



QUARTERLY PROJECT TRACKING REPORT

Q3 2022

June 2022

REVISION HISTORY

DATE OR VERSION NUMBER	AUTHOR	CHANGE DESCRIPTION	COMMENTS
6/30/2022	SPP Staff	Draft	Submitted to MOPC
7/26/2022	SPP Staff	Final	Submitted to Board

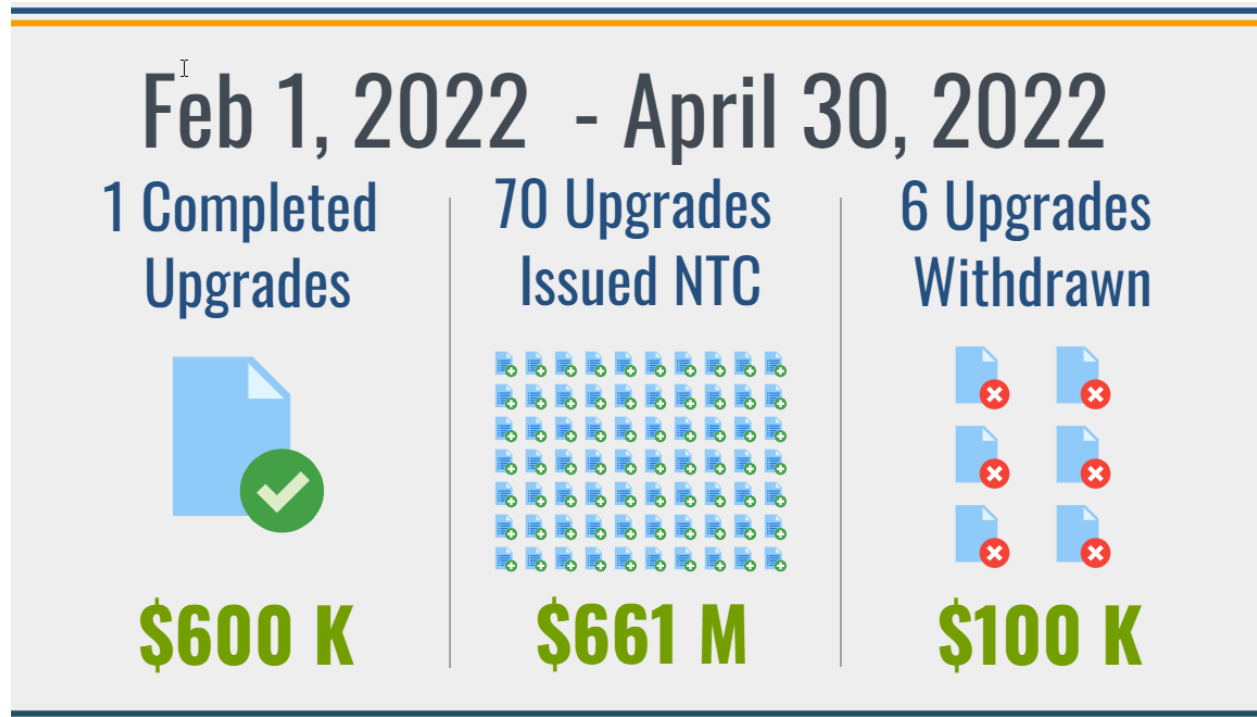
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EXECUTIVE SUMMARY

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.



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

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

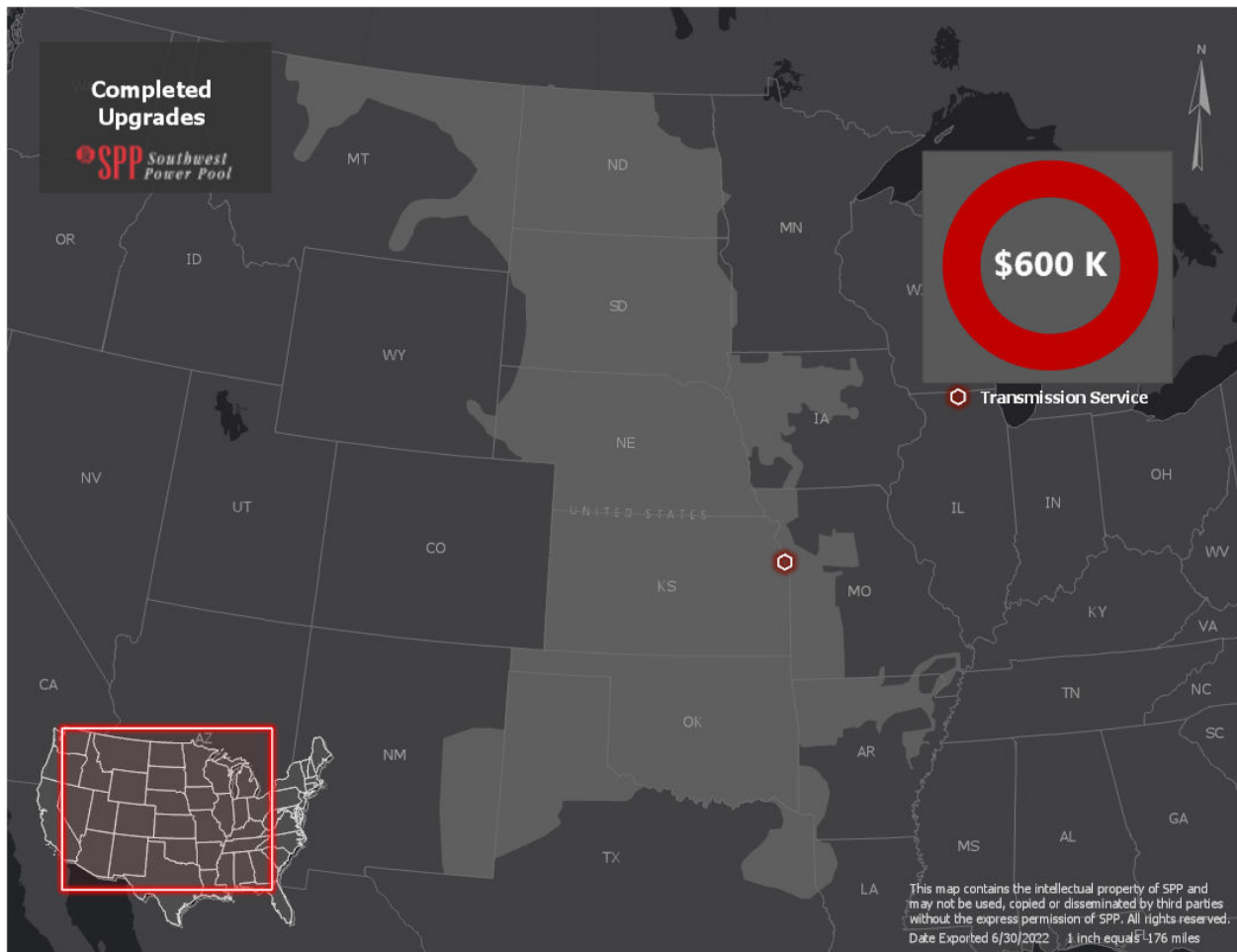


Figure 1: Completed Upgrades

NTC ID	IN SERVICE DATE	UID	OWNER	UPGRADE NAME	SOURCE STUDY	COST ESTIMATE
210590	3/15/2022	143183	EMW	Greenwood 161 kV Terminal Upgrades	SPP-2020-AG1-AFS-3	\$600,168
1 Upgrade(s) Completed						\$600,168

Table 1: Completed Upgrades

NTCS ISSUED

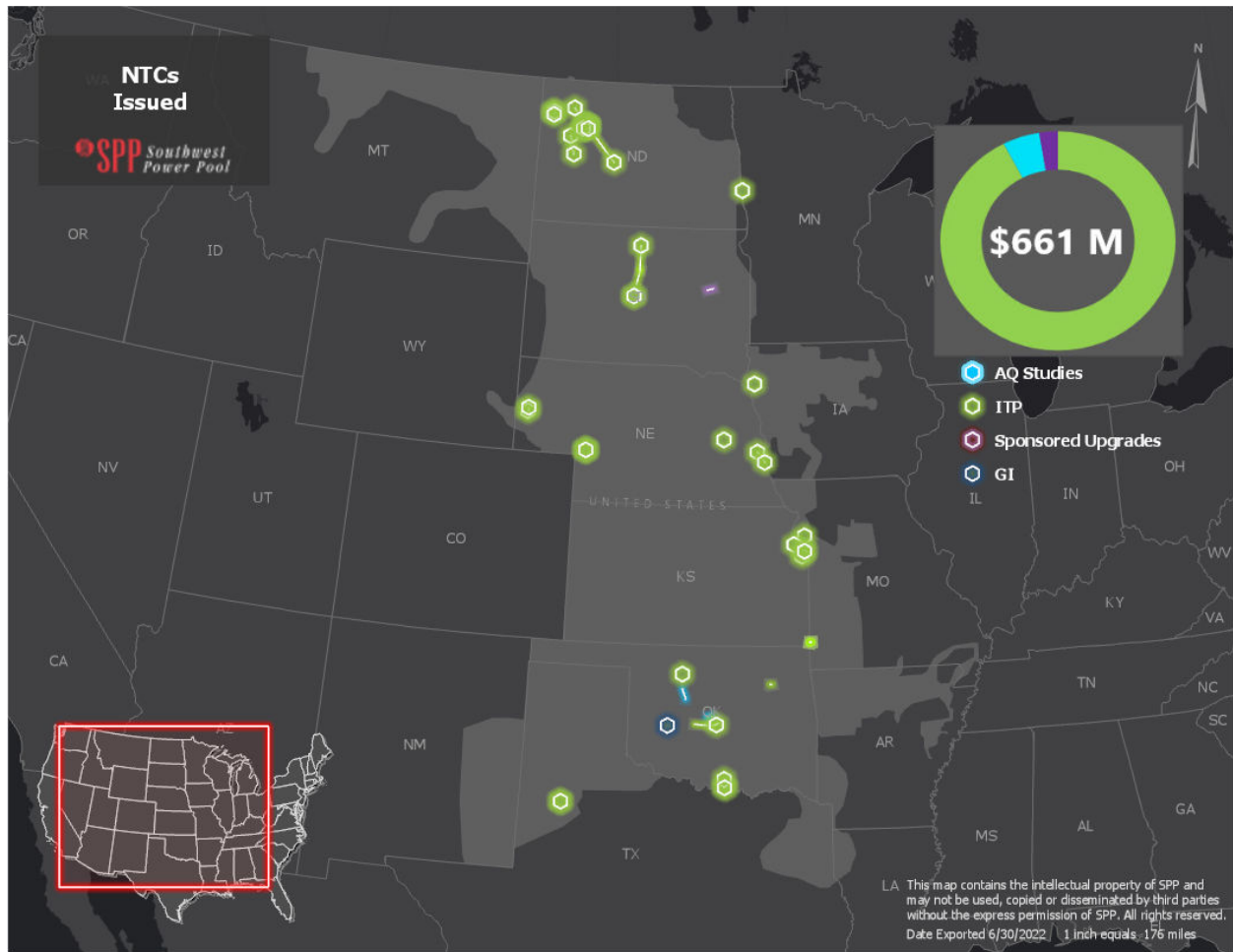


Figure 2: NTCs Issued

NTC ID	NTC ISSUE DATE	UID	OWNER	UPGRADE NAME	SOURCE STUDY	COST ESTIMATE OF NEW UPGRADES	COST ESTIMATE -PREVIOUSLY APPROVED UPGRADES
210633	3/9/2022	143591	AEP	Blue Circle - Catoosa 69 kV Ckt 1 Rebuild	2021 ITP	\$9,020,000	\$0
210637	3/9/2022	143663	EKC	Jarbalo Junction 115 kV Breaker	2021 ITP	\$236,539	\$0
210639	3/11/2022	122735	EREC	Sully Buttes 230 kV Terminal Upgrades	2021 ITP	\$587,000	\$0
210640	3/11/2022	143667	MRES	Moorhead 230 kV Substation Reconfiguration	2021 ITP	\$9,989,000	\$0
210641	3/11/2022	143980	NIPCO	Hinton 69 kV Terminal Equipment	2021 ITP	\$168,228	\$0

NTC ID	NTC ISSUE DATE	UID	OWNER	UPGRADE NAME	SOURCE STUDY	COST ESTIMATE OF NEW UPGRADES	COST ESTIMATE -PREVIOUSLY APPROVED UPGRADES
210642	3/11/2022	112399	SPS	Lubbock South - Jones 230 kV Ckt 1 Terminal Upgrades	2021 ITP	\$231,742	\$0
210642	3/11/2022	112401	SPS	Lubbock South - Jones 230kV Ckt 2 Terminal Upgrades	2021 ITP	\$397,668	\$0
210643	2/25/2022	143127	OGE	Gracemont 345 kV	DISIS-2017-001	\$15,000	\$0
210644	3/11/2022	144142	TSGT	Ogallala (Tri State) - Ogallala (NPPD) 115 kV (TSGT)	2021 ITP	\$280,000	\$0
210645	3/9/2022	144143	NPPD	Ogallala (Tri State) - Ogallala (NPPD) 115 kV (NPPD)	2021 ITP	\$281,000	\$0
210645	3/9/2022	143599	NPPD	Scottsbluff 115 kV Ckt 2 Terminal Upgrades	2021 ITP	\$1,194,000	\$0
210645	3/9/2022	143600	NPPD	Victory Hill 115 kV Ckt 2 Terminal Upgrades	2021 ITP	\$1,129,000	\$0
210645	3/9/2022	122739	NPPD	Columbus East 230/115 kV transformer	2021 ITP	\$5,080,000	\$0
210645	3/9/2022	122741	NPPD	Scottsbluff - Victory Hill 115kV Ckt 2	2021 ITP	\$7,760,000	\$0
210646	3/9/2022	143660	OPPD	S3454 - S3740 345 kV New Line	2021 ITP	\$38,380,095	\$0
210646	3/9/2022	143661	OPPD	S3454 345 kV Terminal Upgrades	2021 ITP	\$1,624,037	\$0
210646	3/9/2022	143662	OPPD	S3740 345 kV Terminal Upgrades	2021 ITP	\$1,680,146	\$0
210647	3/9/2022	143664	EM	Shawnee Mission 161 kV	2021 ITP	\$255,075	\$0
210647	3/9/2022	143665	EM	Shawnee Mission 161 kV Breaker	2021 ITP	\$255,075	\$0
210647	3/9/2022	143666	EM	Craig 161 kV Breaker #2	2021 ITP	\$319,002	\$0
210648	3/11/2022	143613	WAPA	Sully Buttes - Whitlock 230 kV Line Clearance Increase	2021 ITP	\$1,744,800	\$0
210648	3/11/2022	143614	WAPA	Whitlock - Glenham 230 kV	2021 ITP	\$5,845,900	\$0

NTC ID	NTC ISSUE DATE	UID	OWNER	UPGRADE NAME	SOURCE STUDY	COST ESTIMATE OF NEW UPGRADES	COST ESTIMATE -PREVIOUSLY APPROVED UPGRADES
				Clearance Increase			
210648	3/11/2022	122734	WAPA	Oahe 230 kV Terminal Upgrades (WAPA)	2021 ITP	\$561,800	\$0
210650	3/9/2022	122733	BEPC	Whitlock 230 kV Terminal Upgrades	2021 ITP	\$614,000	\$0
210652	3/11/2022	143714	BEPC	Finstad - Tande 345 kV New Line	2021 ITP	\$67,411,405	\$0
210652	3/11/2022	144227	BEPC	Finstad 115 kV Substation	2021 ITP	\$4,675,697	\$0
210652	3/11/2022	144230	BEPC	Finstad 345 kV New Substation	2021 ITP	\$18,822,018	\$0
210652	3/11/2022	144231	BEPC	Finstad Switched Shunt	2021 ITP	\$385,021	\$0
210652	3/11/2022	144233	BEPC	Finstad 345/115 kV Ckt 1 Transformer	2021 ITP	\$5,315,254	\$0
210652	3/11/2022	144235	BEPC	Finstad 345/115 kV Ckt 2 Transformer	2021 ITP	\$5,315,254	\$0
210652	3/11/2022	144236	BEPC	Leland Olds - Finstad - 345 kV New Line	2021 ITP	\$200,761,539	\$0
210652	3/11/2022	144237	BEPC	Leland Olds 345 kV Substation	2021 ITP	\$9,277,339	\$0
210652	3/11/2022	144238	BEPC	Tande 345 kV Terminal Equipment	2021 ITP	\$5,085,047	\$0
210652	3/11/2022	144306	BEPC	Kummer Ridge - Round Up 345 kV Ckt 1 #2	2021 ITP	\$50,396,246	\$0
210652	3/11/2022	144307	BEPC	Kummer Ridge 345 kV Terminal Upgrades #2	2021 ITP	\$2,334,441	\$0
210652	3/11/2022	144308	BEPC	Roundup 345 kV Terminal Upgrades #2	2021 ITP	\$2,334,441	\$0
210654	3/11/2022	143668	EDE	Joplin West 7th - Stateline 161 kV Rebuild	2021 ITP	\$10,688,750	\$0
210654	3/11/2022	143669	EDE	Joplin West 7th 161 kV Terminal Upgrades	2021 ITP	\$393,232	\$0
210654	3/11/2022	143670	EDE	Stateline 161 kV Terminal Upgrades	2021 ITP	\$209,518	\$0

NTC ID	NTC ISSUE DATE	UID	OWNER	UPGRADE NAME	SOURCE STUDY	COST ESTIMATE OF NEW UPGRADES	COST ESTIMATE -PREVIOUSLY APPROVED UPGRADES
210655	3/9/2022	143587	EMW	Platte City 161 kV Terminal Upgrade	2021 ITP	\$55,272	\$0
210656	3/11/2022	122863	OGE	Midwest 138 kV Ckt 1 Terminal Upgrades	2021 ITP	\$0	\$65,000
210656	3/11/2022	143786	OGE	Cleo Corner 69 kV Terminal Upgrades	2021 ITP	\$168,228	\$0
210656	3/11/2022	143806	OGE	Marietta Tap (OKGE) – Marietta Switchyard (WFEC) 138 kV Ckt 1 New Line (OGE)	2021 ITP	\$1,575,000	\$0
210656	3/11/2022	143815	OGE	Marietta 2 138 kV Voltage Conversion	2021 ITP	\$5,000,000	\$0
210656	3/11/2022	143816	OGE	Rocky Point - Marietta 2 138 kV Ckt 1 Rebuild	2021 ITP	\$8,806,000	\$0
210656	3/11/2022	143817	OGE	Rocky Point 69 kV Replace Relays	2021 ITP	\$250,000	\$0
210657	3/11/2022	144173	WFEC	Marietta Switchyard 138 kV Ckt 1 Terminal Equipment	2021 ITP	\$736,000	\$0
210659	3/8/2022	144206	SPS	Wilco 115 kV Substation	DPA-2021-Feb-1279-1280	\$9,225,928	\$0
210659	3/8/2022	144207	SPS	Twist 115 kV Substation	DPA-2021-Feb-1279-1280	\$8,909,901	\$0
210659	3/8/2022	144208	SPS	Twist - Wilco 115 kV Ckt 1	DPA-2021-Feb-1279-1280	\$2,678,226	\$0
210660	3/21/2022	144327	EREC	Onida capacitor bank	SUS-016	\$124,885	\$0
210661	3/21/2022	144328	EREC	Carpenter – Willow Lake 69 kV	SUS-018	\$13,720,246	\$0
210662	3/21/2022	144329	EREC	Hughes County 115/69kV substation	SUS-019	\$3,075,749	\$0
210663	4/14/2022	144226	MWE	Finstad - Vanhook 115 kV New Line	2021 ITP	\$4,702,500	\$0
210663	4/14/2022	144177	MWE	NE Williston - Folvag 115 kV New Line	2021 ITP	\$6,490,000	\$0

NTC ID	NTC ISSUE DATE	UID	OWNER	UPGRADE NAME	SOURCE STUDY	COST ESTIMATE OF NEW UPGRADES	COST ESTIMATE -PREVIOUSLY APPROVED UPGRADES
210663	4/14/2022	144178	MWE	NE Williston 115 kV Terminal Equipment	2021 ITP	\$596,597	\$0
210663	4/14/2022	144199	MWE	East Fork 115 kV Terminal Equipment	2021 ITP	\$2,511,246	\$0
210663	4/14/2022	144202	MWE	E Newtown 115 kV Substation	2021 ITP	\$1,087,789	\$0
210663	4/14/2022	144239	MWE	Vanhook 115 kV Terminal Equipment	2021 ITP	\$3,811,190	\$0
210663	4/14/2022	144148	MWE	E Newtown 115 kV New Statcom	2021 ITP	\$22,213,115	\$0
210663	4/14/2022	144163	MWE	Folvag 115 kV Terminal Equipment	2021 ITP	\$613,746	\$0
210664	4/14/2022	144278	OGE	West Oaks Terminal Upgrades	DPA-2021-March-1296	\$400,000	\$0
210664	4/14/2022	144279	OGE	Classen 138 kV Terminal Upgrades	DPA-2021-March-1296	\$600,000	\$0
210664	4/14/2022	144280	OGE	Council - Mustang 138 kV Ckt 1 Reconductor	DPA-2021-March-1296	\$1,390,000	\$0
210664	4/14/2022	144281	OGE	Classen - Douglas Tap 138 kV Reconductor	DPA-2021-March-1296	\$790,000	\$0
210665	4/18/2022	144276	WFEC	Elmore 69 kV Terminal Upgrades	DPA-2021-June-1332	\$228,000	\$0
210665	4/18/2022	144277	WFEC	Bradly Tap 69 kV Cap Bank	DPA-2021-June-1332	\$803,000	\$0
210669	4/28/2022	72016	WFEC	Okeene - Watonga SW 138 kV Ckt 1 Voltage Conversion	DPA-2017-August-767-774-776	\$0	\$8,600,000
210670	4/28/2022	133085	NEET	Minco - Pleasant Valley 345 kV Ckt 1	2020 ITP	\$57,512,100	\$0
210670	4/28/2022	133106	NEET	Draper - Pleasant Valley 345 kV Ckt 2	2020 ITP	\$23,400,139	\$0
70 Upgrade(s) Issued						\$652,529,166	\$8,665,000

Table 2: NTCs Issued

NTCS WITHDRAWN

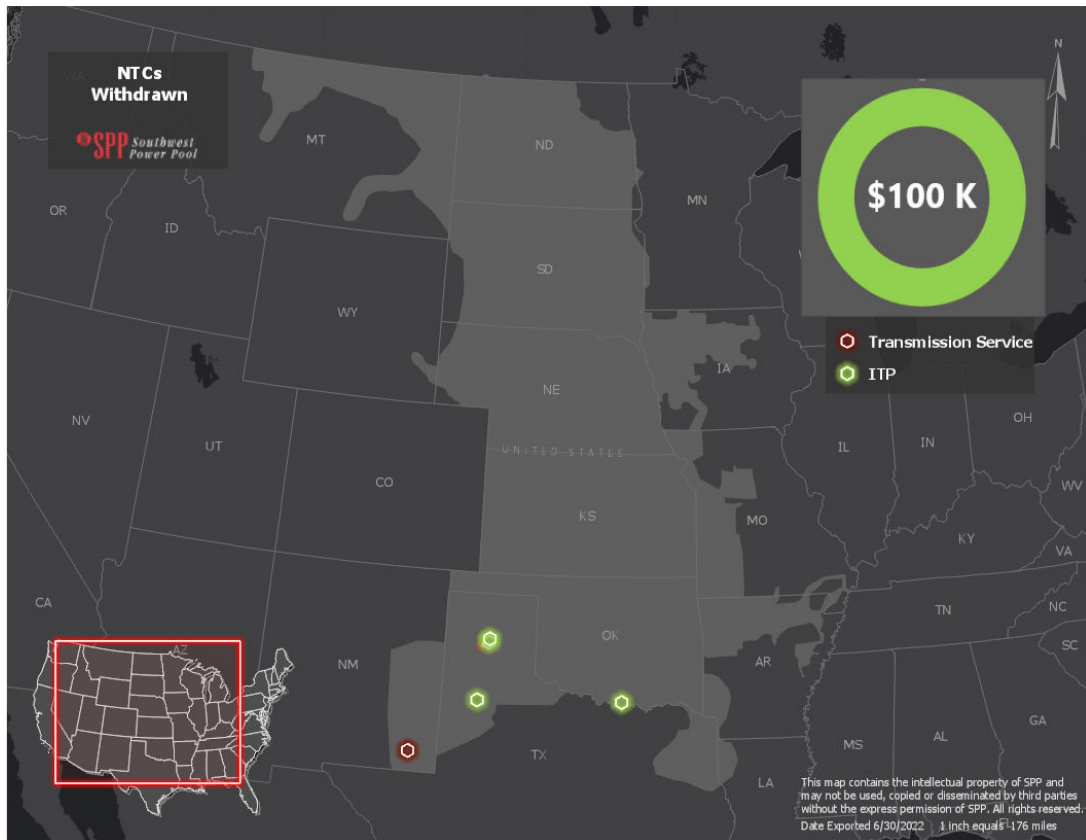


Figure 3: NTCs Withdrawn

NTC ID	NTC WITHDRAWN DATE	UID	OWNER	UPGRADE NAME	SOURCE STUDY	COST ESTIMATE - WITHDRAWN UPGRADES
210658	3/8/2022	122597	WFEC	Marietta 69 kV	2019 ITP	\$100,000
210666	4/27/2022	11027	SPS	East Plant 115 kV Terminal Upgrade	SPP-2014-AG1-AFS-6	\$0 ²
210667	4/27/2022	51409	SPS	Potash Junction 230 kV Terminal Upgrade	SPP-2014-AG1-AFS-6	\$0 ²
210668	4/27/2022	51623	SPS	Tuco - Stanton 115 kV Terminal Upgrades	2017 ITP10	\$0 ²
210668	4/27/2022	61836	SPS	Martin - Pantex North 115 kV Terminal Upgrades	2017 ITP10	\$0 ²
210668	4/27/2022	61837	SPS	Pantex South - Highland Tap 115 kV Terminal Upgrades	2017 ITP10	\$0
6 Upgrade(s) Withdrawn						\$100,000

Table 3: NTCs Withdrawn

² Existing facilities met ratings required by NTC. No cost reported.

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 or through a FERC filed service agreement under the SPP OATT. Projects included in the portfolio are:

1. Upgrades required to satisfy requests for transmission service (TS)
2. Upgrades required to satisfy requests for generator interconnection (GI)
3. Requests pursuant to Attachment AQ of this Tariff (AQ)³
4. Approved projects from the Integrated Transmission Planning Assessment (ITP)
5. Upgrades within approved Balanced Portfolios (BP)⁴
6. Approved high priority upgrades (HP)
7. Endorsed Sponsored Upgrades (SP)
8. Approved Interregional Projects (IR)⁴
9. Approved projects from the 20-Year Assessment (ITP20)
10. Approved projects from Generator Retirement Process (GR)⁴

This report will document changes over the previous quarter to report on 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.

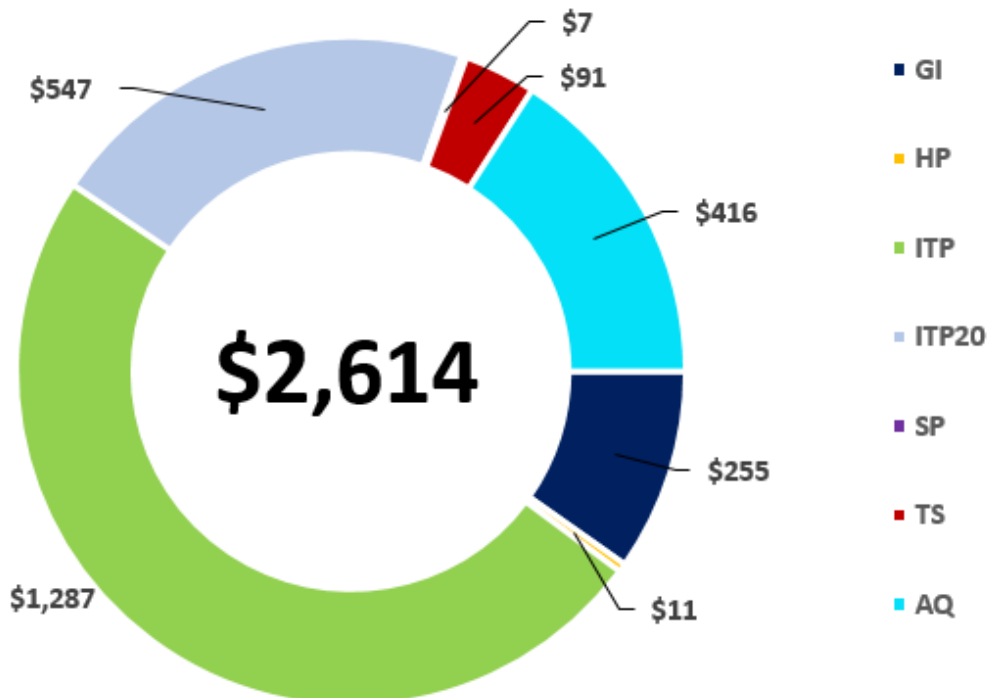


Figure 3: Total Active Portfolio (Millions)

³ Pursuant to RR 467, all Upgrades resulting from under attachment AQ are tracked independently of transmission service upgrades as of 6/1/2022

⁴ There are no active Generator Retirement, Balanced Portfolio or Interregional projects in Quarterly Project Tracking.



Figure 4: Upgrade by Type Cost Summary⁵

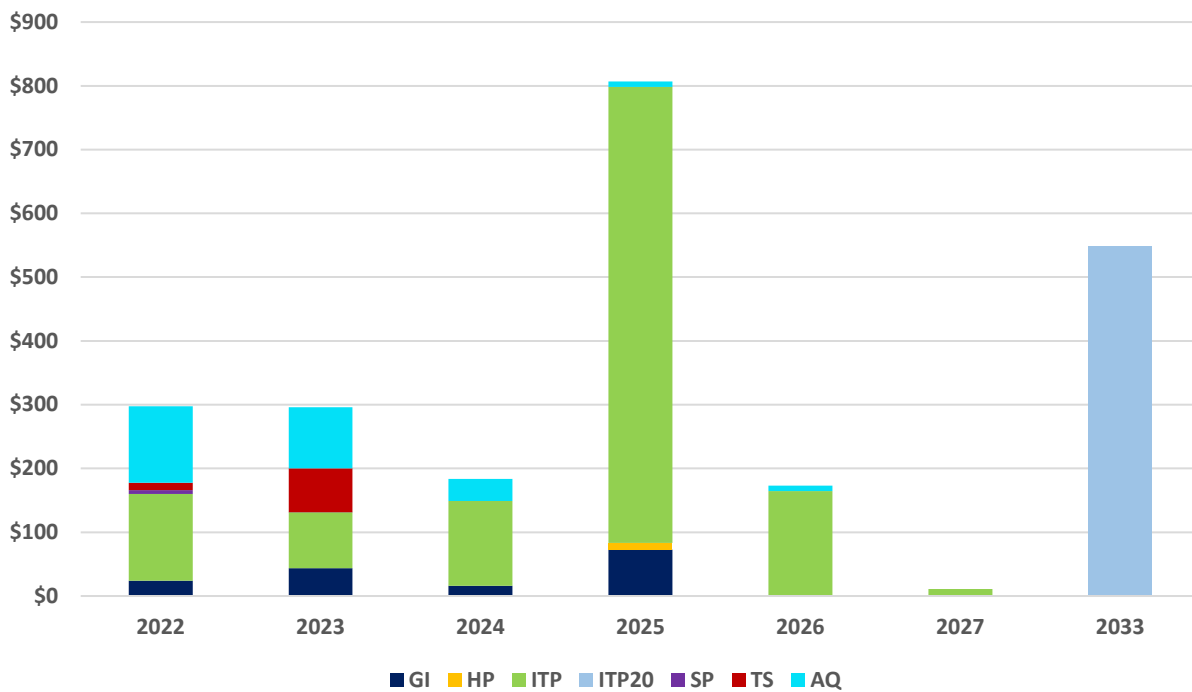


Figure 5: Estimated Cost for Upgrades by In-Service Year

⁵ Line mileage not available for all upgrades.

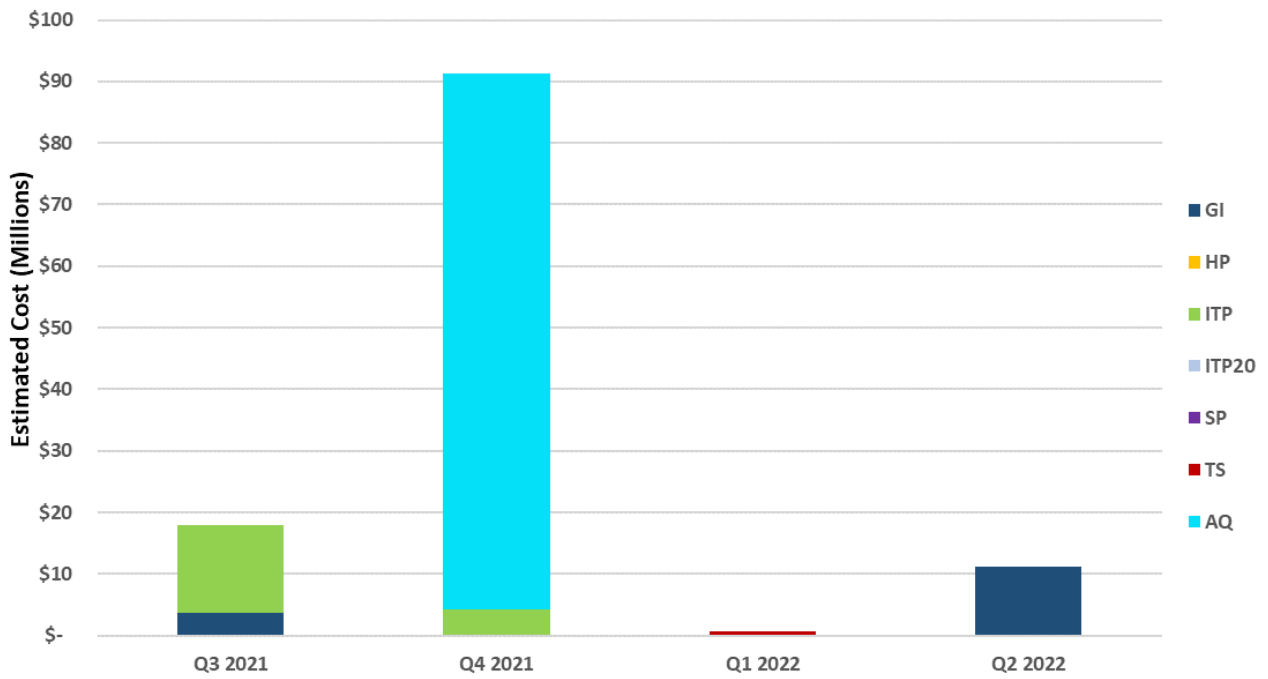


Figure 6: Estimated Cost of Upgrades Completed in Past 4 Quarters⁶

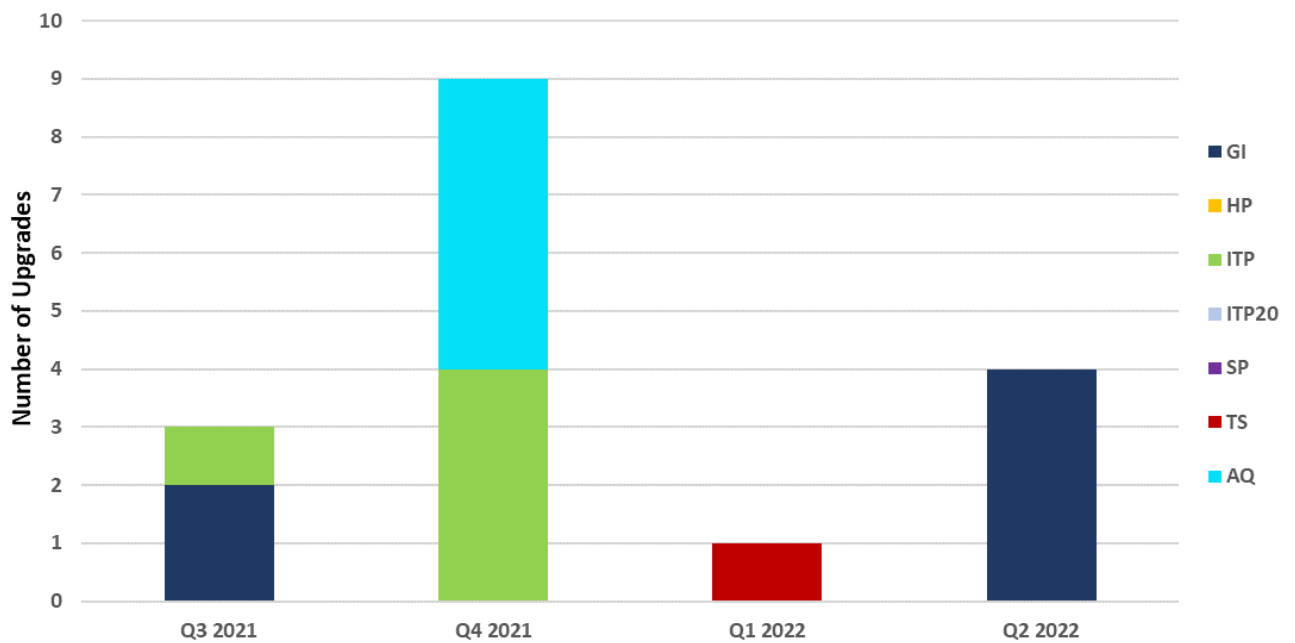


Figure 7: Number of Upgrades Completed in Past Four Quarters⁶

⁶ Figures 6 and 7 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.

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:** Upgrade is operation, all project activities are complete, & all close-out requirements fulfilled in accordance with Business Practice 7060. These upgrades will not appear in future Quarterly Project Tracking reports
- **Complete:** Upgrade is operation and all project activities are complete
- **Delay-Mitigation:** Behind schedule, interim mitigation provided or project may change but time permits the implementation of project
- **Delay-Mitigation Window:** Behind schedule, interim mitigation pending or project may change but time permits the implementation of project
- **Identified:** Upgrade identified and included in Board approved study results
- **In Service:** Upgrade is operational, but not all project 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
- **RFP Issued:** Responses for competitive upgrades are being submitted and/or reviewed
- **NTC Commitment Window:** NTC/NTC-C issued, still within the 90-day written commitment to construct window and no commitment received
- **NTC-C Project Estimate Window:** Within the NTC-C Project Estimate (CPE) window
- **Suspended:** NTC/GIA suspended

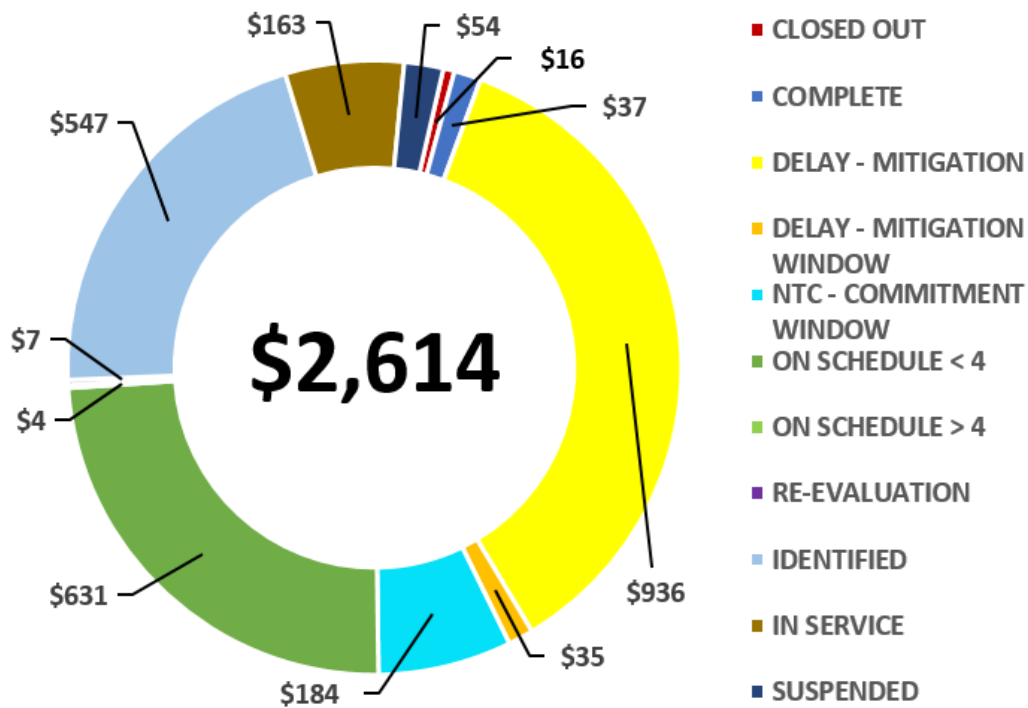


Figure 8: Portfolio Project Status (Millions)

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. Tables below provide summary information and 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
81617	Line - Anadarko - Gracemont 138kV	WFEC	2020 ITP	Economic	1/1/2023

Table 3: 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 %
81617	\$2,850,000	2020	\$2,994,281	\$5,750,000	\$2,755,719	92.0%

Table 4: Out-of-Bandwidth Cost Detail

RESPONSIVENESS REPORT

The table and figures below provide insight into the responsiveness of DTOs constructing Network Upgrades within SPP in the Quarterly Project Tracking Report. Note: Network Upgrades with status of "Identified", "Suspended", "Re-evaluation", "Within NTC Commitment Window", "Within NTC-C Project Estimate Window", and "RFP Issued" are excluded from this analysis.

Project Owner	Number of Upgrades	Number of Upgrades Reviewed	Reviewed %	In-Service Date Changes	ISD Change %	Cost Changes	Cost Change %
AEP	23	20	87%	5	22%	5	22%
BEPC	6	6	100%	0	0%	3	50%
CBPC	1	1	1	0	0%	0	0%
CPEC	1	1	100%	0	0%	1	100%
EDE	1	1	1	0	0%	0	0%
EKC	16	12	75%	0	0%	0	0%
EM	7	7	100%	0	0%	0	0%
EMW	2	2	100%	1	50%	0	0%
EREC	0	0	N/A	N/A	N/A	N/A	N/A
GRDA	4	4	100%	4	100%	0	0%
KPP	1	0	0%	0	0%	0	0%
MRES	0	0	N/A	N/A	N/A	N/A	N/A
MWE	1	1	100%	0	0%	0	0%
NEET	1	0	0%	0	0%	0	0%
NIPCO	0	0	N/A	N/A	N/A	N/A	N/A
NPPD	17	13	76%	2	12%	0	0%
NWE	3	0	0%	0	0%	0	0%
OGE	28	28	100%	3	11%	3	11%
OPPD	4	4	100%	0	0%	0	0%
SEPC	4	4	100%	0	0%	0	0%
SPS	46	46	100%	0	0%	1	2%
TBD	0	0	N/A	N/A	N/A	N/A	N/A
TSGT	2	0	0%	0	0%	0	0%
TSOK	1	0	0%	0	0%	0	0%
WAPA	5	5	100%	4	80%	0	0%
WFEC	49	48	98%	2	4%	1	2%
Total	223	203	39%	21	9%	14	6%

Table 5: Responsiveness Summary

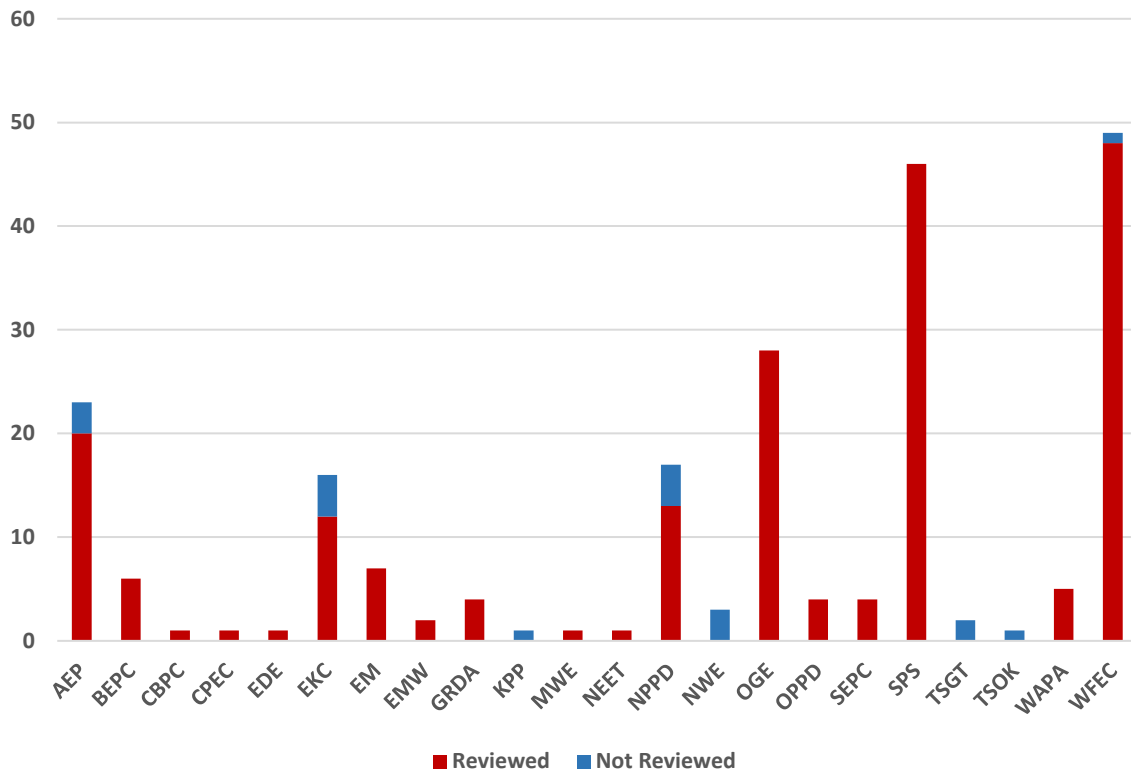


Figure 9: In-Service Date Changes

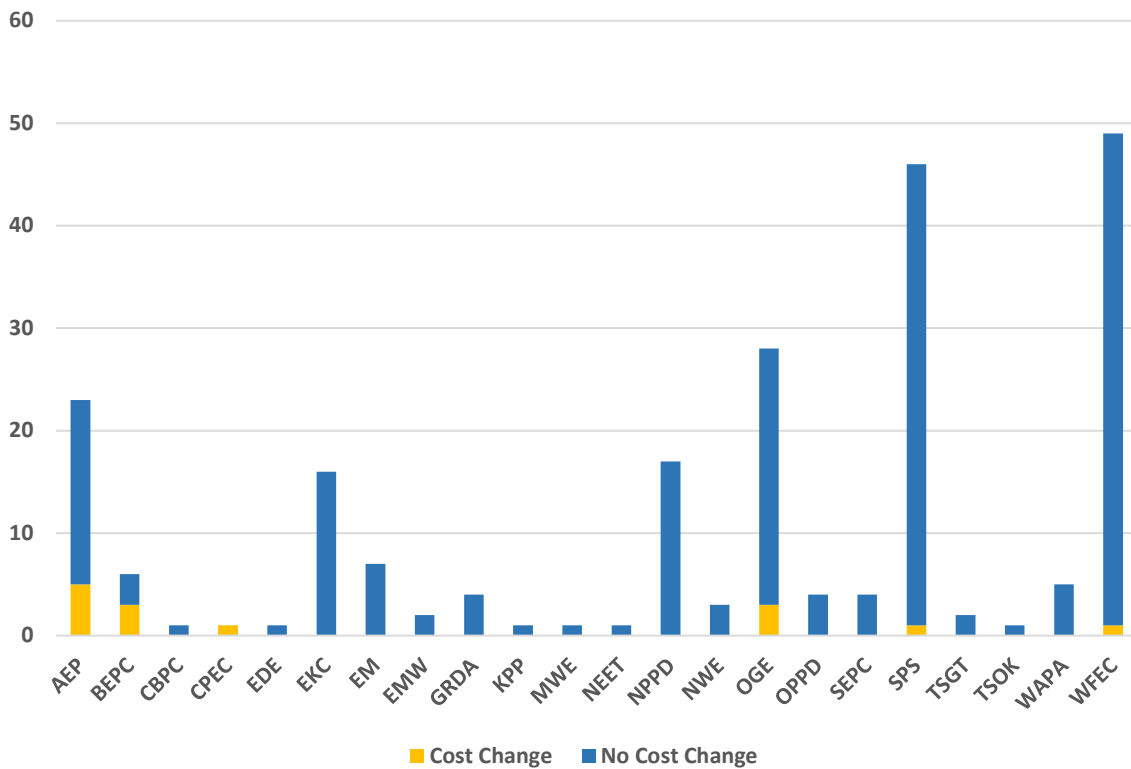


Figure 10: Cost Changes

ITP20 UPGRADES

ITP20 assessments were performed in 2010 and 2013. While the projects proposed by those studies are incorporated into the STEP Project List, they were not included in SPP's project tracking effort as part of the Quarterly Tracking Report prior to Q1 2019. A list of active ITP20 projects will be maintained in the STEP Report and Quarterly Project Tracking Report lists going forward. The current ITP20 projects are listed in the table below.

Project ID	Upgrade ID	Owner	Upgrade Name	RTO Determined Need Date	Latest Cost Estimate
30401	50492	TBD	Cass Co. - S.W. Omaha (aka S3454) 345 kV Ckt1	1/1/2033	\$33,126,800
30599	50769	AEP	South Fayetteville 345/161 kV Transformer Ckt1	1/1/2033	\$12,600,000
30599	50770	TBD	Chamber Springs - South Fayetteville 345 kV Ckt1	1/1/2033	\$21,295,800
30600	50771	GMO	Maryville 345/161 kV Transformer Ckt1	1/1/2033	\$12,600,000
30601	50772	KCPL	Nashua 345/161 kV Transformer Upgrade Ckt11	1/1/2033	\$12,600,000
30602	50773	TBD	Keystone - Red Willow 345 kV Ckt1	1/1/2033	\$130,141,000
30603	50774	TBD	Tolk - Tuco 345 kV Ckt1	1/1/2033	\$75,718,400
30604	50775	SEPC	Holcomb 345/115 kV Transformer Ckt2	1/1/2033	\$12,600,000
30605	50776	TBD	Neosho - Wolf Creek 345 kV Ckt1	1/1/2033	\$117,126,900
30606	50777	TBD	Clinton - Truman 161 kV Ckt1 Reconductor	1/1/2033	\$15,701,325
30606	50778	TBD	North Warsaw - Truman 161 kV Ckt1 Reconductor	1/1/2033	\$1,082,850
30608	50779	WR	Auburn 345/115 kV Transformer Ckt2	1/1/2033	\$12,600,000
30608	50780	TBD	Auburn - Swissvale 345 kV Ckt1 Voltage Conversion	1/1/2033	\$20,112,700
30608	50781	TBD	Auburn - Jeffrey EC 345 kV Ckt1 Voltage Conversion	1/1/2033	\$35,493,000
30607	50782	OGE	Muskogee/Pecan Creek 345 kV Terminal Upgrades	1/1/2033	\$34,605,675
Total					\$547,404,450

Table 6: ITP20 Upgrades

APPENDIX 1

(See accompanying list of Quarterly Project Tracking Projects)