



# QUARTERLY PROJECT TRACKING REPORT

Q3 2020

July 2020

## REVISION HISTORY

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DATE OR VERSION NUMBER	AUTHOR	CHANGE DESCRIPTION	COMMENTS
6/12/2020	SPP Staff	Initial Draft	

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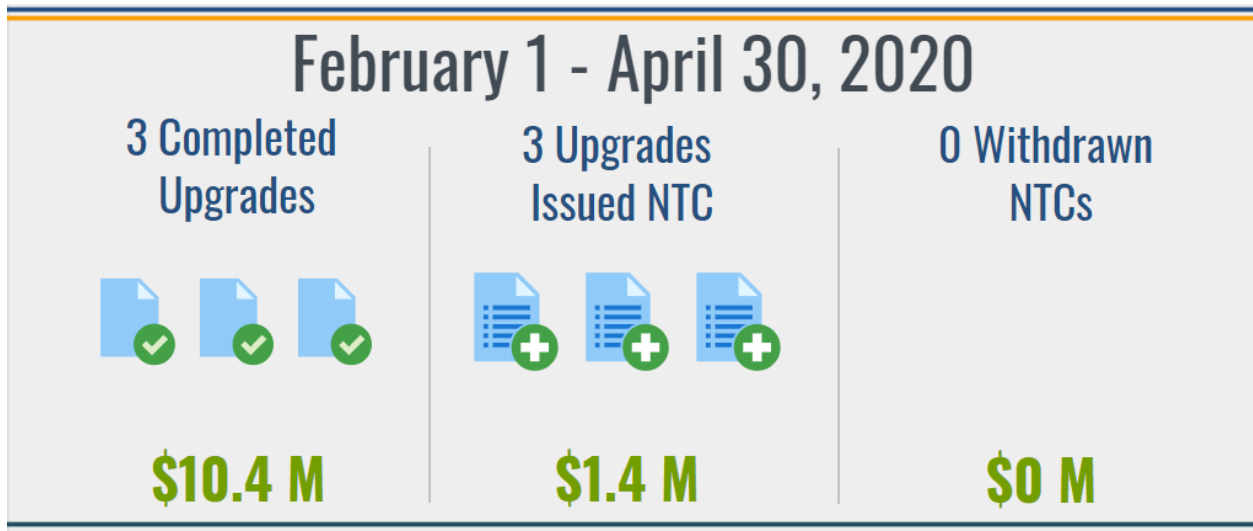
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## EXECUTIVE SUMMARY

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 7060<sup>1</sup>.

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<sup>1</sup> [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

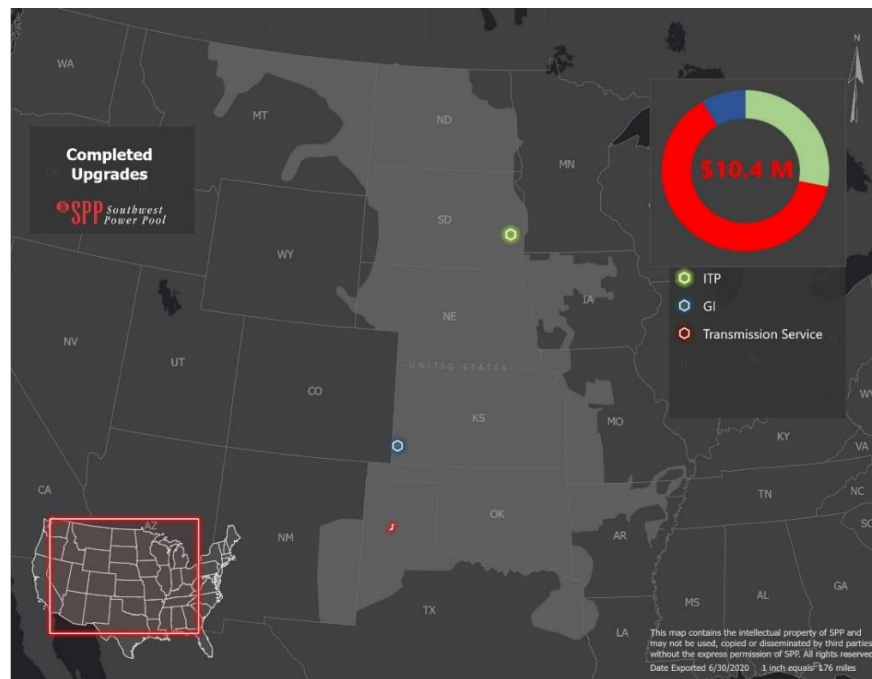


Figure 1: Completed Upgrades

NTC ID	IN SERVICE DATE	UID	OWNER	UPGRADE NAME	SOURCE STUDY	COST ESTIMATE
200369	3/20/2020	11506	SPS	Canyon East Sub - Randall County Interchange 115 kV Ckt 1 Rebuild	SPP-2011-AG3-AFS-11	\$6,562,362
210494	2/1/2020	82123	EREC	Lakeview 69 kV Substation #3	2018 ITPNT	\$2,921,834
	4/7/2020	71939	SEPC	Johnson Corner 115kV - GEN-2015-021 Addition (TOIF)	Generation Interconnection	\$894,061
<b>3 Upgrade(s) Completed</b>						<b>\$10,378,257</b>

Table 1: Completed Upgrades<sup>2</sup>

<sup>2</sup> In accordance with Section 3.4 of SPP BP 7060, SPP only issues NTC for GI upgrades to affected Transmission Owners who are not a party to the Generation Interconnection Agreement (GIA).

## NTCS ISSUED

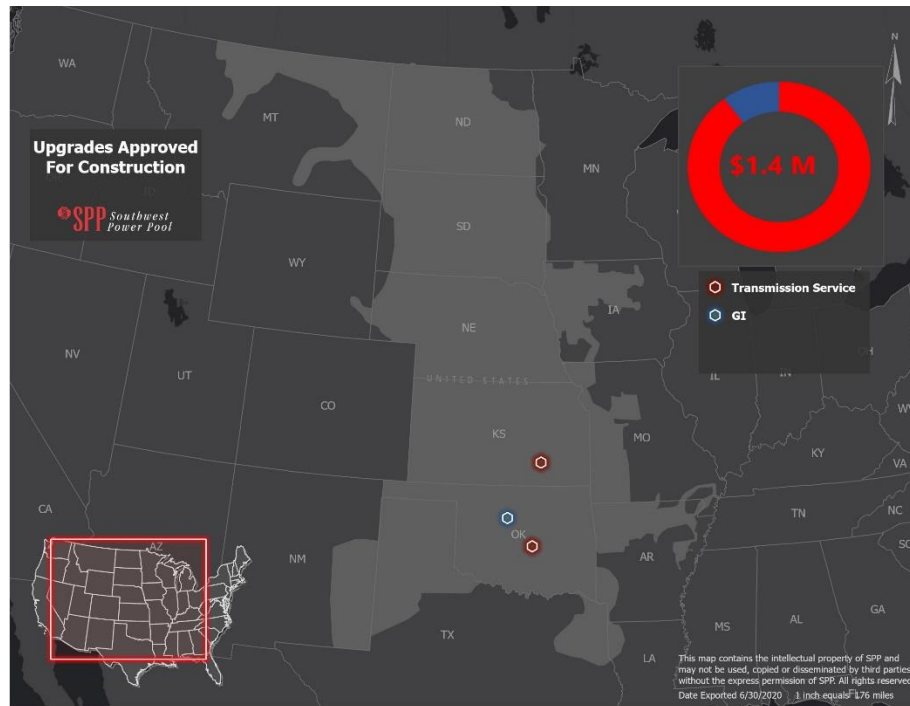


Figure 2: NTCs Issued

NTC ID	NTC ISSUE DATE	UID	OWNER	UPGRADE NAME	SOURCE STUDY	COST ESTIMATE OF NEW UPGRADES
210554	3/17/2020	122639	OGE	Forest Hill 69 kV Terminal Upgrade	DPNS-2019-January-974	\$25,000
210556	3/17/2020	112187	OGE	Dover - Henessey 138 kV Ckt 1 Terminal Upgrades (OKGE)	DISIS-2016-002	\$142,965
210557	4/8/2020	122657	CBPC	Donald Feldman Switching Station 69kV	DPNS-2019-March-1011	\$1,227,000
<b>3 Upgrade(s) Issued</b>						<b>\$1,394,965</b>

Table 2: NTCs Issued

\*Transmission Owner Interconnection Facilities (TOIF)

\*\*Non-Shared Network Upgrades (NU)

# 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. Approved projects from the Integrated Transmission Planning Assessment (ITP)
4. Upgrades within approved Balanced Portfolios<sup>3</sup> (BP)
5. Approved high priority upgrades (HP)
6. Endorsed Sponsored Upgrades (SP)
7. Approved Interregional Projects<sup>2</sup> (IR)
8. Approved projects from the 20-Year Assessment (ITP20)

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.

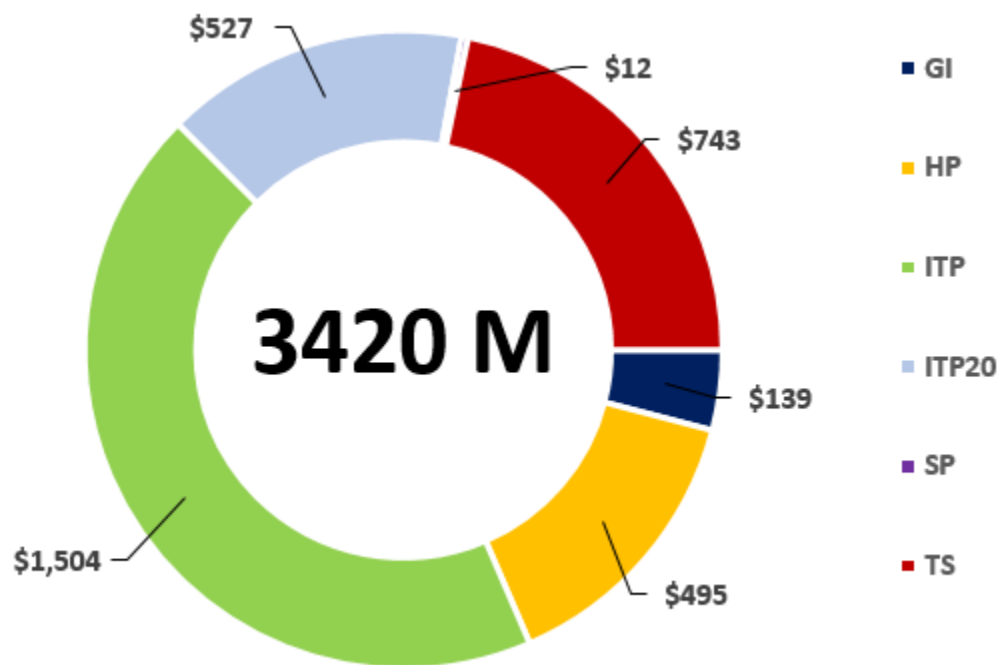


Figure 3: Total Active Portfolio (Millions)

<sup>3</sup> There are currently no Balanced Portfolio or Interregional projects included in Quarterly Project Tracking

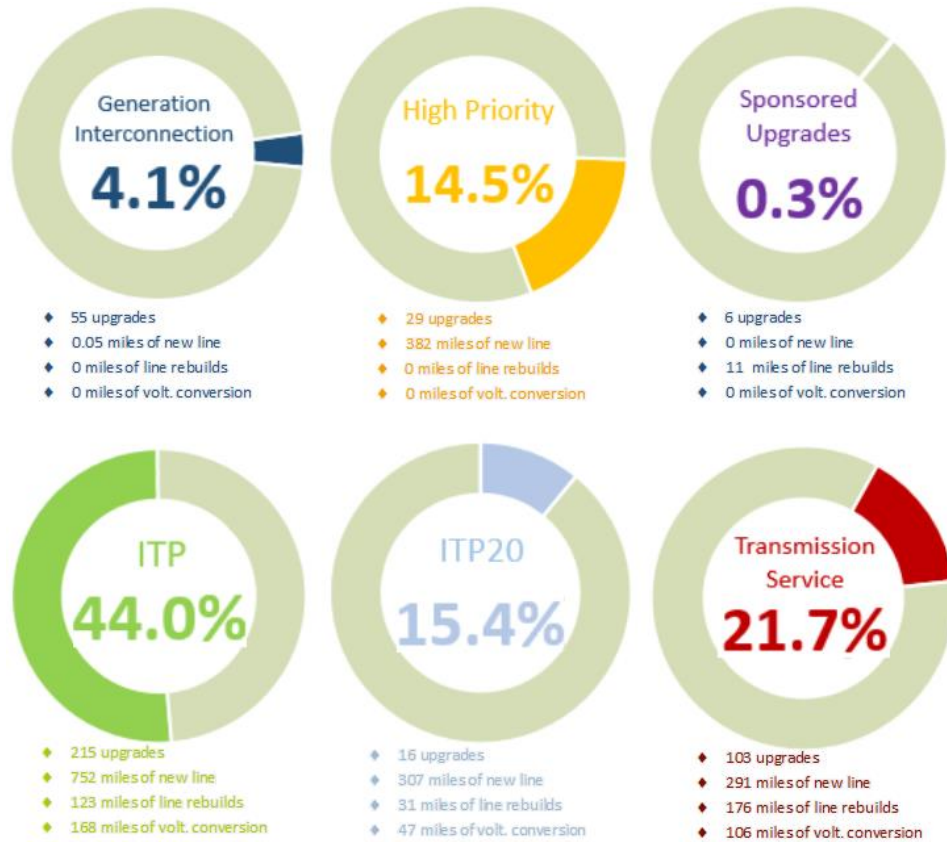


Figure 4: Upgrade by Type Cost Summary<sup>4</sup>

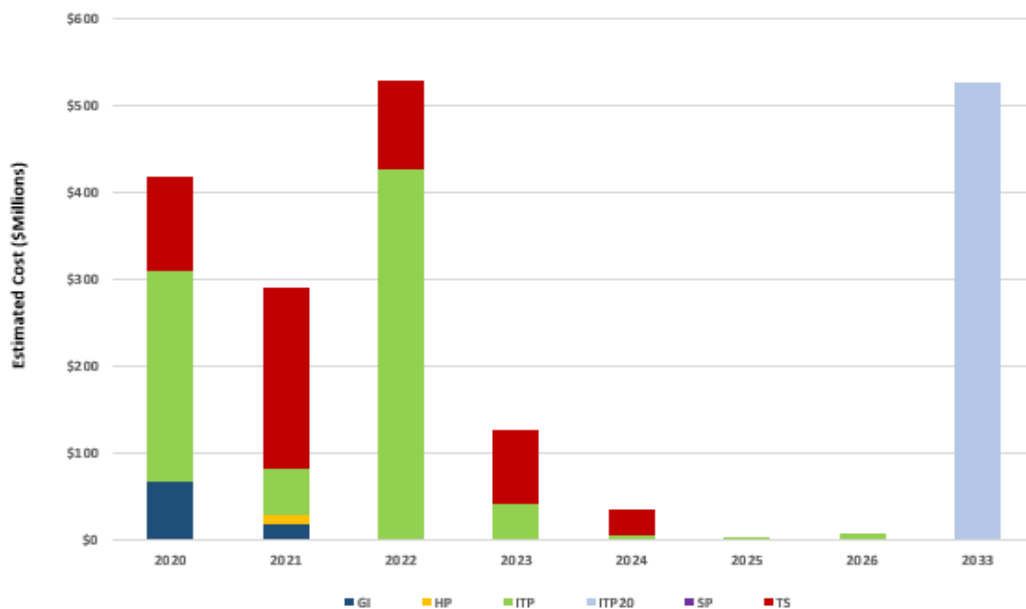


Figure 5: Estimated Cost for All Upgrades by In-Service Year

<sup>4</sup> Line mileage not available for all upgrade categories



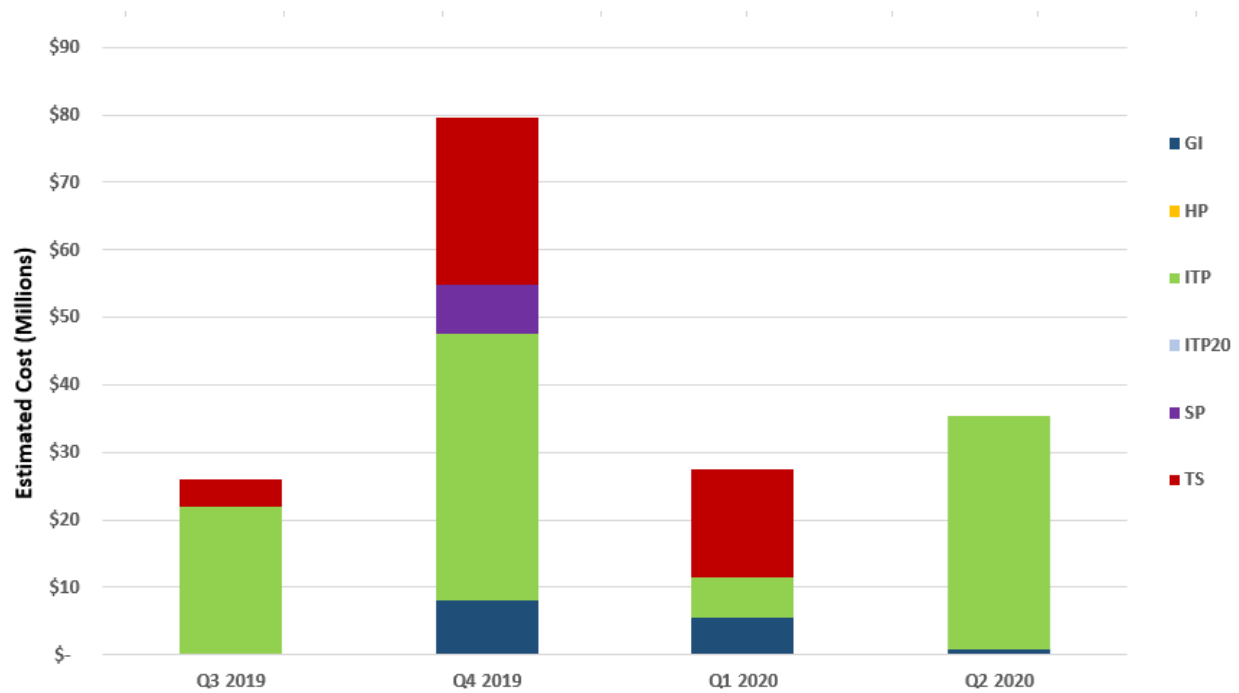


Figure 6: Estimated Cost of Upgrades Completed in Past 4 Quarters<sup>5</sup>

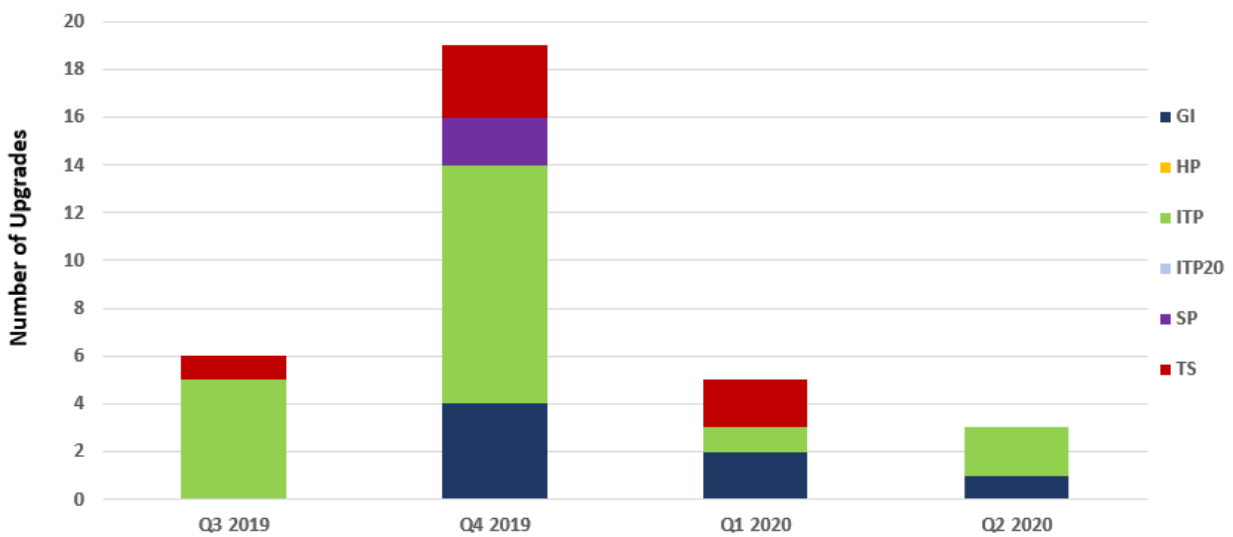


Figure 7: Number of Upgrades Completed in Past Four Quarters

<sup>5</sup> 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
- **Delayed:** Projected In-Service Date beyond Need Date; interim mitigation provided 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
- **Suspended:** Project suspended; pending re-evaluation
- **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

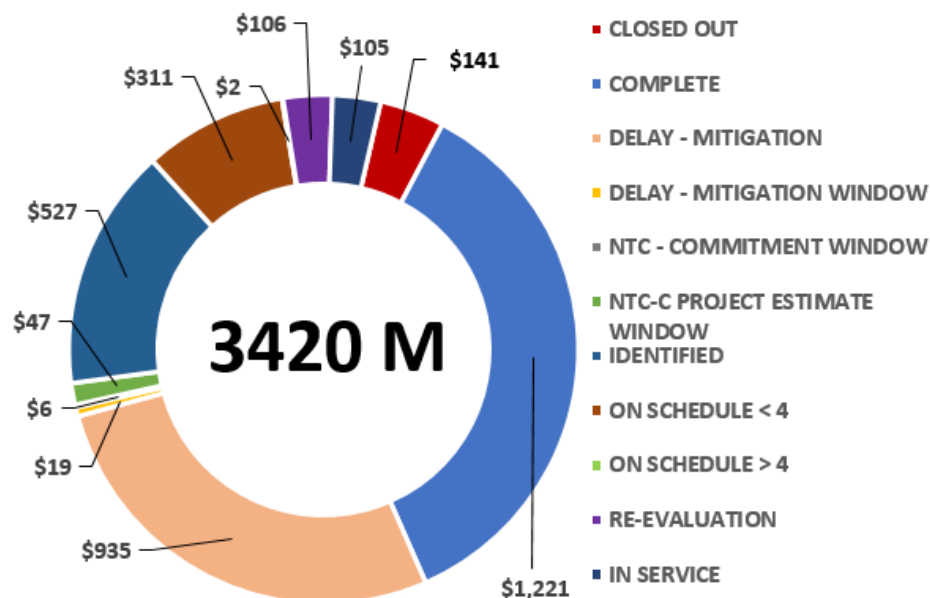


Figure 8: Portfolio Project Status (Millions)<sup>6</sup>

<sup>6</sup> Upgrades valued at \$1.4 B were closed out in 2Q 2020. Those upgrades are no longer reported as part of the Active Portfolio.

# 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
451	Multi - Chamber Springs - Farmington 161 kV	AEP	2013 ITPNT	Regional Reliability	3/28/2017
30889	Line - Linwood - South Shreveport 138kV Ckt 1 Rebuild	AEP	2016 ITPNT	Regional Reliability	5/10/2018
30577	Line - Chavis - Price - CV Pines - Capitan 115 kV Ckt 1	SPS	2014 ITPNT	Regional Reliability	1/30/2018
51252	XFR - Creswell 138/69/13.2 kV Transformers	WR	AG STUDIES	Regional Reliability	6/1/2021

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 %
451	\$12,705,537	2013	\$14,024,536	\$9,206,275	-\$4,818,261	-34%
30889	\$5,285,437	2016	\$5,553,013	\$7,885,000	\$2,331,987	42%
30577	\$14,275,000	2014	\$15,756,929	\$7,231,799	-\$8,525,130	-54%
51252	\$7,107,721	2017	\$7,654,238	\$5,488,126	-\$2,166,112	-28%

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 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 %
AEP	37	36	97%	4	11%	1	3%
BEPC	7	7	100%	1	14%	1	14%
CBPC	2	0	0%	0	0%	0	0%
CPEC	3	0	0%	0	0%	0	0%
CUS	2	2	100%	0	0%	0	0%
EDE	4	3	75%	0	0%	4	100%
EREC	3	3	100%	0	0%	0	0%
GHP	1	0	0%	0	0%	0	0%
GMO	2	1	50%	0	0%	0	0%
GRDA	4	0	0%	0	0%	0	0%
KCPL	12	8	67%	6	50%	2	17%
KPP	1	1	100%	1	100%	1	100%
MIDW	5	5	100%	0	0%	0	0%
MWE	1	0	0%	0	0%	0	0%
NIPCO	2	0	0%	0	0%	0	0%
NPPD	43	32	74%	4	9%	0	0%
NWE	2	0	0%	0	0%	0	0%
OGE	27	5	19%	8	30%	0	0%
OPPD	14	14	100%	1	7%	1	7%
SEPC	11	7	64%	1	9%	0	0%
SPS	149	149	100%	3	2%	19	13%
TBD	9	0	0%	0	0%	1	11%
TSMO	2	2	100%	0	0%	0	0%
WAPA	9	9	100%	5	56%	1	11%
WFEC	45	28	62%	30	67%	9	20%
WR	26	21	81%	8	31%	7	27%
<b>Total</b>	<b>423</b>	<b>333</b>	<b>73%</b>	<b>72</b>	<b>17%</b>	<b>47</b>	<b>11%</b>

Table 5: Responsiveness Summary

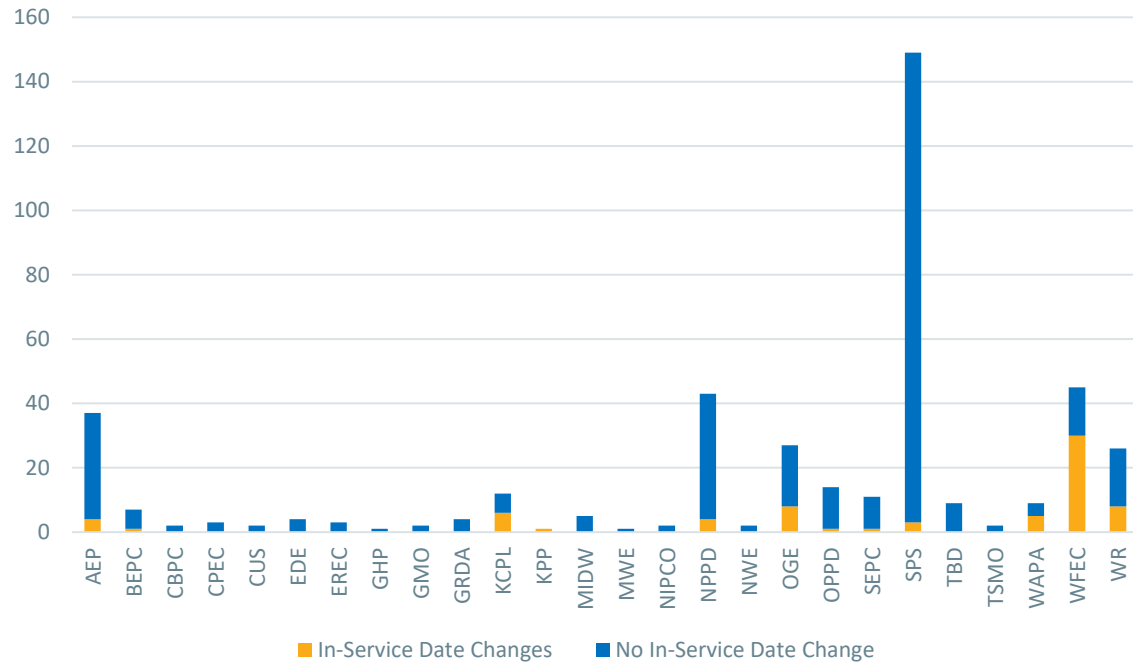


Figure 9: In-Service Date Changes

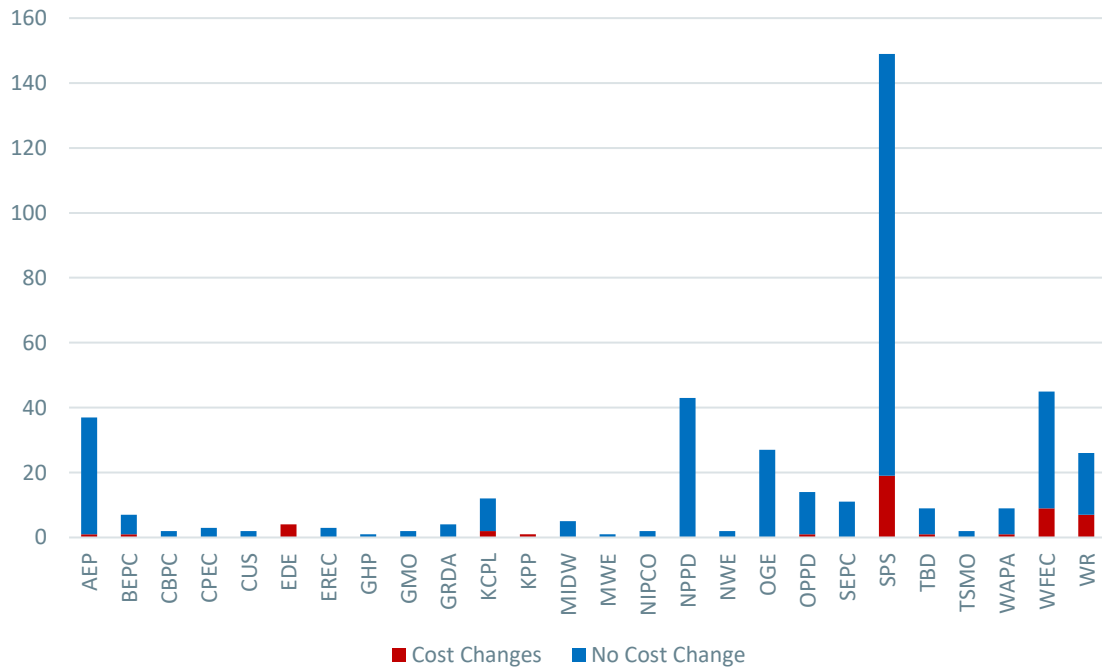


Figure 10: Cost Changes

# 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
30402	50493	OPPD	S3459 345/161 kV Transformer Ckt 2	1/1/2033	\$12,600,000
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

Table 6: ITP20 Upgrades

# MORGAN TRANSFORMER PROJECT

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Pursuant to a Joint Operating Agreement and resulting Joint Coordinated System Planning Process between AECI and SPP, SPP and AECI have agreed to share cost associated with the Morgan Transformer Project.

Project ID	Upgrade ID	Owner	Upgrade Name	Projected In-Service Date	Latest Cost Estimate
31132	51740	AECI	Morgan 345/161kV Transformer	10/31/2020	\$6,700,000
31132	51832	AECI	Morgan Line Uprate	10/31/2020	\$7,050,000

Table 7: Morgan Upgrades

# APPENIDX 1

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*(See accompanying list of Quarterly Project Tracking Projects)*