

FOURTH QUARTERLY PROJECT TRACKING REPORT 2018

October 2018

CONTENTS

- Executive Summary..... 3
- NTC Project Summary – Reporting Quarter 4
 - Completed Upgrades 4
 - NTCs Issued..... 7
 - NTCs Withdrawn..... 8
- Portfolio Summary..... 10
 - Project Status Summary.....13
- Out-of-bandwidth Projects..... 14
- Responsiveness Report..... 16
- Appendix 1 18
 - Project List.....18

EXECUTIVE SUMMARY

SPP actively monitors and supports the progress of transmission expansion projects, emphasizing the importance of maintaining accountability for areas such as regional grid reliability standards, firm transmission commitments, and SPP Open Access Transmission Tariff (OATT) cost recovery.

SPP staff solicits quarterly feedback from the project owners to determine the progress of each approved transmission project. This quarterly report charts the progress of all SPP transmission projects approved by the SPP Board of Directors (Board) or through a FERC-filed service agreement under the OATT. This report covers the period of May 1, 2018 through July 31, 2018.



Projects in the current portfolio include all Network Upgrades for which construction activities are ongoing or those for which construction has completed but not all close-out requirements have been fulfilled in accordance with Section 13 in Business Practice 7060¹.

¹ [SPP OATT Business Practices](#)

NTC PROJECT SUMMARY – REPORTING QUARTER

In adherence with the OATT and Business Practice 7060, SPP issues NTCs to Designated Transmission Owners (DTOs) to begin work on Network Upgrades that have been approved or endorsed by the Board to meet the construction needs of the OATT or Regional Transmission Organization (RTO).

COMPLETED UPGRADES

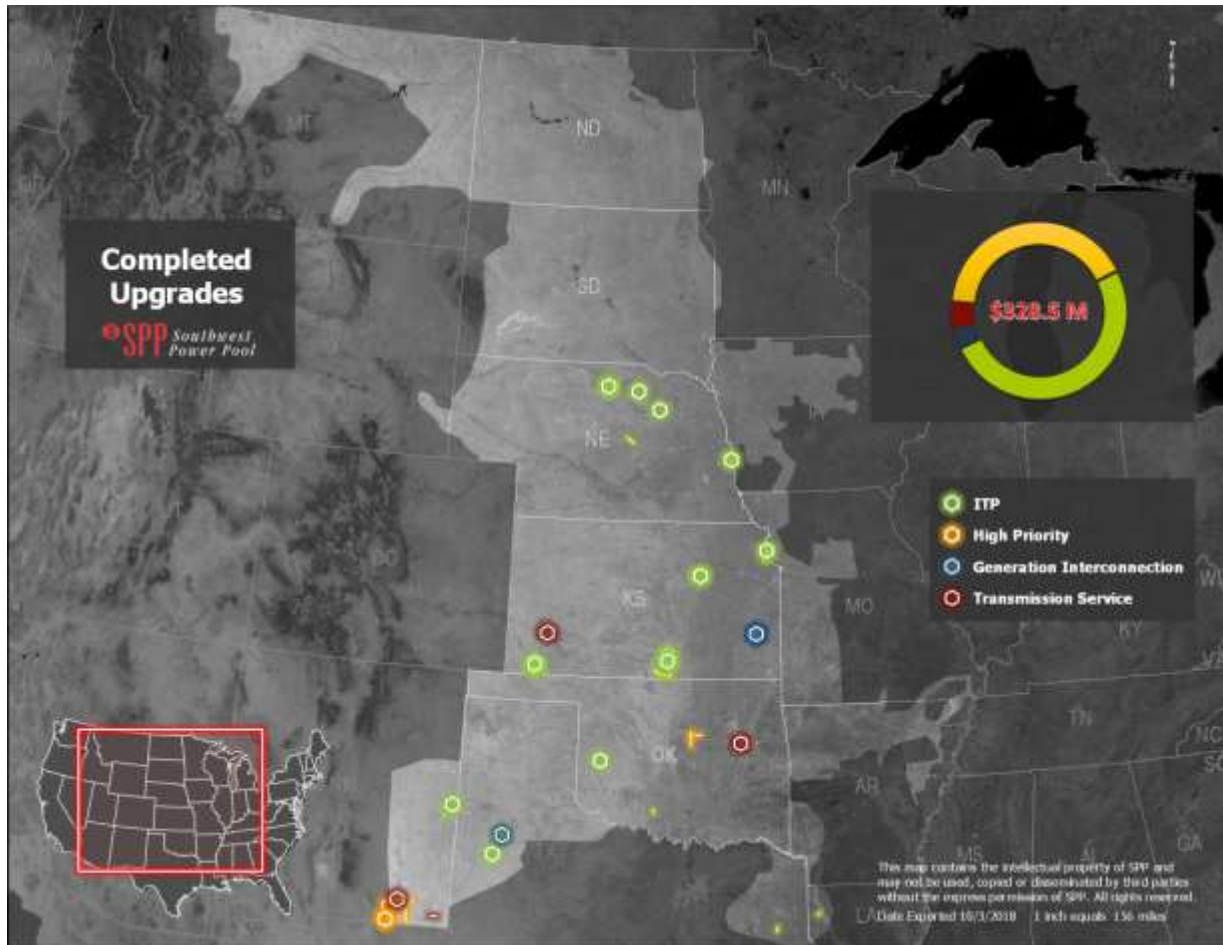


Figure 1: Completed Upgrades

NTC ID	NTC Issue Date	UID	Network Upgrade Name	Owner	NTC Source Study	Cost Estimate
200216	2/20/2013	10646	Evenside - Northwest Henderson 69 kV Ckt 1	AEP	2013 ITPNT	\$11,980,465
200207	2/20/2013	11142	Sub 917 - Sub 918 69 kV Ckt 1	OPPD	2013 ITPNT	\$475,340
20080	2/8/2010	50210	ONEILL 115KV	NPPD	2009 STEP	\$1,772,846
200253	2/19/2014	50441	Neligh 345/115 kV Substation	NPPD	2014 ITPNT	\$10,381,296

NTC ID	NTC Issue Date	UID	Network Upgrade Name	Owner	NTC Source Study	Cost Estimate
200242	2/19/2014	50532	Geary County 345/115 kV Substation	WR	2014 ITPNT	\$22,470,822
200229	9/10/2013	50564	Market St. - South Portales 115 kV Ckt 1	SPS	2013 ITPNT	\$5,400,000
200242	2/19/2014	50605	Geary County 345 kV	WR	2014 ITPNT	\$16,290,638
200228	9/10/2013	50612	Viola 345 kV Terminal Equipment	WR	2013 ITPNT	\$2,718,649
200258	2/19/2014	50748	S906 - S924 69 kV Ckt 1 Rebuild	OPPD	2014 ITPNT	\$1,360,327
200258	2/19/2014	50749	S924 - S912 69 kV Ckt 1 Terminal Upgrades	OPPD	2014 ITPNT	\$69,679
200294	8/26/2014	50760	North Loup - Ord 115 kV Ckt 1	NPPD	2014 ITPNT	\$516,009
200256	2/19/2014	50794	Curry County Interchange 115 kV	SPS	2014 ITPNT	\$2,965,311
200311	12/2/2014	50805	SW Station - Warwick Tap 138 kV Ckt 1	OGE	HPILS	\$12,767,120
200311	12/2/2014	50806	Linwood - SW Station 138 kV Ckt 1	OGE	HPILS	\$9,899,440
200311	12/2/2014	50807	Knipe - SW Station 138 kV Ckt 1	OGE	HPILS	\$9,128,020
200309	12/3/2014	50819	China Draw - North Loving 345 kV Ckt 1	SPS	HPILS	\$19,396,705
200309	12/3/2014	50820	Kiowa - North Loving 345 kV Ckt 1	SPS	HPILS	\$23,082,520
200309	12/3/2014	50849	China Draw 345/115 kV Ckt 1 Transformer	SPS	HPILS	\$5,234,609
200309	12/3/2014	50850	China Draw 345 kV Ckt 1 Terminal Upgrades	SPS	HPILS	\$5,469,757
200309	12/3/2014	50854	North Loving 345 kV Terminal Upgrades	SPS	HPILS	\$5,345,796
200365	1/12/2016	50954	Ochoa - Ponderosa Tap 115 kV Ckt 1 Rebuild	SPS	SPP-2014-AG1-AFS-6	\$4,200,000
200362	12/21/2015	50991	Anthony - Bluff City 138 kV Ckt 1	MKEC	2016 ITPNT	\$14,472,753
200455	5/12/2017	50992	Tuco 230/115 kV Ckt 1 Transformer	SPS	2017 ITPNT	\$200,000
200362	12/21/2015	50993	Bluff City - Caldwell 138 kV Ckt 1	MKEC	2016 ITPNT	\$10,401,473
200362	12/21/2015	50994	Caldwell - Mayfield 138 kV Ckt 1	MKEC	2016 ITPNT	\$7,311,543
200362	12/21/2015	50995	Mayfield - Milan 138 kV Ckt 1	MKEC	2016 ITPNT	\$5,658,800
200328	2/25/2015	51151	Iatan 345 kV Voltage Conversion	KCPL	2015 ITP10	\$1,886,472
200318	2/18/2015	51200	Bassett 115 kV Substation	NPPD	2015 ITPNT	\$5,163,000
200406	8/17/2016	51207	Linwood - South Shreveport 138 kV Ckt 1 Rebuild	AEP	2016 ITPNT	\$5,919,107
200343	8/13/2015	51235	Stevens Co. 345 kV Substation	SPS	2015 ITPNT	\$13,600,000
200344	8/13/2015	51240	Walkemeyer - Stevens Co. 115 kV Ckt 1	SEPC	2015 ITPNT	\$1,673,590
200344	8/13/2015	51241	Walkemeyer 115 kV Terminal Upgrades	SEPC	2015 ITPNT	\$7,246,297
200318	2/18/2015	51277	Bassett 115 kV Cap Bank	NPPD	2015 ITPNT	\$902,000
200337	2/25/2015	51283	Iatan - Stranger Creek 345 kV Ckt 1 Voltage Conversion (GMO)	GMO	2015 ITP10	\$7,685,983

NTC ID	NTC Issue Date	UID	Network Upgrade Name	Owner	NTC Source Study	Cost Estimate
200338	2/25/2015	51284	Iatan - Stranger Creek 345 kV Ckt 1 Voltage Conversion (WR)	WR	2015 ITP10	\$23,000,000
200344	8/13/2015	51326	Walkemeyer Tap 345 kV Substation (SEPC)	SEPC	2015 ITPNT	\$3,686,933
200344	8/13/2015	51327	Stevens Co. 345/115 kV Transformer	SEPC	2015 ITPNT	\$8,305,939
200376	7/12/2016	51332	Ingalls 115 kV Cap Bank	SEPC	DPA-2015-MARCH-494	\$5,527,627
200362	12/21/2015	51394	Viola 138 kV Line Tap (MKEC)	MKEC	2016 ITPNT	\$3,836,068
200363	12/21/2015	51395	Viola 138 kV Line Tap (WR)	WR	2016 ITPNT	\$2,162,471
200365	1/12/2016	51409	Potash Junction 230 kV Terminal Upgrade	SPS	SPP-2014-AG1-AFS-6	\$63,251
200386	5/17/2016	51448	Elk City 138 kV Move Load	AEP	2016 ITPNT	\$2,904,911
200406	8/17/2016	51454	Duncan - Tosco 69 kV Ckt 1 Rebuild	AEP	2016 ITPNT	\$5,974,766
		51473	TUCO Interchange 345/230kV CKT 1 Replacement	SPS	GI Studies	\$3,347,036
200395	5/17/2016	51549	Terry Co. - Wolfforth 115 kV Terminal Upgrades	SPS	2016 ITPNT	\$1,461,643
		51613	Tap Centerville-Marmaton 161kV GEN-2015-016 Addition (TOIF)	KCPL	GI Studies	\$581,433
		51614	Tap Centerville-Marmaton 161kV GEN-2015-016 Addition (NU)	KCPL	GI Studies	\$7,978,000
200463	8/16/2017	51615	Tap Centerville-Marmaton 161kV GEN-2015-016 Addition (WERE)	WR	GI Studies	\$110,000
200423	1/12/2017	51826	Hancock - Muskogee 161 kV Ckt 1 Terminal Upgrades	OGE	SPP-2016-AG1-AFS-1	\$37,638
200481	2/27/2018	72013	Park Community 138 kV Substation	WFEC	DPA-2017-August-767-774-776	\$2,000,000
210483	4/26/2018	72029	Kingfisher SW - Park Community 138 kV Ckt 1 New Line	WFEC	DPA-2017-August-767-774-776	\$4,500,000
51 Upgrade(s) completed						\$328,524,083

Table 1: Completed Upgrades

NTCS ISSUED



Figure 2: NTCs Issued

NTC ID	NTC Issue Date	UID	Owner	Upgrade Name	Source Study	Estimated Cost of New Upgrades	Estimated Cost of Previously Approved Upgrades
210485	5/18/2018	82111	WFEC	Cogar - Cleveland Jct 138 kV Ckt 1 Voltage Conversion	DPA-2017-December-815	\$10,000,000	
210485	5/18/2018	82112	WFEC	Cleveland Jct - Amber Tap 138 kV Ckt 1 Voltage Conversion	DPA-2017-December-815	\$6,900,000	
210485	5/18/2018	82113	WFEC	Amber Tap - Blanchard 138 kV Ckt 1 Voltage Conversion	DPA-2017-December-815	\$7,600,000	
210485	5/18/2018	82114	WFEC	Blanchard - OU SW 138 kV Ckt 1 Voltage Conversion	DPA-2017-December-815	\$300,000	
210485	5/18/2018	82115	WFEC	Cleveland Jct - Anadarko 138 kV Ckt 1 Voltage Conversion	DPA-2017-December-815	\$6,300,000	
210489	7/9/2018	82111	WFEC	Cogar - Cleveland Jct 138 kV Ckt 1 Voltage Conversion	DPA-2017-December-815	\$10,000,000	
210489	7/9/2018	82112	WFEC	Cleveland Jct - Amber Tap 138 kV Ckt 1 Voltage Conversion	DPA-2017-December-815	\$6,900,000	

NTC ID	NTC Issue Date	UID	Owner	Upgrade Name	Source Study	Estimated Cost of New Upgrades	Estimated Cost of Previously Approved Upgrades
210489	7/9/2018	82113	WFEC	Amber Tap - Blanchard 138 kV Ckt 1 Voltage Conversion	DPA-2017-December-815	\$7,600,000	
210489	7/9/2018	82114	WFEC	Blanchard - OU SW 138 kV Ckt 1 Voltage Conversion	DPA-2017-December-815	\$300,000	
210489	7/9/2018	82115	WFEC	Cleveland Jct - Anadarko 138 kV Ckt 1 Voltage Conversion	DPA-2017-December-815	\$6,300,000	
10 Upgrade(s) Issued						\$62,200,000	\$0

Table 2: NTCs Issued

NTCS WITHDRAWN



Figure 3: NTCs Withdrawn

NTC ID	NTC Withdrawn Date	UID	Owner	Upgrade Name	Source Study	Estimated Cost of Withdrawn Upgrades
210488	6/28/2018	51393	GRDA	Claremore 69 kV Terminal Upgrades	SPP-2014-AG1-AFS-6	\$550,000
1 Upgrade(s) withdrawn						\$550,000

Table 3: NTCs Withdrawn

PORTFOLIO SUMMARY

SPP staff solicits quarterly feedback from the project owners to determine the progress of each approved transmission project. This quarterly report charts the progress of projects approved by the SPP Board of Directors (Board) or through a FERC filed service agreement under the SPP Open Access Transmission Tariff (OATT). Projects included in the portfolio are:

1. Upgrades required to satisfy requests for transmission service
2. Upgrades required to satisfy requests for generator interconnection
3. Approved projects from the Integrated Transmission Planning Assessment (ITP Upgrades)
4. Upgrades within approved Balanced Portfolios²
5. Approved high priority upgrades
6. Endorsed Sponsored Upgrades
7. Approved Interregional Projects²

This report will document changes over the previous quarter to projects captured in the Quarterly Project Tracking Portfolio as well as new projects added from various processes listed above. A summary of the project portfolio is also included.

² There are currently no Balanced Portfolio or Interregional projects included in Quarterly Project Tracking

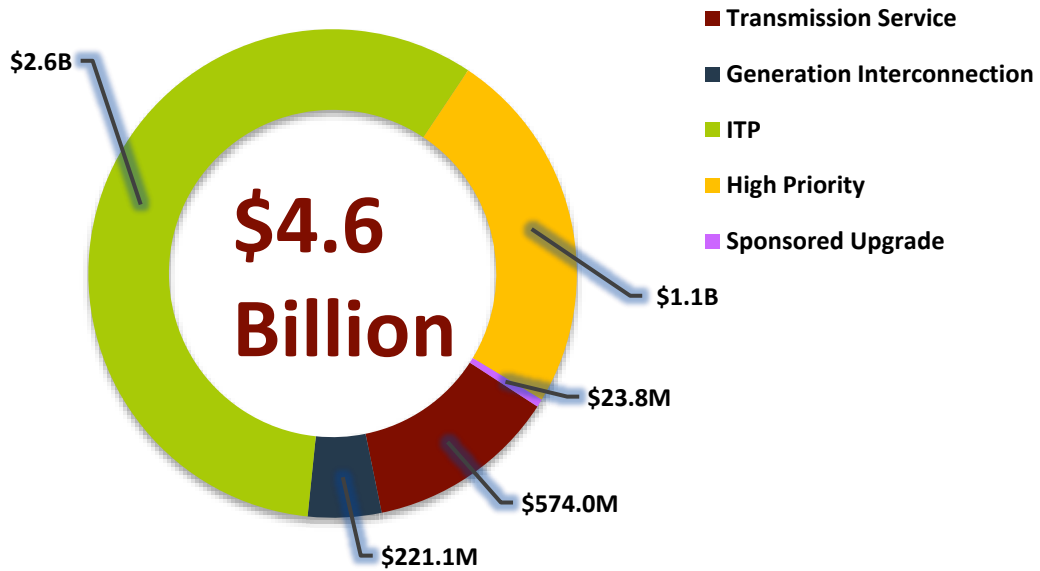


Figure 4: Total Portfolio



Figure 5: Upgrade Type by Cost Summary

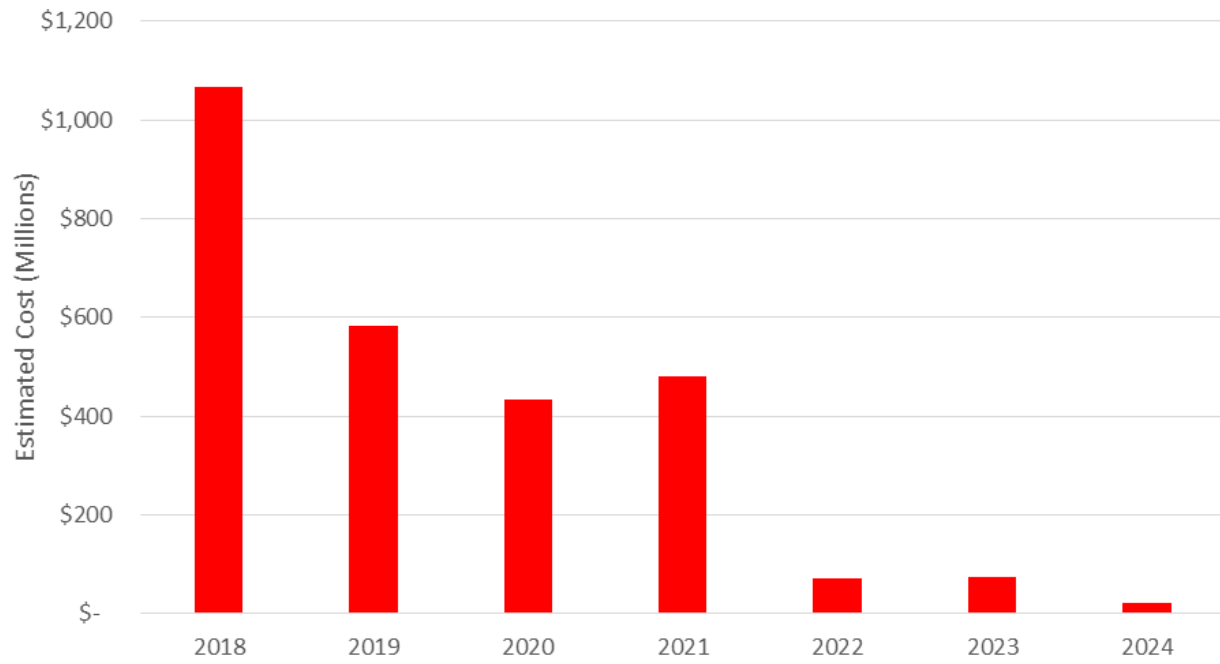


Figure 6: Estimated Cost for All Projects per In-Service Year

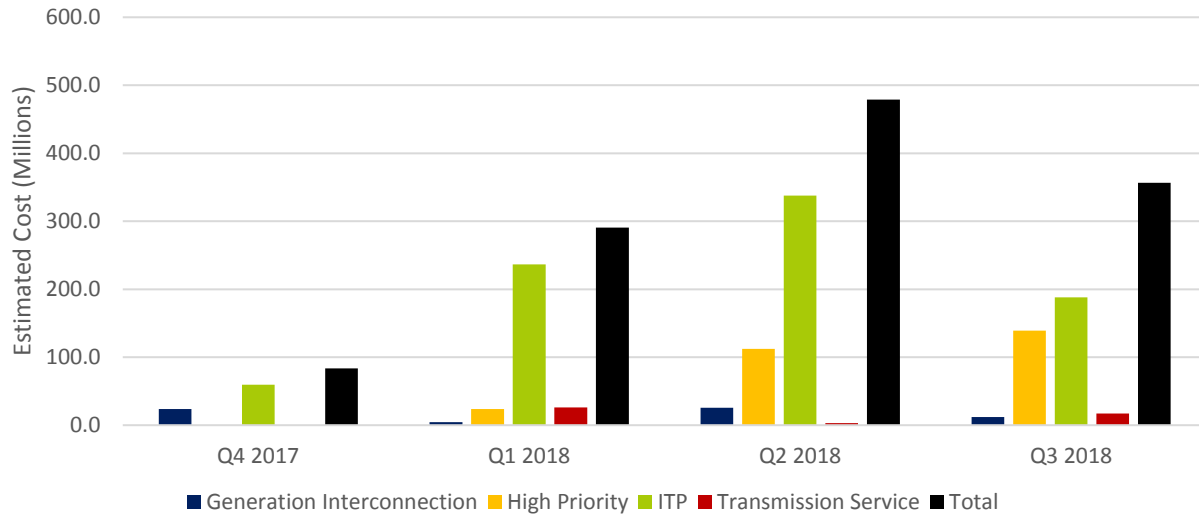


Figure 8: Completed Upgrades by Estimated Cost³ Last Four Quarters

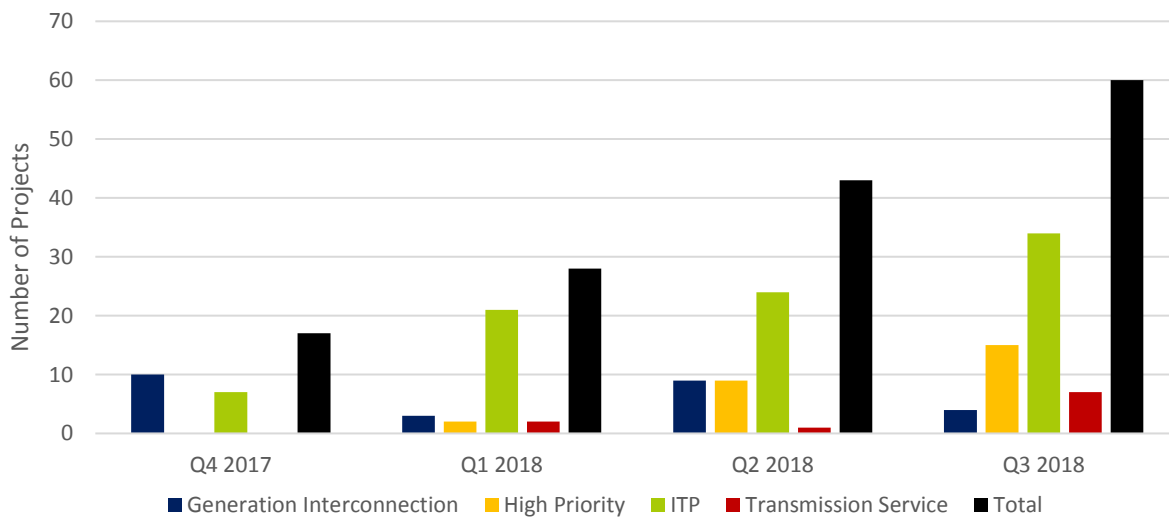


Figure 9: Completed Upgrades by Type Last Four Quarters

PROJECT STATUS SUMMARY

SPP assigns a project status to all Network Upgrades based on the projected in-service dates provided by the DTOs relative to the Need Date determined for the project. Project status definitions are provided below:

- **Closed Out:** Construction complete and in-service; all close-out requirements fulfilled

³ Figures 8 and 9 include Network Upgrades not yet confirmed as completed. Note that the previous quarter’s updated results are listed as the Transmission Owners may make adjustments to final costs and status of projects completed during the year.

- **Complete:** Construction complete and in-service
- **Delayed:** Projected In-Service Date beyond Need Date; interim mitigation provided or project may change but time permits the implementation of project
- **In Service:** Upgrade is operational, but not all construction activities are complete
- **On Schedule < 4:** On Schedule within 4-year horizon
- **On Schedule > 4:** On Schedule beyond 4-year horizon
- **Re-evaluation:** Project active; pending re-evaluation
- **Suspended:** Project suspended; pending re-evaluation
- **Within NTC Commitment Window:** NTC/NTC-C issued, still within the 90-day written commitment to construct window and no commitment received
- **Within NTC-C Project Estimate Window:** Within the NTC-C Project Estimate (CPE) window
- **Within RFP Response Window:** RFP issued for the project

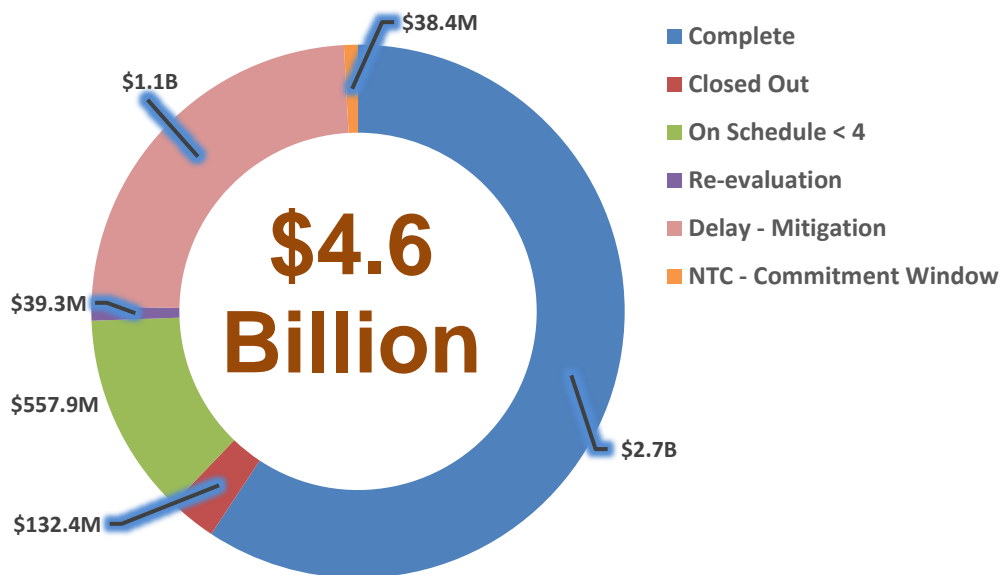


Figure 7: Portfolio Project Status

OUT-OF-BANDWIDTH PROJECTS

In adherence to the Business Practice 7060, SPP reports projects that have updated cost values that exceed their established baseline values based upon a $\pm 20\%$ bandwidth. Variances are determined by total project cost. The following projects with a cost estimate greater than \$5 million were identified as having exceeded the $\pm 20\%$ bandwidth requirement during the reporting period. Table 5 provides

summary information and Table 6 lists cost detail for out-of-bandwidth projects identified during the reporting quarter.

PID	Project Name	Owner	NTC Source Study	Upgrade Type	In-Service Date
30558	XFR - Neosho 138/69 kV Ckt 1	WR	2014 ITPNT	Regional Reliability	4/25/2016

Table 5: Out-of-Bandwidth Project Summary

PID	Baseline Cost Estimate	Baseline Cost Estimate Year	Baseline Cost Estimate with Escalation	Latest Estimate or Final Cost	Variance	Variance %
30576	\$12,984,094	2018	\$13,378,474	\$7,959,327	(\$5,419,147)	-40.51%

Table 6: Out-of-Bandwidth Project Cost Detail

RESPONSIVENESS REPORT

Table 7 and Figures 10 and 11 provide insight into the responsiveness of DTOs constructing Network Upgrades within SPP in the Quarterly Project Tracking Report. **Note: Network Upgrades with statuses of “Suspended”, “Re-evaluation”, “Within NTC Commitment Window”, “Within NTC-C Project Estimate Window”, and “Within RFP Response Window” were excluded from this analysis.**

Project Owner	Number of Upgrades	Number of Upgrades Reviewed	Reviewed %	In-Service Date Changes	ISD Change %	Cost Changes	Cost Change %
AECC	1	0	0%	0	0%	0	0%
AEP	59	58	98%	0	0%	4	7%
BEPC	24	0	0%	2	8%	0	0%
CBPC	1	1	100%	0	0%	1	100%
CPEC	2	2	100%	0	0%	0	0%
CUS	2	0	0%	0	0%	0	0%
EDE	3	0	0%	0	0%	0	0%
EREC	3	1	33%	0	0%	0	0%
GHP	1	0	0%	0	0%	0	0%
GMO	2	2	100%	1	50%	0	0%
GRDA	7	2	29%	0	0%	2	29%
ITCGP	4	0	0%	0	0%	0	0%
KCPL	8	6	75%	4	50%	0	0%
KPP	1	0	0%	1	100%	0	0%
LES	1	0	0%	0	0%	0	0%
MIDW	11	11	100%	0	0%	3	27%
MKEC	7	7	100%	7	100%	7	100%
NIPCO	2	0	0%	0	0%	0	0%
NPPD	47	26	55%	7	15%	2	4%
OGE	60	13	22%	8	13%	5	8%
OPPD	14	14	100%	1	7%	3	21%
SEPC	11	11	100%	6	55%	6	55%
SPS	185	178	96%	34	18%	17	9%
TEXLA	1	0	0%	0	0%	0	0%
TSMO	2	2	100%	0	0%	0	0%
WAPA	5	3	60%	1	20%	2	40%
WFEC	63	23	37%	4	6%	14	22%
WR	36	29	81%	6	17%	3	8%
Total	563	389	69%	82	15%	69	12%

Table 7: Responsiveness Summary

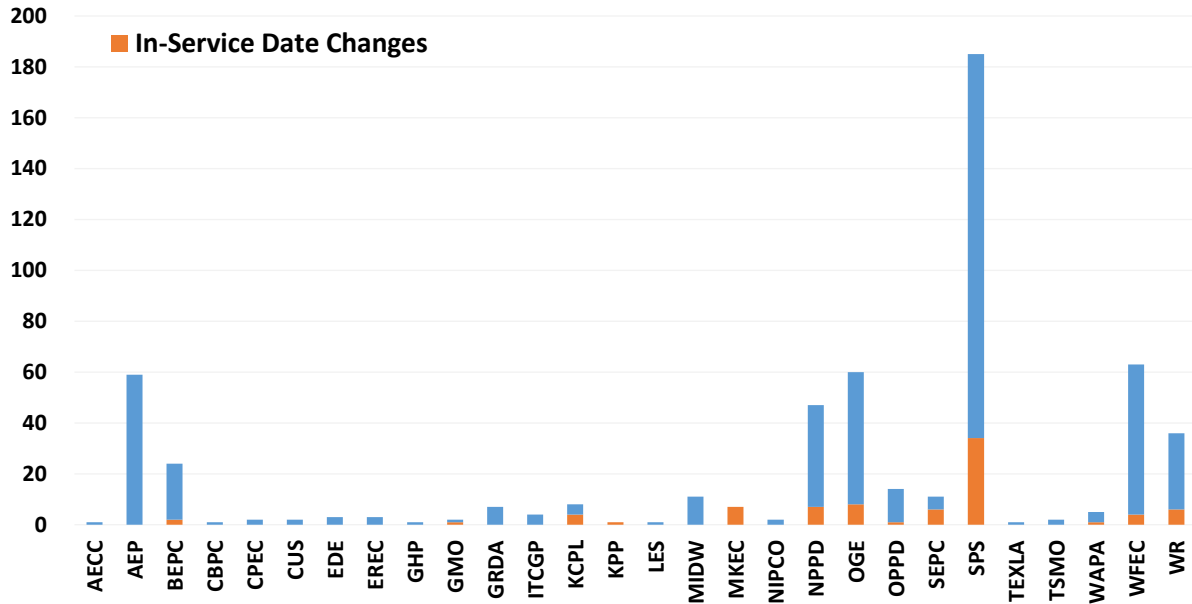


Figure 10: In-Service Date Changes

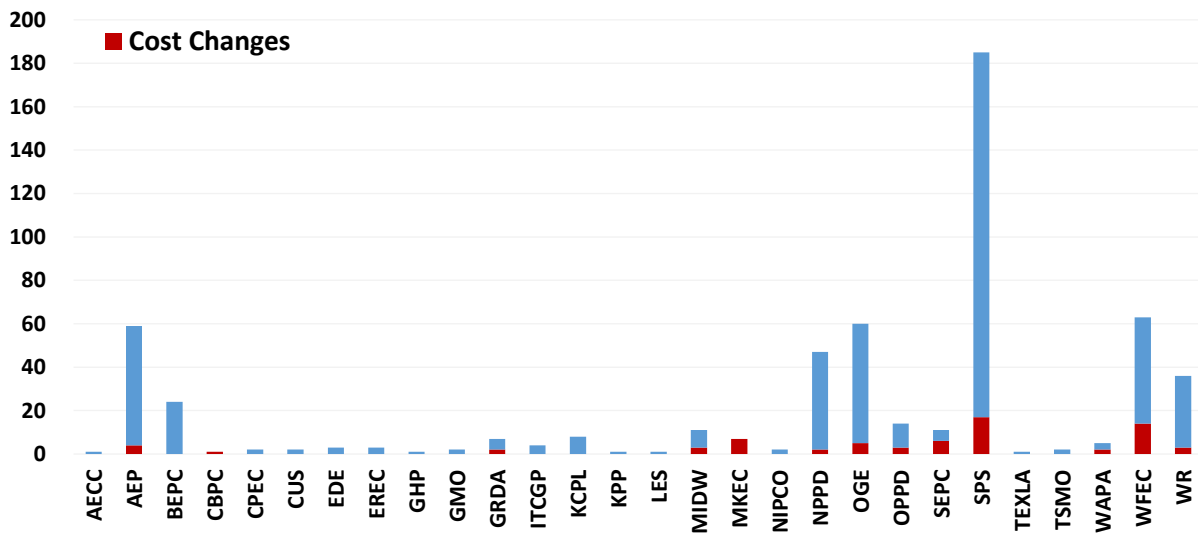


Figure 11: Cost Changes

APPENDIX 1

PROJECT LIST

The accompanying Quarterly Project Tracking list can be found at the following location:

<https://www.spp.org/spp-documents-filings/?id=18641>