade Justification: To address overload of the Happy County 115/69 kV transformer Ckt 2 for the loss of Happy County transformer Ckt 1.
Need Date for Network Upgrade: 6/1/2012
Estimated Cost for Network Upgrade (current day dollars): .$1,890,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 774
Project Name: Line – Cherry - Hastings 115 kV Ckt 1
Need Date for Project: 6/1/2013
Estimated Cost for Project: $1,771,875

Network Upgrade ID: 11378

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Network Upgrade Description: Construct approximately 3.5 miles of 115 kV line from Cherry Street substation to Hastings substation.
Network Upgrade Owner: SPS
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Build line to 192 MVA emergency rating.
Network Upgrade Justification: Replaces UID 11022 Hastings - Bush 115 kV line.
Need Date for Network Upgrade: 6/1/2013
Estimated Cost for Network Upgrade (current day dollars): $1,771,875
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 792
Project Name: Line – Cunningham - Buckeye Tap 115 kV Ckt 1 reconductor
Need Date for Project: 6/1/2013
Estimated Cost for Project: $3,607,000

Network Upgrade ID: 11046
Network Upgrade Description: Reconductor 8.5-mile Cunningham Station - Buckeye Tap 115 kV line with 795 ACSR.
Network Upgrade Owner: SPS
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Upgrade line to 249 MVA emergency rating.
Network Upgrade Justification: To address the overload of Cunningham Station - Buckeye Tap 115 kV Ckt 1 for the loss of the Lea County REC Lovington Interchange 115/69 kV transformer.
Need Date for Network Upgrade: 6/1/2013
Estimated Cost for Network Upgrade (current day dollars): $3,607,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 833
Project Name: XFR – Northeast Hereford 115/69 kV transformer Ckt 2
Need Date for Project: 6/1/2011
Estimated Cost for Project: $1,890,000

Network Upgrade ID: 11100
Network Upgrade Description: Construct 115 kV bus at NE-Hereford Interchange to house two transformer terminals, two 115 kV line terminals, and one future 115 kV line terminal. Add second 115/69 kV transformer..

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Network Upgrade Owner: SPS
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Install transformer to 96 MVA emergency rating.
Network Upgrade Justification: To address the overload of Hereford transformer Ckt 1 and Ckt 2, the overload of Hereford - Northeast Hereford 69 kV for the loss of Northeast Hereford transformer, and in 2013, address the system intact overload of the NE Hereford transformer Ckt 1.
Need Date for Network Upgrade: 6/1/2011
Estimated Cost for Network Upgrade (current day dollars): $1,890,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 1001
Project Name: Line – Randall - South Georgia and Osage Station line re-termination
Need Date for Project: 6/1/2016
Estimated Cost for Project: $1,680,000

Network Upgrade ID: 11315
Network Upgrade Description: Construct approximately 2 miles of new 115 kV line with 795 ACSR from Randall Co. Interchange towards Osage Substation connecting to South Georgia line . Tie new 115 kV line into existing circuit V70 near Osage Substation. Reconfigure the 115 kV transmission lines around Osage Substation: remove circuit V04 termination from Osage Substation and remove circuit back to Manhattan Tap (remove 3-terminal condition); remove circuits V67 and V05 terminations from Osage Substation and tie them together around Osage Substation; leave only circuits V43 and T75 terminated at the Osage Substation. Add new 115 kV terminal at Randall Co. Interchange and rebuild Randall 115 kV bus to breaker and one-half design. Upgrade terminal equipment and reset relays at South Georgia Interchange.
Network Upgrade Owner: SPS
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Upgrade facilities to 160 MVA emergency rating.
Network Upgrade Justification: To address the overload of Osage Switching Station - South Georgia Interchange 115 kV for the loss of Cherry - Northwest Interchange 115 kV Ckt 1 or multi-terminal contingencies. Also to address the overload of Manhattan Tap - Osage Switching Station 115 kV Ckt 1 for the loss of Osage Switching Station - Randall Co. Interchange 115 kV Ckt 1.
Need Date for Network Upgrade: 6/1/2016
Estimated Cost for Network Upgrade (current day dollars): $1,680,000
Cost Allocation of the Network Upgrade: Base Plan

Estimated Cost Source: SPP

Project ID: 1002
Project Name: Line – OXY Permian - Sanger Switching Station 115 kV Ckt 1 Reconductor
Need Date for Project: 6/1/2016
Estimated Cost for Project: $295,313

Network Upgrade ID: 11316
Network Upgrade Description: Reconductor Sanger Switching Station - OXY Permian 115 kV line with 397.5 ACSR.
Network Upgrade Owner: SPS
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Upgrade line to 173 MVA emergency rating.
Network Upgrade Justification: To address the overload of OXY Permian - Sanger Switching Station 115 kV Ckt 1 for the loss of Maddox Station-Monument 115 kV Ckt 1.
Need Date for Network Upgrade: 6/1/2016
Estimated Cost for Network Upgrade (current day dollars): $295,313
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 1004
Project Name: XFR – Swisher 230/115 kV transformer Ckt 1
Need Date for Project: 6/1/2016
Estimated Cost for Project: $5,953,500

Network Upgrade ID: 11318
Network Upgrade Description: Upgrade existing Swisher 230/115 kV transformer.
Network Upgrade Owner: SPS
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Upgrade transformer to 252 MVA emergency rating.
Network Upgrade Justification: To address overload of the Swisher 230/115 kV transformer for the loss of the New Hart 230/115 kV transformer.
Need Date for Network Upgrade: 6/1/2016
Estimated Cost for Network Upgrade (current day dollars): $5,953,500
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 1005
Project Name: Line – Wolfforth - Yuma 115 kV Ckt 1

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Need Date for Project: 6/1/2012
Estimated Cost for Project: $945,000

Network Upgrade ID: 11319
Network Upgrade Description: Replace wave traps, CTs and jumpers at both Wolfforth and Yuma Substations such that terminal equipment does not constrain the conductor rating of the 115 kV line.
Network Upgrade Owner: SPS
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Upgrade facilities to 192 MVA emergency rating.
Network Upgrade Justification: To address the overload of Wolfforth - Yuma Interchange 115 kV for the loss of Carlisle Interchange - Tuco Interchange 230 kV Ckt 1 or Allen - Lubbock 115 kV Ckt 1.
Need Date for Network Upgrade: 6/1/2012
Estimated Cost for Network Upgrade (current day dollars): $945,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 1029
Project Name: Convert Lynn load to 115 kV
Need Date for Project: 6/1/2012
Estimated Cost for Project: $100,000

Network Upgrade ID: 11353
Network Upgrade Description: Expand 115 kV bus at Lynn County Interchange to provide connection for new distribution transformer. Install 115/22.5 kV distribution transformer.
Network Upgrade Owner: SPS
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Convert Lynn County 69 kV load to 115 kV.
Network Upgrade Justification: To address overload of the Lynn Interchange 115/69 kV transformer Ckt 1 for the loss of Lynn Interchange 115 kV transformer Ckt 2.
Need Date for Network Upgrade: 6/1/2012
Estimated Cost for Network Upgrade (current day dollars): $100,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 1030
Project Name: Line – Abernathy - Tolk 115 kV Ckt 1

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Need Date for Project: 6/1/2011
Estimated Cost for Project: $2,126,250

Network Upgrade ID: 11354
Network Upgrade Description: Construct approximately 6 miles of 115 kV line from Tuco Interchange to SP-Abernathy Substation. Convert SP-Abernathy Substation to 115 kV service.
Network Upgrade Owner: SPS
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Build line to 173 MVA emergency rating.
Network Upgrade Justification: To address overload of one Tuco 115/69 kV transformer for the loss of the other.
Need Date for Network Upgrade: 6/1/2011
Estimated Cost for Network Upgrade (current day dollars): $2,126,250
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 1034
Project Name: Line – Hereford - Northeast Hereford 115 kV Ckt 1
Need Date for Project: 6/1/2011
Estimated Cost for Project: $2,362,500

Network Upgrade ID: 11359
Network Upgrade Description: Convert Hereford Interchange - NE-Hereford Interchange 69 kV line to 115 kV service.
Network Upgrade Owner: SPS
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Upgrade facilities to 270 MVA emergency rating.
Network Upgrade Justification: To address the overload of Hereford transformers and the overload of Hereford - Northeast Hereford 69 kV for the loss of Northeast Hereford transformer. In later years it addresses low voltages at Deaf Smith REC #5#11 69 kV, Hereford Centre St 69 kV sub, Deaf Smith Metering Station 69 kV and NE Hereford Interchange 115 kV for the loss of Deaf Smith County Interchange - NE Hereford Interchange Ckt 1.
Need Date for Network Upgrade: 6/1/2011
Estimated Cost for Network Upgrade (current day dollars): $2,362,500
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

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Project ID: 1036
Project Name: Line – Convert Soncy load to 115 kV
Need Date for Project: 6/1/2015
Estimated Cost for Project: $500,000

Network Upgrade ID: 11372
Network Upgrade Description: Tap the Sunset to Coulter Interchange 115 kV line at Soncy Street and convert 1.04 miles of Z33 from 69 kV to 115 kV service. At the new Soncy substation, split the converted Z33 line and install a new 115/13.2 kV transformer to serve the Soncy distribution load.
Network Upgrade Owner: SPS
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Upgrade facilities to 173 MVA emergency rating.
Network Upgrade Justification: To address the overload of Lawrence Park - South Georgia Interchange 69 kV Ckt 1 for the loss of Northwest 115/69 kV transformer, Coulter 115/69 kV transformer or Waterfield Tap - Coulter 69 kV Ckt 1.
Need Date for Network Upgrade: 6/1/2015
Estimated Cost for Network Upgrade (current day dollars): $500,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 1042
Project Name: Substation – North Plainview 115 kV
Need Date for Project: 6/1/2015
Estimated Cost for Project: $150,000

Network Upgrade ID: 11383
Network Upgrade Description: Tap the Kress - Plainview City 115 kV line with North Plainview substation. Convert North Plainview substation to 115 kV.
Network Upgrade Owner: SPS
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Upgrade facilities to 173 MVA emergency rating.
Network Upgrade Justification: Identified in 2009 STEP as part of long range plan for the area and part of the PID 839 upgrade.
Need Date for Network Upgrade: 6/1/2015
Estimated Cost for Network Upgrade (current day dollars): $150,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

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Project ID: 1043
Project Name: Substation – Kress Rural 115 kV
Need Date for Project: 6/1/2015
Estimated Cost for Project: $150,000

Network Upgrade ID: 11384
Network Upgrade Description: Tap the Kress - Plainview City 115 kV line with Kress Rural Substation. Convert Kress Rural Substation to 115 kV.
Network Upgrade Owner: SPS
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Upgrade facilities to 173 MVA emergency rating.
Network Upgrade Justification: Identified in 2009 STEP as part of long range plan for the area and part of the PID 839 upgrade.
Need Date for Network Upgrade: 6/1/2015
Estimated Cost for Network Upgrade (current day dollars): $150,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Project ID: 1048
Project Name: Line – Lighthouse - North Plainview 69 kV Ckt 1
Need Date for Project: 6/1/2011
Estimated Cost for Project: $50,000

Network Upgrade ID: 11388
Network Upgrade Description: Install 69 kV switch north of North Plainview Substation and south of LH-PLW&FNY. Open new switch, and close switch 3811 at Plainview City to allow North Plainview Substation to be fed by Cox Interchange.
Network Upgrade Owner: SPS
MOPC Representative: William Grant
TWG Representative: John Fulton
Categorization: Regional reliability
Network Upgrade Specification: Build facilities to 72 MVA emergency rating.
Network Upgrade Justification: To address system intact low voltages at the Lighthouse 69 kV and North Plainview 69 kV substations.
Need Date for Network Upgrade: 6/1/2011
Estimated Cost for Network Upgrade (current day dollars): $50,000
Cost Allocation of the Network Upgrade: Base Plan
Estimated Cost Source: SPP

Withdrawal of Upgrades

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Previous NTC number: 20004
Previous NTC issue Date: 2/13/2008
Project ID: 146
Project Name: Multi – Seminole - Hobbs 230 kV Ckt 1

Network Upgrade ID: 10186
Network Upgrade Description: Build new 45-mile 230 kV line from Hobbs to Seminole.
Reason For Change: With the 2010 STEP model's circuit configuration and load forecast the upgrade is no longer required.

Previous NTC number: 20031, 20004
Previous NTC issue Date: 1/27/2009
Project ID: 151
Project Name: XFR – Tuco 115/69 kV transformer Ckt 1

Network Upgrade ID: 10195
Network Upgrade Description: Add third 115/69 kV transformer at Tuco..
Reason For Change: Replaced by PID 1030.

Previous NTC number: 20031, 20004
Previous NTC issue Date: 1/27/2009
Project ID: 153
Project Name: XFR – Potash Junction Interchange 115/69 kV transformer Ckt 1

Network Upgrade ID: 10197
Network Upgrade Description: Add third 115/69 kV transformer at Potash Junction Interchange.
Reason For Change: With the 2010 STEP model's circuit configuration and load forecast the upgrade is no longer required.

Previous NTC number: 20004
Previous NTC issue Date: 2/13/2008
Project ID: 156
Project Name: Multi – Hitchland - Texas Co. 230 kV and 115 kV

Network Upgrade ID: 10325
Network Upgrade Description: Build new 34-mile 230 kV line from Pringle to Hitchland.
Reason For Change: With the 2010 STEP model's circuit configuration and load forecast the upgrade is no longer required.

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Previous NTC number: 20084
Previous NTC issue Date: 2/8/2010
Project ID: 773
Project Name: XFR – Roosevelt 230/115 kV transformer Ckt 2

Network Upgrade ID: 11018
Network Upgrade Description: Add second 230/115 kV transformer at Roosevelt.
Reason For Change: Previously identified UID 11052, the Pleasant Hill 230/115 kV transformer addresses the reliability needs in the area.

Previous NTC number: 20084
Previous NTC issue Date: 2/8/2010
Project ID: 774
Project Name: Multi – Cherry Sub add 230 kV source and 115 kV Hastings Conversion

Network Upgrade ID: 11022
Network Upgrade Description: Build new 5-mile Hastings to Bush 115 kV line.
Reason For Change: Replaced by UID 11378.

Previous NTC number: 20084
Previous NTC issue Date: 2/8/2010
Project ID: 776
Project Name: Line – Deaf Smith - Panda 115 kV Ckt 1

Network Upgrade ID: 11026
Network Upgrade Description: Build new 1-mile Deaf Smith to Panda 115 kV line.
Reason For Change: Replaced by PID 245, which has a 2010 RTO Determined Need Date of 06/1/2019.

Previous NTC number: 20084
Previous NTC issue Date: 2/8/2010
Project ID: 777
Project Name: Line – East Plant - Manhattan 115 kV Ckt 1

Network Upgrade ID: 11027
Network Upgrade Description: Reconductor 2.24-mile East Plant to Manhattan 115 kV line.
Reason For Change: Replaced by PID 1001.

Previous NTC number: 20084
Previous NTC issue Date: 2/8/2010
Project ID: 782

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Project Name: Line – South Georgia Interchange - Osage Switching Station 115 kV Ckt 1

Network Upgrade ID: 11032
Network Upgrade Description: Rebuild 4-mile Osage Switching Station to South Georgia Interchange 115 kV with 795 ACSR.
Reason For Change: Replaced by PID 1033 with an RTO Determined Need Date of 6/1/2017.

Previous NTC number: 20084
Previous NTC issue Date: 2/8/2010
Project ID: 793
Project Name: Line – Gaines - Legacy 115 kV Ckt 1 reconductor

Network Upgrade ID: 11047
Network Upgrade Description: Reconductor 5.5-mile Gaines County Interchange to Legacy 115 kV line.
Reason For Change: In the 2008 STEP SPP identified UID 10824 to build a new 115 kV line between Gaines County Interchange and Legacy. In the 2009 STEP SPP identified this facility would need to be reconductored in later years and issued this upgrade. After additional evaluation in 2010, SPP determined the new facility should be built at the necessary higher rating. Modified UID 10824 will replace this upgrade.

Previous NTC number: 20084
Previous NTC issue Date: 2/8/2010
Project ID: 794
Project Name: XFR – Grave 115/69 kV transformer Ckt 2

Network Upgrade ID: 11049
Network Upgrade Description: Add second 115/69 kV transformer at Grave.
Reason For Change: With the 2010 STEP model's circuit configuration and load forecast the upgrade is no longer required.

Previous NTC number: 20084
Previous NTC issue Date: 2/8/2010
Project ID: 795
Project Name: Multi – Pleasant Hill - Potter 345 kV Ckt 1

Network Upgrade ID: 11050
Network Upgrade Description: Build new 130-mile 345 kV line from Potter to new Frio-Draw substation near Roosevelt.
Reason For Change: With the 2010 STEP model's circuit configuration and load forecast the upgrade is no longer required.

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Network Upgrade ID: 11051
Network Upgrade Description: Build new Frio-Draw substation and install a 345/230 kV transformer.
Reason For Change: With the 2010 STEP model's circuit configuration and load forecast the upgrade is no longer required.

Previous NTC number: 20084
Previous NTC issue Date: 2/8/2010
Project ID: 797
Project Name: XFR – Borden 230/138 kV transformer Ckt 2

Network Upgrade ID: 11056
Network Upgrade Description: Add second 230/138 kV transformer at Borden County.
Reason For Change: Load in this area is uncertain with the acquisition of Cap Rock Energy by Sharyland.

Previous NTC number: 20084
Previous NTC issue Date: 2/8/2010
Project ID: 821
Project Name: Line – Randall Co - Osage 115 kV Ckt 1

Network Upgrade ID: 11084
Network Upgrade Description: Reconductor 2-mile Osage Switching Station - Randall County Interchange 115 kV line with 795 ACSR.
Reason For Change: Replaced by PID 1001.

Previous NTC number: 20084
Previous NTC issue Date: 2/8/2010
Project ID: 824
Project Name: Multi – Hobbs - Midland 230 kV to 345 kV Conversion

Network Upgrade ID: 11089
Network Upgrade Description: Convert existing 89.22-mile Hobbs Interchange - Midland 230 kV line to operate at 345 kV.
Reason For Change: Load in this area is uncertain with the acquisition of Cap Rock Energy by Sharyland.

Network Upgrade ID: 11090
Network Upgrade Description: Install new 345/230 kV transformer at Hobbs Interchange.
Reason For Change: Load in this area is uncertain with the acquisition of Cap Rock Energy by Sharyland.

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Network Upgrade ID: 11091
Network Upgrade Description: Install new 345/138 kV transformer at Midland.
Reason For Change: Load in this area is uncertain with the acquisition of Cap Rock Energy by Sharyland.

Previous NTC number: 20084
Previous NTC issue Date: 2/8/2010
Project ID: 830
Project Name: Line – Randall - Manhattan Tap 115 kV Ckt 1

Network Upgrade ID: 11097
Network Upgrade Description: Reconductor 1.6-mile Manhattan - Randall County Interchange 115 kV line with 795 ACSR.
Reason For Change: Replaced by PID 1001.

Previous NTC number: 20084
Previous NTC issue Date: 2/8/2010
Project ID: 857
Project Name: Line – East Plant - Pierce 115 kV Ckt 1

Network Upgrade ID: 11196
Network Upgrade Description: Reconductor 1.06-mile East Plant - Pierce 115 kV line to 795 ACSR.
Reason For Change: Replaced by PID 1001.

Previous NTC number: 20084
Previous NTC issue Date: 2/8/2010
Project ID: 883
Project Name: Line – Grassland - Jones 230 kV Ckt 2

Network Upgrade ID: 11172
Network Upgrade Description: Build new second 26.7-mile Jones - Grassland 230 kV line.
Reason For Change: With the 2010 STEP model's circuit configuration and load forecast the upgrade is no longer required.

Previous NTC number: 20084
Previous NTC issue Date: 2/8/2010
Project ID: 887
Project Name: Line – Canyon West - Spring Draw 115 kV Ckt 1

Network Upgrade ID: 11176

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Network Upgrade Description: Build new 9-mile Canyon West - Spring Draw 115 kV line.
Reason For Change: With the 2010 STEP model's circuit configuration and load forecast the upgrade is no longer required.

Previous NTC number: 20084
Previous NTC issue Date: 2/8/2010
Project ID: 30213
Project Name: Device – East Plant 115 kV

Network Upgrade ID: 50217
Network Upgrade Description: Install 50 Mvar capacitor bank at East Plant 115 kV bus configured as two blocks of 25 Mvar.
Reason For Change: This project was re-evaluated in the 2010 STEP; based on current topology and loads, it was determined as no longer needed.

Previous NTC number: 20084
Previous NTC issue Date: 2/8/2010
Project ID: 30246
Project Name: Device – Kress Rural 69 kV

Network Upgrade ID: 50259
Network Upgrade Description: Install two blocks of 7.2 Mvar capacitors at Kress Rural 69 kV bus.
Reason For Change: Replaced by UIDs 11383 and 11384 to convert Kress Rural and Plainview North Substations to 115 kV service.

Withdrawal of Network Upgrade
SPS has been made aware of all Network Upgrades withdrawn through the expansion plan process. This letter is the formal notification to stop any further work on this Network Upgrade(s), collect any cost associated with the Network Upgrade(s), and provide this information to SPP within 90 days of the date of this NTC.

Commitment to Construct
Please provide to SPP a written commitment to construct the Network Upgrade(s) within 90 days of the date of this NTC, pursuant to Attachment O, Section VI.6 of the SPP OATT, in addition to providing a construction schedule for the Network Upgrade(s). Failure to provide a sufficient written commitment to construct as required by Attachment O could result in the Network Upgrade(s) being assigned to another entity.

Mitigation Plan
The Need Date represents the timing required for the Network Upgrade(s) to address the identified need. Your prompt attention is required to formulation and approval of any necessary

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mitigation plans for the Network Upgrade(s) included in the Network Upgrade(s) if the Need Date is not feasible. Additionally, if it is anticipated that the completion of any Network Upgrade will be delayed past the Need Date, SPP requires a mitigation plan be filed within 60 days of the determination of expected delays.

Notification of Commercial Operation

Please submit a notification of commercial operation for each listed Network Upgrade to SPP as soon as the Network Upgrade is complete and in-service. Please provide SPP with the actual costs of these Network Upgrades as soon as possible after completion of construction. This will facilitate the timely billing by SPP based on actual costs.

Notification of Progress

On an ongoing basis, please keep SPP advised of any inability on SPS's part to complete the approved Network Upgrade(s). For project tracking purposes, SPP requires SPS to submit updates on the status of the Network Upgrade(s) on a quarterly basis in conjunction with the SPP Board of Directors meetings. However, SPS shall also advise SPP of any inability to comply with the Project Schedule as soon as the inability becomes apparent.

All terms and conditions of the SPP OATT and the SPP Membership Agreement shall apply to this Project, and nothing in this NTC shall vary such terms and conditions.

Don't hesitate to contact me if you have questions or comments regarding these instructions. Thank you for the important role that you play in maintaining the reliability of our electric grid.

Sincerely,

Lanny Nickell

Lanny Nickell
Vice President, Engineering
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cc: Carl Monroe, Katherine Prewitt, William Grant