

**SPP-NTC-200216**

**SPP  
Notification to Construct**

February 19, 2013

Mr. Paul Hassink  
American Electric Power  
212 E. 6th St.  
Tulsa, OK 74119

RE: Notification to Construct Approved Reliability Network Upgrades

Dear Mr. Hassink,

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 American Electric Power ("AEP"), as the Designated Transmission Owner, to construct the Network Upgrade(s).

On January 29, 2013, the SPP Board of Directors approved the Network Upgrade(s) listed below to be constructed.

**New Network Upgrades**

**Project ID:** 451

**Project Name:** Line - Chamber Springs - Farmington 161 kV

**Need Date for Project:** 6/1/2013

**Estimated Cost for Project:** \$12,705,537

**Network Upgrade ID:** 10583

**Network Upgrade Name:** Chamber Springs - Farmington REC 161 kV Ckt 1

**Network Upgrade Description:** Rebuild and reconductor 11.1-mile 161 kV line from Chamber Springs to Farmington REC with 2-959.6 ACSR/TW. Upgrade wavetraps, CT ratios, and relay settings at Chamber Springs.

**Network Upgrade Owner:** AEP

**MOPC Representative(s):** Paul Johnson, Richard Ross, Terri Gallup, Matt Vermillion

**TWG Representative:** Matthew McGee

**Categorization:** Regional reliability

**Network Upgrade Specification:** All elements and conductor must have at least an emergency rating of 360 MVA.

**Network Upgrade Justification:** To address the overload of Chamber Springs -

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Farmington 161 kV Ckt 1 for the outage of the Tontitown - Chamber Springs 345 kV line or Tontitown 345/161 kV transformer or other contingencies.

**Estimated Cost for Network Upgrade (current day dollars):** \$12,705,537

**Cost Allocation of the Network Upgrade:** Base Plan

**Estimated Cost Source:** AEP

**Date of Estimated Cost:** 11/21/2012

**Project ID:** 478

**Project Name:** Line - Forbing Tap - South Shreveport 69 kV

**Need Date for Project:** 6/1/2013

**Estimated Cost for Project:** \$1,221,505

**Network Upgrade ID:** 10615

**Network Upgrade Name:** Forbing Tap - South Shreveport 69 kV Ckt 1

**Network Upgrade Description:** Rebuild 2.3-mile 69 kV line from Forbing to South Shreveport with 1233.6 ACSR/TW.

**Network Upgrade Owner:** AEP

**MOPC Representative(s):** Paul Johnson, Richard Ross, Terri Gallup, Matt Vermillion

**TWG Representative:** Matthew McGee

**Categorization:** Regional reliability

**Network Upgrade Specification:** All elements and conductor must have at least an emergency rating of 121 MVA.

**Network Upgrade Justification:** To address the overload of Forbing Tap - South Shreveport 69 kV Ckt 1 for the outage of Broadmoor - Fort Humbug 69 kV Ckt 1.

**Estimated Cost for Network Upgrade (current day dollars):** \$1,221,505

**Cost Allocation of the Network Upgrade:** Base Plan

**Estimated Cost Source:** AEP

**Date of Estimated Cost:** 12/10/2012

**Project ID:** 501

**Project Name:** Line - Evenside - Northwest Henderson 69 kV

**Need Date for Project:** 6/1/2018

**Estimated Cost for Project:** \$11,980,465

**Network Upgrade ID:** 10646

**Network Upgrade Name:** Evenside - Northwest Henderson 69 kV Ckt 1

**Network Upgrade Description:** Rebuild 6.4-mile 69 kV line from Evenside to Northwest Henderson with 1233.6 ACSR/TW. Replace breaker at Evenside.

**Network Upgrade Owner:** AEP

**MOPC Representative(s):** Paul Johnson, Richard Ross, Terri Gallup, Matt Vermillion

**TWG Representative:** Matthew McGee

**Categorization:** Regional reliability

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**Network Upgrade Specification:** All elements and conductor must have at least an emergency rating of 96 MVA.

**Network Upgrade Justification:** To address the overload of Evenside - Northwest Henderson 69 kV Ckt 1 for the outage of Northwest Henderson - Poynter 69 kV Ckt 1.

**Estimated Cost for Network Upgrade (current day dollars):** \$11,980,465

**Cost Allocation of the Network Upgrade:** Base Plan

**Estimated Cost Source:** AEP

**Date of Estimated Cost:** 11/21/2012

**Project ID:** 504

**Project Name:** Line - Brownlee - North Market 69 kV

**Need Date for Project:** 6/1/2013

**Estimated Cost for Project:** \$12,424,849

**Network Upgrade ID:** 10649

**Network Upgrade Name:** Brownlee - North Market 69 kV Ckt 1

**Network Upgrade Description:** Rebuild 4.7-mile 69 kV line from Brownlee to North Market with 1233.6 ACSR/TW.

**Network Upgrade Owner:** AEP

**MOPC Representative(s):** Paul Johnson, Richard Ross, Terri Gallup, Matt Vermillion

**TWG Representative:** Matthew McGee

**Categorization:** Regional reliability

**Network Upgrade Specification:** All elements and conductor must have at least an emergency rating of 143 MVA.

**Network Upgrade Justification:** To address the overload of Brownlee - North Market 69 kV Ckt 1 for the outage Arsenal Hill - Shed Road 69 kV Ckt 1.

**Estimated Cost for Network Upgrade (current day dollars):** \$12,424,849

**Cost Allocation of the Network Upgrade:** Base Plan

**Estimated Cost Source:** AEP

**Date of Estimated Cost:** 11/21/2012

**Project ID:** 512

**Project Name:** Line - Ellerbe Road - Forbing Tap 69 kV

**Need Date for Project:** 6/1/2018

**Estimated Cost for Project:** \$8,174,689

**Network Upgrade ID:** 10657

**Network Upgrade Name:** Ellerbe Road - Forbing Tap 69 kV Ckt 1

**Network Upgrade Description:** Rebuild 2.0-mile 69 kV line from Ellerbe Road to Forbing Road with 1233.6 ACSR/TW.

**Network Upgrade Owner:** AEP

**MOPC Representative(s):** Paul Johnson, Richard Ross, Terri Gallup, Matt Vermillion

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**TWG Representative:** Matthew McGee

**Categorization:** Regional reliability

**Network Upgrade Specification:** All elements and conductor must have at least an emergency rating of 121 MVA.

**Network Upgrade Justification:** To address the overload of Ellerbe Road - Forbing Road 69 kV Ckt 1 for the outage of Broadmoor - Fort Humbug 69 kV Ckt 1.

**Estimated Cost for Network Upgrade (current day dollars):** \$8,174,689

**Cost Allocation of the Network Upgrade:** Base Plan

**Estimated Cost Source:** AEP

**Date of Estimated Cost:** 11/21/2012

**Project ID:** 681

**Project Name:** Line - Broadmoor - Fern Street 69 kV

**Need Date for Project:** 6/1/2013

**Estimated Cost for Project:** \$4,923,124

**Network Upgrade ID:** 10898

**Network Upgrade Name:** Broadmoor - Fern Street 69 kV Ckt 1

**Network Upgrade Description:** Rebuild 1-mile portion of the 69 kV line from Broadmoor to Fern Street with 1233.6 ACSR/TW. Replace switches at Fern Street.

**Network Upgrade Owner:** AEP

**MOPC Representative(s):** Paul Johnson, Richard Ross, Terri Gallup, Matt Vermillion

**TWG Representative:** Matthew McGee

**Categorization:** Regional reliability

**Network Upgrade Specification:** All elements and conductor must have at least an emergency rating of 94 MVA.

**Network Upgrade Justification:** To address the overload of Broadmoor - Fern Street 69 kV Ckt 1 for the outage of Forbing Tap - South Shreveport 69 kV Ckt 1.

**Estimated Cost for Network Upgrade (current day dollars):** \$4,923,124

**Cost Allocation of the Network Upgrade:** Base Plan

**Estimated Cost Source:** AEP

**Date of Estimated Cost:** 11/21/2012

**Project ID:** 879

**Project Name:** Line - Bluebell - Prattville 138 kV

**Need Date for Project:** 6/1/2014

**Estimated Cost for Project:** \$10,241,314

**Network Upgrade ID:** 11158

**Network Upgrade Name:** Bluebell - Prattville 138 kV Ckt 1

**Network Upgrade Description:** Rebuild 9.0-mile 138 kV line from Prattville to Bluebell with 1926.9 ACSR/TW.

**SPP-NTC-200216****Network Upgrade Owner:** AEP**MOPC Representative(s):** Paul Johnson, Richard Ross, Terri Gallup, Matt Vermillion**TWG Representative:** Matthew McGee**Categorization:** Regional reliability**Network Upgrade Specification:** All elements and conductor must have at least an emergency rating of 287 MVA.**Network Upgrade Justification:** To address the overload of Prattville - Bluebell 138 kV Ckt 1 for the outage of Explorer Glenpool - Riverside 138 kV Ckt 1.**Estimated Cost for Network Upgrade (current day dollars):** \$10,241,314**Cost Allocation of the Network Upgrade:** Base Plan**Estimated Cost Source:** AEP**Date of Estimated Cost:** 11/21/2012**Project ID:** 30436**Project Name:** Line - New Gladewater - Perdue 138 kV**Need Date for Project:** 6/1/2016**Estimated Cost for Project:** \$1,000,000**Network Upgrade ID:** 50531**Network Upgrade Name:** New Gladewater - Perdue 138 kV Ckt 1**Network Upgrade Description:** Replace 138 kV breaker at Perdue.**Network Upgrade Owner:** AEP**MOPC Representative(s):** Paul Johnson, Richard Ross, Terri Gallup, Matt Vermillion**TWG Representative:** Matthew McGee**Categorization:** Regional reliability**Network Upgrade Specification:** All elements and conductor must have at least an emergency rating of 272 MVA.**Network Upgrade Justification:** To address the overload of New Gladewater - Perdue 138 kV Ckt 1 for the outage of Diana - Perdue 138 kV Ckt 1.**Estimated Cost for Network Upgrade (current day dollars):** \$1,000,000**Cost Allocation of the Network Upgrade:** Base Plan**Estimated Cost Source:** AEP**Date of Estimated Cost:** 11/21/2012**Project ID:** 30471**Project Name:** Line - Dekalb - New Boston 69 kV**Need Date for Project:** 6/1/2013**Estimated Cost for Project:** \$16,548,317**Network Upgrade ID:** 50567**Network Upgrade Name:** Dekalb - New Boston 69 kV Ckt 1**Network Upgrade Description:** Rebuild 13.2-mile 69 kV line from Dekalb to New

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Boston with 1233.6 ACSR/TW. Upgrade CT ratios and relay settings at New Boston.

**Network Upgrade Owner:** AEP

**MOPC Representative(s):** Paul Johnson, Richard Ross, Terri Gallup, Matt Vermillion

**TWG Representative:** Matthew McGee

**Categorization:** Regional reliability

**Network Upgrade Specification:** All elements and conductor must have at least an emergency rating of 69 MVA.

**Network Upgrade Justification:** To address the overload of Dekalb - New Boston 69 kV Ckt 1 for the outage of Welsh REC - Wilkes 138 kV Ckt 1.

**Estimated Cost for Network Upgrade (current day dollars):** \$16,548,317

**Cost Allocation of the Network Upgrade:** Base Plan

**Estimated Cost Source:** AEP

**Date of Estimated Cost:** 11/21/2012

**Project ID:** 30472

**Project Name:** Line - Hardy Street - Waterworks 69 kV

**Need Date for Project:** 6/1/2013

**Estimated Cost for Project:** \$7,519,658

**Network Upgrade ID:** 50568

**Network Upgrade Name:** Hardy Street - Waterworks 69 kV Ckt 1

**Network Upgrade Description:** Rebuild 1.6-mile 69 kV line from Hardy Street to Waterworks with 1233.6 ACSR/TW.

**Network Upgrade Owner:** AEP

**MOPC Representative(s):** Paul Johnson, Richard Ross, Terri Gallup, Matt Vermillion

**TWG Representative:** Matthew McGee

**Categorization:** Regional reliability

**Network Upgrade Specification:** All elements and conductor must have at least an emergency rating of 121 MVA.

**Network Upgrade Justification:** To address the overload of Hardy Street - Waterworks 69 kV Ckt 1 for the outage of Flournoy 138/69/12.47 kV Transformer Ckt 1.

**Estimated Cost for Network Upgrade (current day dollars):** \$7,519,658

**Cost Allocation of the Network Upgrade:** Base Plan

**Estimated Cost Source:** AEP

**Date of Estimated Cost:** 11/21/2012

**Project ID:** 30473

**Project Name:** Line - Midland REC - North Huntington 69 kV

**Need Date for Project:** 6/1/2013

**Estimated Cost for Project:** \$1,829,026

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**Network Upgrade ID:** 50569

**Network Upgrade Name:** Midland REC - North Huntington 69 kV Ckt 1

**Network Upgrade Description:** Rebuild 4.0-mile 69 kV line from Midland REC to North Huntington with 1233.6 ACSR/TW. Upgrade CT ratios, relay settings, and jumpers at North Huntington.

**Network Upgrade Owner:** AEP

**MOPC Representative(s):** Paul Johnson, Richard Ross, Terri Gallup, Matt Vermillion

**TWG Representative:** Matthew McGee

**Categorization:** Regional reliability

**Network Upgrade Specification:** All elements and conductor must have at least an emergency rating of 143 MVA.

**Network Upgrade Justification:** To address the overload of Midland REC - North Huntington 69 kV Ckt 1 for the outage of Bonanza - Hackett - Reeves Road 161 kV Ckt 1 and Bonanza Tap 161 kV.

**Estimated Cost for Network Upgrade (current day dollars):** \$1,829,026

**Cost Allocation of the Network Upgrade:** Base Plan

**Estimated Cost Source:** AEP

**Date of Estimated Cost:** 11/21/2012

**Project ID:** 30474

**Project Name:** Line - Midland - Midland REC 69 kV

**Need Date for Project:** 6/1/2013

**Estimated Cost for Project:** \$5,653,353

**Network Upgrade ID:** 50570

**Network Upgrade Name:** Midland - Midland REC 69 kV Ckt 1

**Network Upgrade Description:** Rebuild 1.3-mile 69 kV line from Midland to Midland REC with 1233.6 ACSR/TW. Upgrade CT ratios, relay settings, switches, and station conductors at Midland.

**Network Upgrade Owner:** AEP

**MOPC Representative(s):** Paul Johnson, Richard Ross, Terri Gallup, Matt Vermillion

**TWG Representative:** Matthew McGee

**Categorization:** Regional reliability

**Network Upgrade Specification:** All elements and conductor must have at least an emergency rating of 217 MVA.

**Network Upgrade Justification:** To address the overload of Midland - Midland REC 69 kV Ckt 1 for the outage: Bonanza - Hackett - Reeves Road 161 kV Ckt 1 and Bonanza Tap 161 kV; or Bonanza - Bonanza Tap 161 kV Ckt 1.

**Estimated Cost for Network Upgrade (current day dollars):** \$5,653,353

**Cost Allocation of the Network Upgrade:** Base Plan

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**Estimated Cost Source:** AEP  
**Date of Estimated Cost:** 11/21/2012

**Project ID:** 30475  
**Project Name:** Line - Howe Interchange - Midland 69 kV  
**Need Date for Project:** 6/1/2013  
**Estimated Cost for Project:** \$9,145,130

**Network Upgrade ID:** 50571  
**Network Upgrade Name:** Howe Interchange - Midland 69 kV Ckt 1  
**Network Upgrade Description:** Rebuild 7.0-mile portion of the 69 kV line from Howe Interchange to Midland with 1233.6 ACSR/TW. The portion of line to be rebuilt is from the state line to Midland. Upgrade CT ratios, relay settings, switches, and station conductors at Midland.  
**Network Upgrade Owner:** AEP  
**MOPC Representative(s):** Paul Johnson, Richard Ross, Terri Gallup, Matt Vermillion  
**TWG Representative:** Matthew McGee  
**Categorization:** Regional reliability  
**Network Upgrade Specification:** All elements and conductor must have at least an emergency rating of 217 MVA.  
**Network Upgrade Justification:** To address the overload of Howe Interchange - Midland 69 kV Ckt 1 for the outages: Bonanza - Hackett - Reeves Road 161 kV Ckt 1 and Bonanza Tap 161 kV; Bonanza - Bonanza Tap 161 kV; Bonanza - Hackett AECC 161 kV Ckt 1; or Excelsior - Hackett AECC 161 kV Ckt 1.  
**Estimated Cost for Network Upgrade (current day dollars):** \$9,145,130  
**Cost Allocation of the Network Upgrade:** Base Plan  
**Estimated Cost Source:** AEP  
**Date of Estimated Cost:** 11/21/2012

**Upgrades with Modifications**

**Previous NTC Number:** 200167  
**Previous NTC Issue Date:** 4/9/2012  
**Project ID:** 1012  
**Project Name:** Line - Diana - Perdue 138 kV Reconductor  
**Need Date for Project:** 6/1/2013  
**Estimated Cost for Project:** \$18,805,489

**Network Upgrade ID:** 11331  
**Network Upgrade Name:** Diana - Perdue 138 kV Ckt 1 #2  
**Network Upgrade Description:** Rebuild 21.85-mile 138 kV line from Diana to Perdue.



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Replace switches, jumpers, and upgrade CT ratios at Diana and Perdue. Upgrade relay settings at Diana.

**Network Upgrade Owner:** AEP

**MOPC Representative(s):** Paul Johnson, Richard Ross, Terri Gallup, Matt Vermillion

**TWG Representative:** Matthew McGee

**Reason for Change:** The 2013 ITP Near-Term Assessment determined the Need Date should be advanced from 6/1/2014 to 6/1/2013.

**Categorization:** Regional reliability

**Network Upgrade Specification:** All elements and conductor must have at least an emergency rating of 478 MVA.

**Network Upgrade Justification:** To address the overload of Diana - Perdue 138 kV Ckt 1 for the outage of the Harrison Road - Liberty City Tap 138 kV Ckt 1 or a portion of the Pirkey - Easton - Knox 138 kV Ckt 1.

**Estimated Cost for Network Upgrade (current day dollars):** \$18,805,489

**Cost Allocation of the Network Upgrade:** Base Plan

**Estimated Cost Source:** AEP

**Date of Estimated Cost:** 9/18/2012

**Previous NTC Number:** 200167

**Previous NTC Issue Date:** 4/9/2012

**Project ID:** 502

**Project Name:** Line - Northwest Henderson - Poynter 69 kV

**Need Date for Project:** 6/1/2013

**Estimated Cost for Project:** \$7,815,833

**Network Upgrade ID:** 10647

**Network Upgrade Name:** Northwest Henderson - Poynter 69 kV Ckt 1

**Network Upgrade Description:** Reconductor 3.25-mile 69 kV line from Northwest Henderson to Poynter with 1272 ACSR.

**Network Upgrade Owner:** AEP

**MOPC Representative(s):** Paul Johnson, Richard Ross, Terri Gallup, Matt Vermillion

**TWG Representative:** Matthew McGee

**Reason for Change:** The 2013 ITP Near-Term Assessment determined the Need Date should be advanced from 6/1/2014 to 6/1/2013.

**Categorization:** Regional reliability

**Network Upgrade Specification:** All elements and conductor must have at least an emergency rating of 143 MVA.

**Network Upgrade Justification:** To address the overload of Northwest Henderson - Poynter 69 kV Ckt 1 for the outage of Evenside - Northwest Henderson 69 kV Ckt 1.

**Estimated Cost for Network Upgrade (current day dollars):** \$7,815,833

**Cost Allocation of the Network Upgrade:** Base Plan

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**Estimated Cost Source:** AEP  
**Date of Estimated Cost:** 11/15/2011

**Commitment to Construct**

Within 90 days of this NTC, please provide to SPP a written commitment to construct the Network Upgrade(s) pursuant to Attachment O, Section VI.6 of the SPP OATT, a construction schedule for the Network Upgrade(s), and the NTC Project Estimate, which is the updated  $\pm 20\%$  cost estimate for the Network Upgrade(s) in the Standardized Cost Estimate Reporting Template. 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 for formulation and approval of any necessary 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**

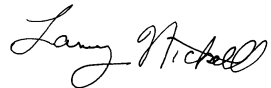
Please continue to keep SPP advised of any inability on AEP's part to complete the approved Network Upgrade(s). For project tracking, SPP requires AEP to submit quarterly status updates of the Network Upgrade(s) in conjunction with the SPP Board of Directors meetings. However, AEP shall also advise SPP 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.

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Sincerely,



Lanny Nickell  
Vice President, Engineering  
Phone: (501) 614-3232 • Fax: (501) 482-2022 • [lnickell@spp.org](mailto:lnickell@spp.org)

cc: Carl Monroe - SPP  
Katherine Prewitt - SPP  
Bob Bradish - AEP  
Paul Johnson - AEP  
Richard Ross - AEP  
Terri Gallup - AEP  
Matt Vermillion - AEP  
Scott Rainbolt - AEP  
Matt McGee - AEP