



SPP
Notification to Construct

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Little Rock, AR 72205-3020
501-614-3220 • Fax: (501) 666-0376
P. Jay Caspary
Director, Engineering

SPP-NTC-20003

February 13, 2008

Mitchell Williams
701 NE 7th Street
Anadarko, OK 73005

RE: Transmission System Upgrade Notification to Construct Approved Appendix B projects in 2008-2017 SPP Transmission Expansion Plan

Dear Mr. Williams,

During the January 29, 2008 meeting, the Southwest Power Pool (SPP) Board of Directors approved and directed the network upgrades listed below be constructed. As a result, based on Section IX.4 of Attachment O of the OATT, SPP is notifying Western Farmers Electric Cooperative to move forward with the development of the following upgrades/mitigations to alleviate associated reliability concerns:

Project ID: 30044
Project Name: Device – Gypsum Cap 69 kV
Required In-Service Date: 4/1/2008
Estimated Project Cost: \$ 81,000

Upgrade ID: 50050
Upgrade Description: Install 3 Mvar 69 kV cap at Gypsum.
Upgrade Justification: To address the low voltage from the loss of Gypsum-Russell 69 kV line.



Project ID: 132

Project Name: Line - Anadarko - Cyril 69 kV

Required In-Service Date: 6/1/2008

Estimated Project Cost: \$3,120,000

Upgrade ID: 10166

Upgrade Description: Upgrade to 795 ACSR from Anadarko SW to Cyril, Anadarko-Cyril 12.9 miles.

Upgrade Justification: To relieve overload on Anadarko to Cyril 69 kV for outage of Anadarko to Georgia 138 kV line or Fletcher to Georgia 138 kV line

Project ID: 136

Project Name: Line - Meeker - Hammett 138 kV

Required In-Service Date: 6/1/2008

Estimated Project Cost: \$5,250,000

Upgrade ID: 10174

Upgrade Description: Install 10 miles of 138 kV from Meeker sub to Hammett Sub and install terminal equipment.

Upgrade Justification: To address overload for the outages Franklin- Pink SW 138 kV line and Franklin SW-Franklin 138 kV line

Project ID: 137

Project Name: Line - Wakita - Hazelton 69 kV

Required In-Service Date: 6/1/2008

Estimated Project Cost: \$5,670,000

Upgrade ID: 10175

Upgrade Description: Wakita to Hazelton Junction 69 kV; Reconnector 18.9 miles of 1/0 ACSR to 336.4 ACSR new rating 53/65 MVA

Upgrade Justification: To address low voltage at Ringwood, Nash, and Wakita from the loss of Cleo Jct - Ringwood 69 kV line or Cleo Corner-Cleo Jct. 69 kV line



Project ID: 138

Project Name: Line - OGE Woodward - WFEC Woodward 69 kV

Required In-Service Date: 6/1/2008

Estimated Project Cost: \$1,050,000

Upgrade ID: 10176

Upgrade Description: Upgrade WFEC Woodward sub to 1200 A and Reconductor from 336.4 ACSR to 795 ACSR; New Rating 91/110 MVA

Upgrade Justification: To address the overload for the outage the Woodward 138/69 transformer or Windfarm-Mooreland 138 kV line

Project ID: 139

Project Name: Multi - Kingfisher 69 kV

Required In-Service Date: 6/1/2008

Estimated Project Cost: \$7,590,000

Upgrade ID: 10177

Upgrade Description: Construction of Kingfisher SW and new line - Dover SW to Kingfisher SW

Upgrade Justification: To address the overload from the loss of Dover-Twin Lakes 69 kV line

Required In-Service Date: 6/1/2008

Estimated Upgrade Cost: \$4,050,000

Upgrade ID: 10178

Upgrade Description: Construction of Kingfisher SW and new line - Dover SW to Dover Substation

Upgrade Justification: To address the overload from the loss of Dover-Twin Lakes 69 kV line

Required In-Service Date: 6/1/2008

Estimated Upgrade Cost: \$3,540,000

Project ID: 142

Project Name: Line - Little Axe - Noble 69 kV

Required In-Service Date: 6/1/2008

Estimated Project Cost: \$2,640,000

Upgrade ID: 10181

Upgrade Description: Reconductor 11 miles from 1/0 to 795 ACSR. Rate A=81MVA, Rate B=106MVA

Upgrade Justification: To relieve overload for outage of Paoli 138/69 kV transformer.



Project ID: 30035
Project Name: Device - Frederick Cap 69 kV
Required In-Service Date: 6/1/2008
Estimated Project Cost: \$108,000

Upgrade ID: 50041
Upgrade Description: Install 6 Mvar capacitors at Frederick 69 kV bus.
Upgrade Justification: To address low voltage at Frederick 69 kV for outage of Snyder to Tipton 69 kV

Project ID: 30036
Project Name: Device - Marietta Cap 138 kV
Required In-Service Date: 6/1/2008
Estimated Project Cost: \$675,000

Upgrade ID: 50042
Upgrade Description: Install new 25 Mvar bank at Marietta SW.
Upgrade Justification: To address low voltage from outage Caney Creek-Texoma 138 kV line

Project ID: 30037
Project Name: Device - Sweet Water Cap 69 kV
Required In-Service Date: 6/1/2008
Estimated Project Cost: \$243,000

Upgrade ID: 50043
Upgrade Description: Install 9 Mvar Cap at Sweet Water 69 kV.
Upgrade Justification: To address low voltage for the outage of Elk City 138/69 kV transformer.

Project ID: 30038
Project Name: Device - East Kingfisher Cap 69 kV
Required In-Service Date: 6/1/2008
Estimated Project Cost: \$350,000

Upgrade ID: 50044
Upgrade Description: Install 12 Mvar Cap at 520891 East Kingfisher.
Upgrade Justification: To address the low voltage for the outage of Dover SW 138/69 kV transformer.



Project ID: 30039
Project Name: Device – Esquandale Cap 69 kV
Required In-Service Date: 6/1/2008
Estimated Project Cost: \$162,000

Upgrade ID: 50045
Upgrade Description: Install 6 Mvar Cap at Esquandale 69 kV.
Upgrade Justification: To address low voltage at Esquandale and Hulen from the loss of Walters-Esquandale 69 kV line or Lawton ReliftTap-OMPA Walters 69 kV line.

Project ID: 30040
Project Name: Device – Blanchard Cap 69 kV
Required In-Service Date: 6/1/2008
Estimated Project Cost: \$162,000

Upgrade ID: 50046
Upgrade Description: Install 6 Mvar Cap at Blanchard 69 kV.
Upgrade Justification: To address low voltage at Blanchard from the loss of Blanchard - OU SW 69 kV line.

Project ID: 30043
Project Name: Device - Twin Lakes Cap 69 kV
Required In-Service Date: 6/1/2008
Estimated Project Cost: \$108,000

Upgrade ID: 50049
Upgrade Description: Install 12 Mvar Capacitor at Twin Lakes 69 kV.
Upgrade Justification: Identified in 2006 STEP. Replaces Cashion capacitor. Needed to address low voltage at Cashion 69 kV for the loss of Dover - Dover Junction 69 kV line.

Project ID: 30045
Project Name: Device – Grandfield Cap 69 kV
Required In-Service Date: 6/1/2008
Estimated Project Cost: \$243,000

Upgrade ID: 50051
Upgrade Description: Install 9 Mvar 69 kV Cap at Grandfield 69 kV. The Fredrick and Esquandale 69 kV caps are required to be in-service.
Upgrade Justification: To address low voltage at Hulen 69 kV and Esquandale 69 kV for outage of the Lawton Relift Tap to OMPA-Walters 69 kV.



Project ID: 240

Project Name: Line - Cyril to Medicine Park Jct 69 kV

Required In-Service Date: 6/1/2009

Estimated Project Cost: \$750,000

Upgrade ID: 10306

Upgrade Description: Upgrade to 795 ACSR from Cyril-MedPark, 3.1 miles.

Upgrade Justification: To address the overload of Cyril to Medicine Park junction for the outage of Anadarko-Georgia 138 kV line or the Duncan 138/69 kV transformer

Project ID: 241

Project Name: Line - Anadarko - Georgia Tap 138 kV

Required In-Service Date: 6/1/2009

Estimated Project Cost: \$750,000

Upgrade ID: 10307

Upgrade Description: Upgrade line from 556 to 1113ACSR - 2 miles

Upgrade Justification: To address the overload at Anadarko - Georgia and Anadarko-Georgia Tap 138 kV in the base case

Project ID: 242

Project Name: Line - Elmore - Paoli 69 kV

Required In-Service Date: 6/1/2009

Estimated Project Cost: \$3,240,000

Upgrade ID: 10308

Upgrade Description: Elmore - Paoli Rebuild 3/0 to 336 ACSR - 10.8 miles.

Upgrade Justification: To address the overload of Elmore-Paoli from the loss of Anadarko-Georgia 138 kV line, Fletcher-Marlow 69 kV line, or other various contingencies



Project ID: 243

Project Name: Multi - OU SW - Goldsby - Canadian SW 138 kV

Required In-Service Date: 6/1/2009

Estimated Project Cost: \$9,087,500

Upgrade ID: 10309

Upgrade Description: Convert Oklahoma University (OU) Switch to Goldsby from 69 kV to 138 kV.

Upgrade Justification: To address the overload of Franklin 138/69 kV transformer and Anadarko-Blanchard 69 kV line from the loss of the Canadian 138/69 kV transformer or the Canadian-Goldsby 69 kV line

Required In-Service Date: 6/1/2009

Estimated Upgrade Cost: \$1,837,500

Upgrade ID: 10310

Upgrade Description: Convert Goldsby Sub to Canadian Switch from 69 kV to 138 kV.

Upgrade Justification: To address the overload of Franklin 138/69 kV transformer and Anadarko-Blanchard 69 kV line from the loss of the Canadian 138/69 kV transformer or the Canadian-Goldsby 69 kV line

Required In-Service Date: 6/1/2009

Estimated Upgrade Cost: \$2,250,000

Upgrade ID: 10311

Upgrade Description: Install 138/69 kV transformer at Oklahoma University.

Upgrade Justification: To address the overload of Franklin 138/69 kV transformer and Anadarko-Blanchard 69 kV line from the loss of the Canadian 138/69 kV transformer or the Canadian-Goldsby 69 kV line

Required In-Service Date: 6/1/2009

Estimated Upgrade Cost: \$5,000,000

Project ID: 244

Project Name: XFR - Paoli 138 kV/69 kV xfr

Required In-Service Date: 6/1/2009

Estimated Project Cost: \$1,500,000

Upgrade ID: 10312

Upgrade Description: Upgrade transformer to 70 MVA

Upgrade Justification: To address overload for several outages: Canadian 138/69 kV transformer, Canada- Noble 69 kV line, or Little Axe-Noble 69 kV line



Project ID: 311

Project Name: Multi - Franklin SW - Acme - Norman - OU SW Conversion 138 kV

Required In-Service Date: 6/1/2010

Estimated Project Cost: \$3,646,594

Upgrade ID: 10401

Upgrade Description: Convert Acme to Franklin 69 kV to 138 kV.

Upgrade Justification: Franklin 138/69 kV overload for the outage of Canadian to Goldsby

Required In-Service Date: 6/1/2010

Estimated Upgrade Cost: \$931,000

Upgrade ID: 10402

Upgrade Description: Convert West Norman to Acme 69 kV to 138 kV.

Upgrade Justification: Franklin 138/69 kV overload for the outage of Canadian to Goldsby

Required In-Service Date: 6/1/2010

Estimated Upgrade Cost: \$1,138,594

Upgrade ID: 10403

Upgrade Description: Convert OU to West Norman 69 kV to 138 kV.

Upgrade Justification: Franklin 138/69 kV overload for the outage of Canadian to Goldsby

Required In-Service Date: 6/1/2010

Estimated Upgrade Cost: \$1,577,000

Project ID: 312

Project Name: Line - Alva - Cherokee SW 69 kV

Required In-Service Date: 6/1/2010

Estimated Project Cost: \$150,000

Upgrade ID: 10404

Upgrade Description: Upgrade CT's at Cherokee SW, 300 to 600 A, new ratings: A=53MVA, B=65MVA

Upgrade Justification: To address the overloading of Alva-Cherokee from the loss of Fairview-Okeene 69 kV line or Cedardale-Okeene 69 kV line



Project ID: 30079

Project Name: Device – Carter Cap 69 kV

Required In-Service Date: 6/1/2010

Estimated Project Cost: \$324,000

Upgrade ID: 50085

Upgrade Description: Install 12 Mvar capacitor at Carter Jct which makes at total of 24 Mvar.

Upgrade Justification: To address low voltage at Canute, Dill, Elk City, and Carter from the loss of the Elk City 138/69 kV transformer.

Project ID: 30080

Project Name: Device - Twin Lakes Cap 69 kV

Required In-Service Date: 6/1/2010

Estimated Project Cost: \$162,000

Upgrade ID: 50086

Upgrade Description: Install an additional 6 Mvar cap at Twin Lakes; this will make a total of 18 MVAR at Twin Lakes.

Upgrade Justification: To address the low voltage from the loss of the Dover SW 138/69 kV transformer.

Project ID: 356

Project Name: Line - Medicine Park Jct – Fletcher 69 kV

Required In-Service Date: 6/1/2011

Estimated Project Cost: \$1,230,000

Upgrade ID: 10466

Upgrade Description: Upgrade to 795 ACSR MedPark-Fletcher, 4.1 miles.

Upgrade Justification: To address overloading from the loss of Anadarko-Georgia Jct 138 kV line

Project ID: 358

Project Name: Line - Franklin SW - Midwest Tap 138 kV

Required In-Service Date: 6/1/2011

Estimated Project Cost: \$200,000

Upgrade ID: 10468

Upgrade Description: Replace switches and wavetraps at Franklin.

Upgrade Justification: To address overload for the outage of Canadian-Cedar lane 138 kV line, Cromwell-Wetumka 138 kV line, or other various contingencies.



Project ID: 361

Project Name: Line - Fletcher - Marlow Jct 69 kV

Required In-Service Date: 6/1/2011

Estimated Project Cost: \$2,000,000

Upgrade ID: 10471

Upgrade Description: Upgrade 7 miles to 795 ACSR from Fletcher SW to Marlow Junction 69 kV.

Upgrade Justification: To address the overload of Fletcher to Marlow Jct 69 kV in the base case or for the outage of Comanche-Empire-Fletcher 138 kV

Project ID: 360

Project Name: Line - South Brown - Russett 138 kV

Required In-Service Date: 12/1/2011

Estimated Project Cost: \$100,000

Upgrade ID: 10470

Upgrade Description: WFEC CT's at Russett change from 300A to 600A.

Upgrade Justification: To address overload for the outages of South Brown-Brown 138 kV line, Explorer Tap-Brown 138 kV line, Russett-Glasses 138 kV line, or Brown Tap-Explorer Tap 138 kV line

Project ID: 238

Project Name: Line - Atoka - WFEC Tupelo – Lane 138 kV

Required In-Service Date: 6/1/2012

Estimated Project Cost: \$8,265,000

Upgrade ID: 10303

Upgrade Description: WFEC will build a double circuit 138 kV line, approximately 6.5 miles long, from AEP's Atoka substation to the south and looping into the WFEC Tupelo-Lane 138 kV line - Atoka to Tupelo line..

Upgrade Justification: To address low voltage in the Atoka area for outage of Colgate Tap to Allen Gas Tap 138 kV, or for outage of Colgate Tap to Leigh 138 kV or Hugo Tap to Hugo 138 kV.

Required In-Service Date: 6/1/2012

Upgrade ID: 10304

Upgrade Description: WFEC will build a double circuit 138 kV line, approximately 6.5 miles long, from AEP's Atoka substation to the south and looping into the WFEC Tupelo-Lane 138 kV line - Atoka to Lane line..



Upgrade Justification: To address low voltage in the Atoka area for outage of Colgate Tap to Allen Gas Tap 138 kV, or for outage of Colgate Tap to Leigh 138 kV or Hugo Tap to Hugo 138 kV.

Required In-Service Date: 6/1/2012

Project ID: 398

Project Name: Line - OGE Paoli - WFEC Paoli 138 kV

Required In-Service Date: 6/1/2012

Estimated Project Cost: \$1,900,000

Upgrade ID: 10518

Upgrade Description: Install new 138 kV line between Paoli OGE and Paoli WFEC and terminal equipment at each end

Upgrade Justification: To address address low voltage in the Fletcher 138 kV, Empire 138 kV, ARCO 138 area for the outage Anadarko-Georgia JCT 138 kV line

Project ID: 399

Project Name: Line - Lindsay - Wallville 69 kV

Required In-Service Date: 6/1/2012

Estimated Project Cost: \$1,347,000

Upgrade ID: 10519

Upgrade Description: Upgrade line from 1/0 to 336.4, 4.85 miles

Upgrade Justification: To address overloading of Lindsay SW-Wallville 69 kV line from the loss of Fletcher-Marlow 69 kV line or the Fletcher 138/69 kV transformer

Project ID: 400

Project Name: Line - Pharoah - Weleetka 138 kV

Required In-Service Date: 6/1/2012

Estimated Project Cost: \$100,000

Upgrade ID: 10520

Upgrade Description: WFEC will upgrade 800A CT's, new CT limit will be 1200A at Pharaoh.

Upgrade Justification: To address the overload for the outage of Franklin-Franklin SW 138 kV line



Project ID: 401

Project Name: Line - WFEC Russell 138 kV - AEP Altus Jct Tap 138 kV

Required In-Service Date: 6/1/2012

Estimated Project Cost: \$ 50,000

Upgrade ID: 10521

Upgrade Description: Replace CT at WFEC Russell

Upgrade Justification: To address overload of Russell 138 kV to Altus Jct Tap 138 kV for outage of Anadarko-Paradise 138kV line

Project ID: 402

Project Name: Multi - Granfield - Cache SW 138 kV

Required In-Service Date: 6/1/2012

Estimated Project Cost: \$11,262,500

Upgrade ID: 10522

Upgrade Description: Convert 3 miles of 69 kV to 138 kV from Indianoma to Grandfield.

Upgrade Justification: To address low voltage at Hulen 69 kV and Esquandale 69 kV for outage of the Lawton Relift Tap to OMPA-Walters 69 kV.

Required In-Service Date: 6/1/2012

Estimated Upgrade Cost: \$1,125,000

Upgrade ID: 10523

Upgrade Description: Tap Cache to Paradise 138 kV and install 13.7 miles of 138 kV from Cache to Indianoma.

Upgrade Justification: To address low voltage at Hulen 69 kV and Esquandale 69 kV for outage of the Lawton Relift Tap to OMPA-Walters 69 kV.

Required In-Service Date: 6/1/2012

Estimated Upgrade Cost: \$5,137,500

Upgrade ID: 10524

Upgrade Description: Install new 138/69 kV transformer at Grandfield

Upgrade Justification: To address low voltage at Hulen 69 kV and Esquandale 69 kV for outage of the Lawton Relift Tap to OMPA-Walters 69 kV.

Required In-Service Date: 6/1/2012

Estimated Upgrade Cost: \$5,000,000



Project ID: 403
Project Name: XFR - Comanche 138/69 kV xfr
Required In-Service Date: 6/1/2012
Estimated Project Cost: \$210,000

Upgrade ID: 10525
Upgrade Description: Upgrade Auto to 70 MVA.
Upgrade Justification: To address the overload of the Comanche 138/69 kV transformer for the outage of Duncan 138/69 kV transformer.

Project ID: 30093
Project Name: Device - Latta Cap 138 kV
Required In-Service Date: 6/1/2012
Estimated Project Cost: \$324,000

Upgrade ID: 50099
Upgrade Description: Install 12 Mvar Cap at Latta Junction 138 kV.
Upgrade Justification: To address the low voltage for the outage of Lasalle-Tupelo Tap 138 kV line, Lasalle-Latta Jct 138kV line, and Corn Tap-Paoli 138 kV line .

Project ID: 30094
Project Name: Device - Mustang Cap 69 kV
Required In-Service Date: 6/1/2012
Estimated Project Cost: \$162,000

Upgrade ID: 50100
Upgrade Description: Install 6 Mvar Cap at Mustang 69 kV.
Upgrade Justification: To address low voltage at Mustang for the outage of Mustang-Sunshine 69 kV line .

The Required In-Service Date represents the timing required for the upgrade to address the identified need. We would appreciate your prompt attention to the formulation and approval of any necessary mitigation plans if this date is not feasible.

Western Farmers Electric Cooperative shall submit certification of commercial operation for each listed upgrade to SPP as soon as the upgrade is complete and in-service. Please provide SPP with the actual costs of these upgrades as soon as possible after completion of construction. This will facilitate the timely billing by SPP based on actual costs.

Please keep SPP advised of any inability on Western Farmers Electric Cooperative's part to complete the approved upgrades. In addition, SPP requests that a construction schedule supporting the required upgrade(s) noted above be provided within 30 days of



receipt of this Notice to Construct. For project tracking, SPP will request on a quarterly basis, in conjunction with the SPP Board of Directors meetings, that Western Farmers Electric Cooperative submit updates to the schedule status to SPPprojecttracking@spp.org. If it is anticipated that the completion of any approved project will be delayed past the required in-service date, SPP requires a mitigation plan be filed within 30 days of the determination of expected delay in the project schedule.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Jay Caspary'.

P. Jay Caspary
Director, Engineering

cc: Alan Derichsweiler, Joseph Williams, Les Dillahunty, Carl Monroe, Pat Bourne,
SPPprojecttracking@spp.org.