



Rachael Leonard
Manager,
State Regulatory Affairs

Mail Station 9708
PO Box 53999
Phoenix, Arizona 85072-3999
Tel 602-250-2404
Rachael.Leonard@aps.com

May 22, 2023

Docket Control
ARIZONA CORPORATION COMMISSION
1200 West Washington Street
Phoenix, Arizona 85007

RE: Arizona Public Service Company (APS or Company)
Transmission Cost Adjustor (TCA) charges
Docket No. E-01345A-11-0224

Note: The TCA calculations and supporting data were filed in Docket No. E-01345A-19-0236 on May 15, 2023 and are being filed in this docket at the request of Arizona Corporation Commission Staff.

Pursuant to Decision Nos. 73262, 73183, and 78317, APS submits its TCA calculations, along with supporting data, for TCA charges that will go into effect with the first billing cycle in June 2023 (without proration) unless otherwise ordered by the Commission. These TCA rates will remain in effect through the end of May 2024. APS estimates that these revised TCA rates will decrease overall retail revenues by approximately \$(10.0) million annually, which results in a reduction to average monthly residential bills of approximately \$(0.46).

Open Access Transmission Tariff (OATT) rates are approved by the Federal Energy Regulatory Commission (FERC) and are designed to recover transmission costs from all users of APS transmission facilities. OATT rates are calculated and reset annually using a FERC-approved formula. For retail customers, APS recovers transmission costs (reflected in OATT calculations) through the sum of two distinct rate components: (1) a transmission charge embedded in base rates as established in APS's most recent rate case; and (2) the TCA adjustment mechanism, which account for changes in the OATT rate between APS rate cases.

Included within this compliance filing are the following attachments:

1. Attachment A – a clean version of Adjustment Schedule TCA-1 Revision No. 20.
2. Attachment B – a redline version of Adjustment Schedule TCA-1 Revision No. 20.

3. Attachment C – the numerical inputs used to develop the revised TCA-1 rates.
4. Attachment D – the estimated monthly bill impacts of the new TCA-1 rates.
5. Attachment E – a table illustrating the percentage demand of each of the classes for the 2021 OATT and the 2022 OATT as filed with FERC.
6. Attachment F – a table illustrating the transmission cost embedded in base rates, the current and proposed TCA rates, and the differences in the current and revised rates.
7. Attachment G – actual and estimated transmission additions, dollars, and estimated O&M for calendar years 2022 through 2024.
8. Attachment H – APS's annual update of transmission service rates pursuant to the APS OATT as filed with FERC.

Please let me know if you have any questions.

Sincerely,

/s/ Rachael Leonard

Rachael Leonard

RL/bg
Attachments

cc: Elijah Abinah
Ranelle Paladino
Maureen Scott
Barbara Keene

ATTACHMENT A



ADJUSTMENT SCHEDULE TCA-1 TRANSMISSION COST ADJUSTMENT

AVAILABILITY

The Transmission Cost Adjustment (TCA) charge applies to all Customer monthly bills.

DESCRIPTION

The TCA allows the Company to recover transmission costs associated with service to retail Customers at the level approved by the Federal Energy Regulatory Commission (FERC) as new transmission rates become effective.

CHARGES

Customer Class	TCA Charge	
Residential	\$0.000370	per kWh
General Service 20 kW or less	\$(0.000712)	per kWh
General Service over 20 kW, under 3,000 kW	\$(0.366)	per kW
General Service 3,000 kW and over	\$(0.798)	per kW

SERVICE DETAILS

1. The TCA will be calculated annually and will go into effect with the first billing cycle in June (without proration) and will remain in effect for the following 12-month period unless otherwise ordered by the Commission.
2. All the terms and charges in the Customer's rate schedule continue to apply to electric service provided under this adjustment.

ATTACHMENT B



ADJUSTMENT SCHEDULE TCA-1 TRANSMISSION COST ADJUSTMENT

AVAILABILITY

The Transmission Cost Adjustment (TCA) charge applies to all Customer monthly bills.

DESCRIPTION

The TCA allows the Company to recover transmission costs associated with service to retail Customers at the level approved by the Federal Energy Regulatory Commission (FERC) as new transmission rates become effective.

CHARGES

Customer Class	TCA Charge	
Residential	\$0.0008070.000370	per kWh
General Service 20 kW or less	\$(0.0005420.000712)	per kWh
General Service over 20 kW, under 3,000 kW	\$(0.2950.366)	per kW
General Service 3,000 kW and over	\$(0.6900.798)	per kW

SERVICE DETAILS

1. The TCA will be calculated annually and will go into effect with the first billing cycle in June (without proration) and will remain in effect for the following 12-month period unless otherwise ordered by the Commission.
2. All the terms and charges in the Customer's rate schedule continue to apply to electric service provided under this adjustment.

ATTACHMENT C

ARIZONA PUBLIC SERVICE COMPANY
TCA Rate Calculation - Plan of Administration

Line	Service Type Retail Transmission Rates	Residential \$/kWh (A)	GS≤20 kW \$/kWh (B)	GS > 20 kW and < 3MW \$/kW (C)	GS≥3 MW \$/kW (D)
1.	NITS (A)	0.010596	0.006572	2.253	2.144
2.	Scheduling (B)	0.000069	0.000056	0.021	0.024
3.	Regulation & Frequency (B)	0.000267	0.000217	0.081	0.092
4.	Spinning Reserve (B)	0.000618	0.000502	0.188	0.212
5.	Operating Reserve (B)	0.000078	0.000064	0.024	0.027
6.	Energy Imbalance (B)	0.000000	0.000000	0.000	0.000
7.	Total (Lines 1 thru 6)	0.011628	0.007411	2.567	2.499
8.	Included In Retail Base Rates (C)	0.010970	0.007940	2.870	3.236
9.	Balancing Account (D)	-0.000288	-0.000183	-0.063	-0.061
10.	TCA (Line 7 - Line 8 + Line 9) (E)	0.000370	-0.000712	-0.366	-0.798

- (A) Source: Attachment H, Appendix A of Attachment H-1, Lines 169-172 - (APS's FERC Formula Rate Annual Update of transmission service rates pursuant to the APS OATT)
- (B) Source: Ancillary Services as defined in Schedule 11 of the APS OATT
- (C) Source: Base Transmission Rates as approved in Decision No. 78317
- (D) Source: TCA Balancing Account Workpaper Detail (to be provided with TCA filing)
- (E) Amounts presented in Attachment A and Attachment B

ATTACHMENT D

ARIZONA PUBLIC SERVICE COMPANY
Estimated Monthly Bill Impacts of 2023 Transmission Cost Adjustment (TCA) Reset

	AVERAGE MONTHLY BILL IMPACTS				SEASONAL BILL IMPACTS			
	Current		Proposed		Current		Proposed	
	Average Monthly	Average Monthly	Summer Monthly	Summer Monthly	Winter Monthly	Winter Monthly		
Residential	Bill ¹	Bill ¹	\$ Impact	% Impact	Bill	Bill	Bill	Bill
Average kWh per Month	1,050				1,282	1,282	818	818
Base Rates	\$ 135.02	\$ 135.02			\$ 167.34	\$ 167.34	\$ 102.69	\$ 102.69
PSA	\$ 20.03	\$ 20.03			\$ 24.45	\$ 24.45	\$ 15.60	\$ 15.60
TCA	\$ 0.85	\$ 0.39	\$ (0.46)	-0.28%	\$ 1.03	\$ 0.47	\$ 0.66	\$ 0.30
REAC	\$ 2.84	\$ 2.84			\$ 2.84	\$ 2.84	\$ 2.84	\$ 2.84
DSMAC	\$ 1.81	\$ 1.81			\$ 2.21	\$ 2.21	\$ 1.41	\$ 1.41
EIS	\$ 0.15	\$ 0.15			\$ 0.18	\$ 0.18	\$ 0.11	\$ 0.11
SBA-2	\$ -	\$ -			\$ -	\$ -	\$ -	\$ -
FCA	\$ -	\$ -			\$ -	\$ -	\$ -	\$ -
TEAM	\$ -	\$ -			\$ -	\$ -	\$ -	\$ -
LFCR	\$ 2.76	\$ 2.76			\$ 3.37	\$ 3.37	\$ 2.15	\$ 2.15
Total	\$ 163.46	\$ 163.00	\$ (0.46)	-0.28%	\$ 201.42	\$ 200.86	\$ 125.46	\$ 125.10
Commercial XS (E-32)	Average Monthly	Average Monthly	Summer Monthly	Summer Monthly	Winter Monthly	Winter Monthly		
Average kWh per Month	1,259				Bill	Bill	Bill	Bill
Base Rates	\$ 189.61	\$ 189.61			\$ 1,418	\$ 1,418	\$ 1,100	\$ 1,100
PSA	\$ 24.01	\$ 24.01			\$ 219.11	\$ 219.11	\$ 160.10	\$ 160.10
TCA	\$ (0.69)	\$ (0.90)	\$ (0.21)	-0.09%	\$ (0.77)	\$ (1.01)	\$ (0.60)	\$ (0.78)
RES	\$ 8.94	\$ 8.94			\$ 10.07	\$ 10.07	\$ 7.81	\$ 7.81
DSMAC	\$ 2.18	\$ 2.18			\$ 2.45	\$ 2.45	\$ 1.90	\$ 1.90
EIS	\$ 0.17	\$ 0.17			\$ 0.19	\$ 0.19	\$ 0.15	\$ 0.15
SBA-2	\$ -	\$ -			\$ -	\$ -	\$ -	\$ -
Four Corners	\$ -	\$ -			\$ -	\$ -	\$ -	\$ -
TEAM	\$ -	\$ -			\$ -	\$ -	\$ -	\$ -
LFCR	\$ 3.31	\$ 3.31			\$ 3.73	\$ 3.73	\$ 2.89	\$ 2.89
Total	\$ 227.53	\$ 227.32	\$ (0.21)	-0.09%	\$ 261.82	\$ 261.58	\$ 193.23	\$ 193.05
Commercial XS D (E-32)	Average Monthly	Average Monthly	Summer Monthly	Summer Monthly	Winter Monthly	Winter Monthly		
Average kWh per Month	843				Bill	Bill	Bill	Bill
Average kW per Month	3				997	997	689	689
Base Rates	\$ 130.18	\$ 130.18			\$ 3	\$ 3	\$ 2	\$ 2
PSA	\$ 16.08	\$ 16.08			\$ 155.71	\$ 155.71	\$ 104.64	\$ 104.64
TCA	\$ (0.46)	\$ (0.60)	\$ (0.14)	-0.09%	\$ (0.54)	\$ (0.71)	\$ (0.37)	\$ (0.49)
RES	\$ 5.99	\$ 5.99			\$ 7.08	\$ 7.08	\$ 4.89	\$ 4.89
DSMAC	\$ 1.59	\$ 1.59			\$ 1.91	\$ 1.91	\$ 1.27	\$ 1.27
EIS	\$ 0.12	\$ 0.12			\$ 0.14	\$ 0.14	\$ 0.09	\$ 0.09
SBA-2	\$ -	\$ -			\$ -	\$ -	\$ -	\$ -
Four Corners	\$ -	\$ -			\$ -	\$ -	\$ -	\$ -
TEAM	\$ -	\$ -			\$ -	\$ -	\$ -	\$ -
LFCR	\$ 1.94	\$ 1.94			\$ 2.33	\$ 2.33	\$ 1.55	\$ 1.55
Total	\$ 155.44	\$ 155.30	\$ (0.14)	-0.09%	\$ 185.65	\$ 185.48	\$ 125.21	\$ 125.09

ARIZONA PUBLIC SERVICE COMPANY
Estimated Monthly Bill Impacts of 2023 Transmission Cost Adjustment (TCA) Reset

	AVERAGE MONTHLY BILL IMPACTS				SEASONAL BILL IMPACTS			
	Current		Proposed		Current		Proposed	
	Average Monthly Bill ¹	Average Monthly Bill ¹	\$ Impact	% Impact	Summer Monthly Bill	Summer Monthly Bill	Winter Monthly Bill	Winter Monthly Bill
Commercial S (E-32)								
Average kWh per Month	10,802				12,453	12,453	9,151	9,151
Average kW per Month	36.5				40	40	33.0	33.0
Base Rates	\$ 1,345.91	\$ 1,345.91			\$ 1,587.92	\$ 1,587.92	\$ 1,103.90	\$ 1,103.90
PSA	\$ 206.03	\$ 206.03			\$ 237.52	\$ 237.52	\$ 174.54	\$ 174.54
TCA	\$ (10.77)	\$ (13.36)	\$ (2.59)	-0.16%	\$ (11.80)	\$ (14.64)	\$ (9.74)	\$ (12.08)
RES	\$ 76.70	\$ 76.70			\$ 88.42	\$ 88.42	\$ 64.97	\$ 64.97
DSMAC	\$ 23.25	\$ 23.25			\$ 25.48	\$ 25.48	\$ 21.02	\$ 21.02
EIS	\$ 1.48	\$ 1.48			\$ 1.71	\$ 1.71	\$ 1.25	\$ 1.25
SBA-2	\$ -	\$ -			\$ -	\$ -	\$ -	\$ -
Four Corners	\$ -	\$ -			\$ -	\$ -	\$ -	\$ -
TEAM	\$ -	\$ -			\$ -	\$ -	\$ -	\$ -
LFCR	\$ 28.29	\$ 28.29			\$ 31.00	\$ 31.00	\$ 25.58	\$ 25.58
Total	\$ 1,670.89	\$ 1,668.30	\$ (2.59)	-0.16%	\$ 1,960.25	\$ 1,957.41	\$ 1,381.52	\$ 1,379.18
Commercial - M (E-32)								
Average kWh per Month	61,057	61,057			67,598	67,598	54,516	54,516
Average kW per Month	172.5				186.0	186.0	159.0	159.0
Base Rates	\$ 6,422.79	\$ 6,422.79			\$ 7,442.00	\$ 7,442.00	\$ 5,403.58	\$ 5,403.58
PSA	\$ 1,164.60	\$ 1,164.60			\$ 1,289.36	\$ 1,289.36	\$ 1,039.84	\$ 1,039.84
TCA	\$ (50.89)	\$ (63.14)	\$ (12.25)	-0.15%	\$ (54.87)	\$ (68.08)	\$ (46.91)	\$ (58.19)
RES	\$ 177.50	\$ 177.50			\$ 177.50	\$ 177.50	\$ 177.50	\$ 177.50
DSMAC	\$ 109.88	\$ 109.88			\$ 118.48	\$ 118.48	\$ 101.28	\$ 101.28
EIS	\$ 8.37	\$ 8.37			\$ 9.26	\$ 9.26	\$ 7.47	\$ 7.47
SBA-2	\$ -	\$ -			\$ -	\$ -	\$ -	\$ -
Four Corners	\$ -	\$ -			\$ -	\$ -	\$ -	\$ -
TEAM	\$ -	\$ -			\$ -	\$ -	\$ -	\$ -
LFCR	\$ 133.69	\$ 133.69			\$ 144.15	\$ 144.15	\$ 123.23	\$ 123.23
Total	\$ 7,965.94	\$ 7,953.69	\$ (12.25)	-0.15%	\$ 9,125.88	\$ 9,112.67	\$ 6,805.99	\$ 6,794.71
Commercial - L (E-32)								
Average kWh per Month	283,329	283,329			309,856	309,856	256,802	256,802
Average kW per Month	718.0				740	740	696	696
Base Rates	\$ 25,572.61	\$ 25,572.61			\$ 29,539.48	\$ 29,539.48	\$ 21,605.73	\$ 21,605.73
PSA	\$ 5,404.23	\$ 5,404.23			\$ 5,910.20	\$ 5,910.20	\$ 4,898.25	\$ 4,898.25
TCA	\$ (211.81)	\$ (262.79)	\$ (50.98)	-0.16%	\$ (218.30)	\$ (270.84)	\$ (205.32)	\$ (254.74)
RES	\$ 355.00	\$ 355.00			\$ 355.00	\$ 355.00	\$ 355.00	\$ 355.00
DSMAC	\$ 457.37	\$ 457.37			\$ 471.38	\$ 471.38	\$ 443.35	\$ 443.35
EIS	\$ 38.82	\$ 38.82			\$ 42.45	\$ 42.45	\$ 35.18	\$ 35.18
SBA-2	\$ -	\$ -			\$ -	\$ -	\$ -	\$ -
Four Corners	\$ -	\$ -			\$ -	\$ -	\$ -	\$ -
TEAM	\$ -	\$ -			\$ -	\$ -	\$ -	\$ -
LFCR	\$ -	\$ -			\$ -	\$ -	\$ -	\$ -
Total	\$ 31,616.22	\$ 31,565.24	\$ (50.98)	-0.16%	\$ 36,100.21	\$ 36,047.67	\$ 27,132.19	\$ 27,082.77

ARIZONA PUBLIC SERVICE COMPANY
Estimated Monthly Bill Impacts of 2023 Transmission Cost Adjustment (TCA) Reset

	AVERAGE MONTHLY BILL IMPACTS					SEASONAL BILL IMPACTS			
	Current		Proposed			Current		Proposed	
	Average Monthly Bill ¹	Average Monthly Bill ¹	\$ Impact	% Impact		Summer Monthly Bill	Summer Monthly Bill	Winter Monthly Bill	Winter Monthly Bill
Industrial - XL (E-34,35)									
Average kWh per Month	2,833,863	2,833,863				3,091,462	3,091,462	2,576,263	2,576,263
Average kW per Month	5,562	5,562				5,728	5,728	5,396	5,396
Base Rates	\$ 208,434.16	\$ 208,434.16				\$ 220,963.74	\$ 220,963.74	\$ 195,904.58	\$ 195,904.58
PSA	\$ 54,053.09	\$ 54,053.09				\$ 58,966.55	\$ 58,966.55	\$ 49,139.63	\$ 49,139.63
TCA	\$ (3,837.78)	\$ (4,438.48)	\$ (600.70)	-0.23%		\$ (3,952.32)	\$ (4,570.94)	\$ (3,723.24)	\$ (4,306.01)
RES	\$ 2,307.50	\$ 2,307.50				\$ 2,307.50	\$ 2,307.50	\$ 2,307.50	\$ 2,307.50
DSMAC	\$ 3,543.00	\$ 3,543.00				\$ 3,648.74	\$ 3,648.74	\$ 3,437.25	\$ 3,437.25
EIS	\$ 388.24	\$ 388.24				\$ 423.53	\$ 423.53	\$ 352.95	\$ 352.95
SBA-2	\$ -	\$ -				\$ -	\$ -	\$ -	\$ -
Four Corners	\$ -	\$ -				\$ -	\$ -	\$ -	\$ -
TEAM	\$ -	\$ -				\$ -	\$ -	\$ -	\$ -
LFCR	\$ -	\$ -				\$ -	\$ -	\$ -	\$ -
Total	\$ 264,888.21	\$ 264,287.51	\$ (600.70)	-0.23%		\$ 282,357.74	\$ 281,739.12	\$ 247,418.67	\$ 246,835.90

Notes:

(1) Bill excludes regulatory assessment charge, taxes and fees. All Adjustor levels in effect as of June 1, 2023.

ATTACHMENT E

ARIZONA PUBLIC SERVICE COMPANY
Class Coincident Peak Demand

Class	2021		2022	
	MW	% of Coincident Demand	MW	% of Coincident Demand
Residential	4125.3	62.23%	4118.1	61.92%
General Service < 3MW	2078.0	31.35%	2086.6	31.37%
General Service > 3 MW	425.4	6.42%	446.1	6.71%
Total	6628.7	100.00%	6650.9	100.00%

ATTACHMENT F

Arizona Public Service Company
Transmission Rates Embedded in Base Rates and TCA

Customer Group	Embedded Base	Current TCA Rate	Proposed TCA Rate	Difference (D) = (C) - (B)	Percentage Difference	
					TCA Rate (E) = (D)/(B)	Total (F) = (D)/[(A)+(B)]
Residential	\$ 0.010970 /kWh	\$ 0.000807 /kWh	\$ 0.000370 /kWh	\$ (0.000437) /kWh	-54.2%	-3.7%
General Service 20 kW or less	\$ 0.007940 /kWh	\$ (0.000542) /kWh	\$ (0.000712) /kWh	\$ (0.000170) /kWh	-31.4%	-2.3%
General Service over 20 kW and under 3,000 kW	\$ 2.870 /kW	\$ (0.295) /kW	\$ (0.366) /kW	\$ (0.071) /kW	-24.1%	-2.8%
General Service 3,000 kW and over	\$ 3.236 /kW	\$ (0.690) /kW	\$ (0.798) /kW	\$ (0.108) /kW	-15.7%	-4.2%

ATTACHMENT G

Arizona Public Service Company
2022 Transmission Actual Addition Dollars and O&M

Line #	Funding Project	Funding Project Name	WA#	Add'l WA's for the Funding Project	Description	Actual Cost	Purpose	Miles	Estimated O&M (a)	In-Service Date	
1	BUCKEYE SC SUB	Buckeye Svc Center Build New Sub	WE013299		Upgrade feeder exits conductor from 336 to 795+N for BZ01 and BZ03 to serve new load.	848,098	Increase load serving capability of BZ01 and BZ03 feeders to feed Project Alpha and initial construction power to Buckeye SW Service Center.	N/A	9,894	06/28/22	
2	DELANY 500-69	Provide new transmission source	<=250k	WA628612	Substation additions at Delaney sub	10,869	Substation additions at Delaney sub	N/A	163	04/04/22	
3	DSRTRDGSPRBK1S	Desert Ridge Superblock 1S	<=250k	WA433411	Relocate the OH 69kV Double Ckt - Pinnacle Peak to Indian Bend & Sunny Slope out of D.R. Hortons property, North East of Deer Valley Drive and 56th St. The new lines to run along Deer Valley Drive. Remove 1 self-supporting pole & 10 tangent 69kV poles. Also remove approximately 3000' of OH double-circuit wire. Relocate double-circuit 69kV OH line, approximately .83 miles. Possible installation of 4 self-supporters for dead-ends and 12 tangent poles.	48,824	Commercial customer request	0.83	814	03/07/22	
4	FAC RM BUILDING	Facilities Run Maintain-Building	<=250k	PE018118	Resurface of the roof system	40,260	Extend the life	N/A	738	02/04/22	
5	LINEPTRL REPL	Overhead Planned Repl	<=250k	WA686485,WA600693,WA612382,WA604061,WA670455,WA623802,WA679701,WA599805,WA710993	Overhead Planned Repl: Replacement of end-of-life, degraded or damaged equipment (noted during annual public safety line patrols and annual climbing inspections)	562,666	To ensure safety and reliability of the system	N/A	2,813	10/26/22	
6	LOCAL AREA NTWK	Local Area Network Program	<=250k	TEC016021M,TEC16021N2,TEC16021N3,TEC16021N1	Replace end of life/non-scalable Routers. Decommission Corporate Security and Smart Grid firewalls. Standard configurations on head-end firewalls to prepare for firewall automation.	353,895	Replace end of life/non-scalable Routers. Decommission Corporate Security and Smart Grid firewalls. Standard configurations on head-end firewalls to prepare for firewall automation.	N/A	2,359	09/22/22	
7	MURAL PALMNAS	Cochise County Regional Fix	WE016899		Upgrade relays at Adams substation to provide protection for a fault on the 115/69 kV transformer at Boothill where the Boothill circuit breaker fails to open. Install a control house with badge readers at Adams for CIP Low compliance.	1,697,469	The Cochise County Improvement Project is a joint effort between APS, AEPCO, and SSVEC to improve reliability for each of the systems in the area. Since all the utilities operate radial systems in Cochise County, the construction of various ties will help ensure that customers can be restored for outage situations. One of the joint improvement projects is a 69 kV line between AEPCO's Schieffelin and APS's Boothill substation. In order to provide protection for this line, a 115 kV ring bus and 115/69 kV transformer are being installed at Boothill. However, the current relays at Adams would not trip if there was a failure of the 115/69 kV transformer at Boothill and the Boothill circuit breaker failed to open. In order to provide backup, the relays at Adams need to be replaced and DTT installed to trip the relays at Adams for breaker failure at Boothill. Also, the new Boothill - Schieffelin 69 kV line creates a network system and requires upgrades at Boothill and Adams to bring the substations up to the CIP Low standard. These substations did not previously need to meet the CIP standard despite being BES substations because the Cochise County system was radial.	N/A	22,633	05/24/22	
8	MURAL PALMNAS	Cochise County Regional Fix	WE012343		Boothill substation is being rebuilt as an 115kV in and out with the addition of a 115/69kV transformer. This requires a three position 115kV ring bus and a six position 69kV ring bus. In addition, a new line will be constructed between Boothill and SSVECs Tombstone Junction. Finally, SSVECs Webb-Tombstone Junction 69kV line will become a breakerized in and out.	5,179,381	The purpose of these area improvements is to allow for a normally open emergency tie with SSVEC/AEPCO capable of 40MW. Under the single contingency of the Adams-Boothill 115kV line, Boothill-Mural 115kV line, or the 115/69kV Mural transformer outage, all APS costumers in the Cochise County lose service. The existing 69kV McNeal tie is not capable of serving all APS load. Additionally, the Douglas generator has a history of not being able to provide power when called upon. With the generation online, the generator is still not capable of serving all load at Fairview/Douglas (at peak demand) let alone serve the entire Cochise County load.	N/A	25,897	10/21/22	
9	NVJOARMYDPTXMFR	Brannigan Substation	WE014263		69kV: Cut in N08 to Williams to Woody Mountain line in n out. NAD tap will be served from 3rd 69kV line breaker. 795AA cables used. 2500ft of 69kV double circuit from sub site to NAD tap. 12kV underbuild should remain. Rebuild 1-40 crossing (NPB73 to P211800) to double circuit 69kV and double circuit 12kV due to road closure needed. 12kV: Supervisor OH NO switch north of NTP2509 south of CAP959, as close to NTP2509 as possible (101713). 2 way cap bank controls installed on CAP959, CAP961.	3,907,628	Navajo Army Depot Substation's (NAD) transformer has a forecasted load of 5.5MW or 88% in 2020 on a rating of 6.25MVA. The 2015 actual load was 4.8 MW and growth is forecasted for the Capstone Homes development.	N/A	71,640	02/14/22	
10	PART BY APS FC	Participant Work at 4 Corners Swyd	<=250k	WA661379,WA661380,WA630854,WA626751,WA626750,WA694257,WA626748	Transmission assets and substation upgrades on participant lines where APS is the operating agent	393,408	Replacement of end-of-life components will ensure a reliable transmission system. Facilities APS is a participant in and is the operator	N/A	7,212	02/18/22	
11	PARTICP BY APS	Participant Op by APS	WA644407		Participant Op by APS: Transmission assets and substation upgrades on participant lines where APS is the operating agent	498,102	Replacement of end-of-life components will ensure a reliable transmission system. Facilities APS is a participant in and is the operator	N/A	9,962	01/01/22	

Arizona Public Service Company
2022 Transmission Actual Addition Dollars and O&M

Line #	Funding Project	Funding Project Name	WA#	Add'l WA's for the Funding Project	Description	Actual Cost	Purpose	Miles	Estimated O&M (a)	In-Service Date
12	PARTICP BY APS	Participant Op by APS	WA637089		Participant Op by APS: Transmission assets and substation upgrades on participant lines where APS is the operating agent.	4,235,041	Replacement of end-of-life components will ensure a reliable transmission system. Facilities APS is a participant in and is the operator.	N/A	84,701	01/01/22
13	PARTICP BY APS	Participant Op by APS	WA573811		Participant Op by APS: Transmission assets and substation upgrades on participant lines where APS is the operating agent.	344,422	Replacement of end-of-life components will ensure a reliable transmission system. Facilities APS is a participant in and is the operator.	N/A	3,444	07/16/22
14	PARTICP BY APS	Participant Op by APS	<=250k	WA638919,WE018250,WA628319,WA625600,WA626897,WA632018,WA695442,WA519016,PE017022,WA610392	Participant Op by APS: Transmission assets and substation upgrades on participant lines where APS is the operating agent.	375,842	Replacement of end-of-life components will ensure a reliable transmission system. Facilities APS is a participant in and is the operator.	N/A	4,385	06/06/22
15	PARTICP BY OTH	Participant by Other	<=250k	WAPA1070,WA649821	Participant by Other: Transmission assets and substation upgrades on participant lines that APS is not the operating agent	173,009	Replacement of end-of-life components will ensure a reliable transmission system. Facilities APS is a participant in, but not the operator.	N/A	577	11/30/22
16	PHYS SEC SYS	Physical Security System Program	<=250k	TEC01234A,TEC016942N,TEC0123 4B,TEC01234D,TEC01234E,TEC016942M,TEC016942W	The Physical Security Reliability Program tackles technology gaps within APS' physical security systems that have the potential to hamper the alarm monitoring, assessment and evidence gathering capabilities of Corporate Security.	265,999	The Physical Security Reliability Program tackles technology gaps within APS' physical security systems that have the potential to hamper the alarm monitoring, assessment and evidence gathering capabilities of Corporate Security.	N/A	887	11/15/22
17	PY.WPK69KVLINE	Build West Park-Perryville 69 Line	WE013391		Build the third 69kV line out of West Park substation to Perryville. An estimated 5.5 miles of new 69kV line is needed to go east and north to tap into the Watson - Perryville 69kV line. Then switch 69K6842 will become a normally open and 69K6843 becomes a normally closed completing the West Park - Perryville 69kV line.	2,764,788	With added load at West Park and Baseline this line is needed to support the area's voltage during N-1 conditions. Also it eliminates several 69kV line overloads in the area during N-1 conditions.	5.50	32,256	06/11/22
18	PY.WPK69KVLINE	Build West Park-Perryville 69 Line	<=250k	WE018410	Removal of the temporary 9.6 MVAR cap bank from Bay 3 of West Park 69 kV switchyard in preparation for the Freedom - West Park 69 kV line to connect at Bay 3. Also, includes installation of line switch for the new 69 kV line, note that the circuit breaker need not be replaced.	33,812	To help energize Freedom - West park 69 kV line. The new line would provide much needed voltage support to West park and around for the loss of Buckeye - West park 69 kV.	N/A	394	06/11/22
19	RELOC GOV	Highway Relo Distribution	<=250k	WA607891	Highway Relocation: Move/remove transmission facilities	113,759	To comply with requests driven by governmental agencies (City/Town/County/State)	N/A	569	10/28/22
20	RELWDPOLEREPL	Wood Pole Repl	<=250k	WA557278,WA540030,WA658759,WA637994,WA631037	Wood Pole Replacement: Replacement of poles found to not have 10 years of remaining life.	311,737	Failure to replace will result in more frequent and longer outages due to downed poles and present hazards to the public.	N/A	5,196	03/04/22
21	STORM LINES	Storm - Lines	WA696623		Storm - Lines: The purpose of this program is to replace transmission lines damaged resulting from storm and unplanned events.	251,816	To maintain and/or restore system operations	N/A	1,679	09/03/22
22	STORM LINES	Storm - Lines	WA693975		Storm - Lines: The purpose of this program is to replace transmission lines damaged resulting from storm and unplanned events	611,062	To maintain and/or restore system operations	N/A	5,092	08/20/22
23	STORM LINES	Storm - Lines	WA693953		Storm - Lines: The purpose of this program is to replace transmission lines damaged resulting from storm and unplanned events	816,408	To maintain and/or restore system operations	N/A	6,803	08/22/22
24	STORM LINES	Storm - Lines	WA692696		Storm - Lines: The purpose of this program is to replace transmission lines damaged resulting from storm and unplanned events	343,272	To maintain and/or restore system operations	N/A	2,861	08/14/22
25	STORM LINES	Storm - Lines	WA691552		Storm - Lines: The purpose of this program is to replace transmission lines damaged resulting from storm and unplanned events	1,028,758	To maintain and/or restore system operations	N/A	8,573	08/26/22
26	STORM LINES	Storm - Lines	WA689080		Storm - Lines: The purpose of this program is to replace transmission lines damaged resulting from storm and unplanned events	1,153,683	To maintain and/or restore system operations	N/A	11,537	07/28/22
27	STORM LINES	Storm - Lines	WA687615		Storm - Lines: The purpose of this program is to replace transmission lines damaged resulting from storm and unplanned events	2,034,832	To maintain and/or restore system operations	N/A	10,174	10/12/22
28	STORM LINES	Storm - Lines	WA687614		Storm - Lines: The purpose of this program is to replace transmission lines damaged resulting from storm and unplanned events	1,917,033	To maintain and/or restore system operations	N/A	15,975	08/26/22
29	STORM LINES	Storm - Lines	WA687148		Storm - Lines: The purpose of this program is to replace transmission lines damaged resulting from storm and unplanned events	763,491	To maintain and/or restore system operations	N/A	7,635	07/19/22
30	STORM LINES	Storm - Lines	WA683574		Storm - Lines: The purpose of this program is to replace transmission lines damaged resulting from storm and unplanned events	562,011	To maintain and/or restore system operations	N/A	6,557	06/27/22
31	STORM LINES	Storm - Lines	WA652515		Storm - Lines: The purpose of this program is to replace transmission lines damaged resulting from storm and unplanned events	305,473	To maintain and/or restore system operations	N/A	6,109	01/14/22
32	STORM LINES	Storm - Lines	<=250k	WA595133,WA686584,WA696614,WA684418,WA692816,WA696626,WA684412,WA693864,WA687403,WA692805,WA702977,WA672818,WA693964	Storm - Lines: The purpose of this program is to replace transmission lines damaged resulting from storm and unplanned events	1,149,049	To maintain and/or restore system operations	N/A	13,406	06/20/22
33	STORM SUBS	STORM - Substations	<=250k	WA707186,WA561857,WA696636,WA705394	Storm Substations	144,821	Storm Substations	N/A	2,896	01/05/22
34	SUB MAINTENANCE	Perform Substation Maintenance	<=250k	WA678456	Perform Substation Maintenance	3,656	Perform Substation Maintenance	N/A	49	05/25/22
35	SUBAGEDEQUIP	Substation Aged Equipment Repl	WE018084		Replace aged, end-of-life assets to ensure a reliable system	1,119,530	Replace aged, end-of-life assets to ensure a reliable system	N/A	5,598	10/03/22
36	SUBAGEDEQUIP	Substation Aged Equipment Repl	WA637459		Replace aged, end-of-life assets to ensure a reliable system	333,925	Replace aged, end-of-life assets to ensure a reliable system	N/A	1,670	10/21/22

Arizona Public Service Company
2022 Transmission Actual Addition Dollars and O&M

Line #	Funding Project	Funding Project Name	WA#	Add'l WA's for the Funding Project	Description	Actual Cost	Purpose	Miles	Estimated O&M (a)	In-Service Date
37	SUBAGEDEQUIP	Substation Aged Equipment Repl	<=250k	WA637451,WA542324,WA674676, WA637070,WA637077,WA642913, WA661597,WA636545,WA656193, WA646798,WA636521,WA661598, WA692514,WA574893,WA619048, WA659018,WA635913,WA636537, WA685507,WA665523,WA492523, WA430905,WA636529,WA891024, WA661636,WA539481,WA661595, WA487352,WA642725,WA636881, WA487353,WA638576,WA546721, WA504702,WA635810,WA641544, WA656157,WA661594,WA700614, WA656152.	Replace aged, end-of-life assets to ensure a reliable system.	1,923,923	Replace aged, end-of-life assets to ensure a reliable system.	N/A	28,859	04/15/22
38	SUBLANDSCAPE	Forestry/Landscaping	<=250k	WA610199	Forestry work to ensure that Transmission lines do not get close to Trees or forestry	32,673	Forestry work to ensure that Transmission lines do not get close to Trees or forestry	N/A	545	03/17/22
39	TAI LAND	Transmission Land	WA627115		Right of Way Payments for Land (for Transmission lines)	506,323	Right of Way Payments for Land (for Transmission lines)	N/A	5,907	06/30/22
40	TAIMPNGILATS8	North Gila - TS8 230	WA130928		This project is 15 miles of a new double-circuit capable 230kV line from a new 230kV bus at North Gila to a new 230kV bus at Orchard.	53,309,086	The North Gila to Orchard 230kV project is a project needed along with the Palo Verde to North Gila 500kV project to maximize the value of the 500kV project and increase import and load serving capability, and improve reliability for the Yuma area.	15.00	1,066,182	01/25/22
41	TCSMISCPROJ	Trans Cntrct Svcs Misc Chrgs	<=250k	WE018442	Re-route the APS 69kV transmission line around Jojoba substation.	65,529	Nextera request to interconnect at Jojoba where SRP is the operating agent.	N/A	109	12/14/22
42	TEN WEST LINK	12kV Line From Vicksburg Fdr02	<=250k	WE015019	Wires to Wires interconnection request of a 500 kV line into the Delaney 500 kV yard.	(9,349)	Meet interconnection request requirements.	N/A	(187)	01/14/22
43	TPWE014059	Freedom - Willis New 69kV Line	WE018264		Install a temporary 69kV, 7.2 MVAR capacitor bank in Bay 3 of the Willis Substation	450,776	To eliminate the low voltage issues in the Komatke/Estretilia area during N-1s.	N/A	6,010	05/31/22
44	TPWE014059	Freedom - Willis New 69kV Line	WE014190		To build a new line bay at the Freedom 69kV substation to accommodate the new Freedom - Willis 69kV line. The line bay will consist of one 69kV breaker, associated switches, bus work and associated below grade work. It will be located on the West side of the 69kV ring bus at Freedom, with this it means that the whole 69kV ring bus will need to be built out for the ultimate build	819,018	To eliminate the low voltage issues in the Komatke/Estretilia area during N-1s.	N/A	9,555	06/03/22
45	TPWE014059	Freedom - Willis New 69kV Line	<=250k	WE014189	To build a new line bay at the Willis 69kV substation to accommodate the new Freedom - Willis 69kV line. The line bay will consist of one 69kV breaker, associated switches, bus work and associated below grade work. It will be located on the North side of the 69kV bus at Willis next to the 69kV Cap bank. To accommodate this the Komatke 69kV line will need to be moved middle 69kV line bay at the substation	107,994	To eliminate the low voltage issues in the Komatke/Estretilia area during N-1s.	N/A	1,260	06/24/22
46	TPWE014083	Coconino to Woody Mountain 69 kV Li	WE016420		Rebuild first ~2.5 miles of CQ-Williams Tap 69kV line. Re-build portion of existing CQ-Woody Mnt line to double circuit, add new 69 kV line from I-40 into Woody Mountain. Re-terminate the Williams Tap to Coconino 69kV line into Soldiers Trl Substation, rebuilding existing line to double-circuit. Reconfigure Woody Mountain Substation to an in and out to accommodate the two lines coming in from Coconino and a third line from Williams.	2,121,543	This line will insure no load is dropped at Woody Mountain; reduce the exposure in the area and considerably help the voltage profile at Williams for the loss of the Williams to Williams tap line.	2.50	24,751	06/23/22
47	TPWE014104	Yavapai 525kV Single Point of Failure	WE014219		Update and upgrade protection schemes and equipment at Yavapai 525kV yard. Upgrade the 525/230kV Transformer #1, 525/230kV Transformer #3, and breaker trip coils.	1,409,477	TPL-001-4/TPL-001-5 identifies single points of failure and requires that utilities simulate loss of non-redundant elements to review the impact. The purpose of this project is to add redundancy to the identified single points of failure.	N/A	7,047	10/03/22
48	TPWE014326	Hohokam-Tempe 69kV Upgrade	WE014328		Rebuild UG portion of the 69 kV Tempe - Hohokam line (~0.6 miles) by retrenching and adding new conduit on south side of Rio Salado with 2x2500 kcmil for 191 MVA line rating.	2,843,545	Prevent overload for some N-1 contingencies.	0.60	52,132	02/25/22
49	TPWE014326	Hohokam-Tempe 69kV Upgrade	WE014327		Rebuild 1.1 miles of the Tempe - Hohokam 69 kV line with R795X.	2,448,895	Prevent overload during some N-1 contingencies.	1.10	44,896	02/25/22
50	TPWE014330	Ocotillo-Polk 69kV Upgrade	<=250k	WE014332	Upgrade the Ocotillo-Polk 69kV line to achieve a 1600A rating. Upgrade 5.5 miles of OH 795ACSR to 795ACSS. Approximately 0.5 miles of this line is double circuit with the Hohokam-Polk 69kV line. Per APS Transmission Line Section Book, the double circutied portion with Hohokam-Polk is 795ACSR and should up upgraded to 795ACSS at the same time as the Ocotillo-Polk upgrade.	61,705	Load growth in Tempe causes the Ocotillo-Polk 69kV line to overload 8% for the N-1 of the Hohokam-Tempe 69kV line. This load growth is primarily driven by the Iron Mountain data center load growth at Polk substation (an addition ~75MW, ramped up starting 2019 through 2024).	5.50	309	10/14/22
51	TPWE015002	Broadway 230kV Phase	WE015004		230kV of the Cyclone Data Center project.	441,938	Serve Cyclone Data Center's load from the 230kV system.	N/A	5,893	05/06/22

Arizona Public Service Company
2022 Transmission Actual Addition Dollars and O&M

Line #	Funding Project	Funding Project Name	WA#	Add'l WA's for the Funding Project	Description	Actual Cost	Purpose	Miles	Estimated O&M (a)	In-Service Date
52	TPWE015108	Lincoln St. 69 kV Tie Rebuild	WE015354		Replace (8) substation switches in line and transfer bays to meet new line ratings. New line conductor will also be needed.	784,061	North - West tie overloads during periods of low metro load with generation from West Phoenix. Upgrading to 1800 A rating will prevent overloads. Upgrading tie between north and south yards to 2000 A will get full 234 MVA emergency rating out of XFMR #10.	N/A	13,068	03/11/22
53	TPWE015108	Lincoln St. 69 kV Tie Rebuild	<=250k	WE015787	Reconductor 69 kV tie between Lincoln Street North and Lincoln Street West, and 69 kV tie between Lincoln Street South and Lincoln Street North.	171,399	To get full 234 MVA emergency rating out of XFMR #10. Emergency loading will occur during loss of LSS-CC 230 kV line.	N/A	2,857	03/11/22
54	TPWE015312	Camelback-Mummy Mountain 69 kV Reb	WE018279		Rebuild overhead portion of line (~1.61 miles) to R795X with double circuit capable poles to achieve 191 MVA rating.	997,628	To prevent overload during the loss of the Orangewood C-E 69 kV bus tie.	1.61	13,302	05/24/22
55	TPWE015312	Camelback-Mummy Mountain 69 kV Reb	WE015377		Rebuild overhead portion of line (~1.61 miles) to R795X with double circuit capable poles to achieve 191 MVA rating.	1,096,968	To prevent overload during the loss of the Orangewood C-E 69 kV bus tie.	1.61	3,657	11/20/22
56	TPWE015722	White Spar 69kV Bus Tie-Breaker	WE016678		Add 69 kV bus tie breaker at White Spar Substation	515,384	Add reliability to 69 kV system	N/A	1,718	11/02/22
57	TPWE015725	Snowflake 69 kV Bus Tie-Breaker	WE016671		Add 69 kV bus tie breaker at SNOWFLAKE	346,910	Add reliability to 69 kV system	N/A	5,204	04/11/22
58	TPWE016437	Runway Substation/Microsoft Phase 2	WE014727		Microsoft is building a large data center in the Goodyear area with an estimated load of 270 MWs as of right now. To serve this load APS will be initially serving it off our 69kV system and then off of our 230kV system in the future. Microsoft will have their own dedicated 230/69kV substation with 69/34.5kV transformers to serve their load. Phase 2 will consist of the following 230kV above grade for 2 230/69kV transformers and 2 230kV lines, and the removal of the 69kV lines. The ultimate build as of right now the substation will consist of 7 69/34.5kV transformers, 3 230/69kV transformers, an onsite spare 69/34.5kV transformer, and both 230kV and 69kV yards will consist of breaker and a half designs.	9,495,308	To serve Microsoft's new Goodyear data center.	N/A	126,604	05/06/22
59	TPWE016437	Runway Substation/Microsoft Phase 2	WE014726		Cut-in the Palm Valley - Rudd 230 kV line in 2022 to meet their 135 MW load and continue to service up to their 270 MW ultimate load in 2025.	5,495,397	Transition Runway from 69 kV service to 230 kV service to meet their larger loads.	N/A	73,272	05/06/22
60	TPWE016736	HPFF Mitigation Phase 0	WE017438		As a portion of HPFF Phase 0, acquire the land adjacent to Country Club (currently a dry cleaners) for expansion of the Country Club substation to include the new reactors.	2,727,002	acquire the land adjacent to Country Club (currently a dry cleaners) for expansion of the Country Club substation to include the new reactors.	N/A	13,635	10/31/22
61	TPWE016822	Stratus Sub/Microsoft Phase 2	WE016845		Phase II of Stratus substation will consist of the construction of a 230 kV switchyard using a breaker and a half configuration, the cut-in of the Palm Valley - Freedom and Palm Valley - Runway 230 kV lines, the installation of two 230/69 kV transformers, two 21.6 MVAR 69 kV capacitor banks, and removal of the 69 kV cut-in.	1,977,912	A large customer is building a datacenter with an estimated load of 270MW. To serve this load, APS will be initially serving it off the 69kV system and then transitioning to 230kV as the load ramps up. The customer will take virtual transmission at 34.5kV.	N/A	9,890	10/11/22
62	TPWE016822	Stratus Sub/Microsoft Phase 2	<=250k	WE017959	Phase II of Stratus substation will consist of the construction of a 230 kV switchyard using a breaker and a half configuration, the cut-in of the Palm Valley - Freedom and Palm Valley - Runway 230 kV lines, the installation of two 230/69 kV transformers, two 21.6 MVAR 69 kV capacitor banks, and removal of the 69 kV cut-in.	1,225,800	A large customer is building a datacenter with an estimated load of 270MW. To serve this load, APS will be initially serving it off the 69kV system and then transitioning to 230kV as the load ramps up. The customer will take virtual transmission at 34.5kV.	N/A	3,763	03/31/22
63	TPWE017033	Datacenter 69kV Pistol Grip Upgrade	WE017036		The Stratus substation has a datacenter with a large load which APS has agreed to. The derating of the pistol grips on all of the line segments between Palm Valley-Tuthill lower the maximum load on the lines from 191MVA to 123MVA. In an N-1 condition, there is risk of shedding load from the key datacenter customer. The line segments that require replacement of pistol grip connectors are Palm Valley-Stratus and Stratus-Tuthill. The total line distance is approximately 7.5 miles.	853,200	Prevent overload during an N-1 event that could adversely affect the large datacenter customer if load is shed.	7.50	1,422	12/07/22
64	TPWE017081	TSMC Phase 1&2	WE017085		Build new eight (8) element 230 kV breaker and a half switchyard to cut into the Raceway - Scatter Wash 230 kV line and to hold four (4) 230 kV UG customer tie lines to Keystone and two (2) 230 kV UG tie lines to Sparkling.	40,638,726	Provide 230 kV service to customer.	N/A	474,118	06/10/22
65	TPWE017081	TSMC Phase 1&2	WE017083		Cut-in the new Avery 230 kV switchyard for phase 1 and phase 2.	1,179,356	Provide a source for the new Avery 230 kV switchyard in order to serve TSMC and Linde.	N/A	13,759	06/10/22
66	TPWE018026	Childs to Irving Tap 69kV Rebuild	WA619967		Upgrade to the 69kV system from 3/0 to 336 ACSR from Childs Substation to Irving Tap, which is approximately 7.5 miles.	19,151,966	Rebuild ~7.5 miles of 69kV line with 336 ACSR on wood poles in the existing APS alignment. The Backbone fire in the Coconino National Forest destroyed the existing Childs to Irving Tap pole line which was 7.5 miles of 3/0.	7.50	351,119	02/14/22
67	TPWE018061	Pinal Substation Wall Upgrade	WE018072		Modification to Pinal substation is required to prevent damage from flooding	359,583	To prevent future damage from flooding based on the 2021 flooding incident, engineering will be adding flood walls at selected locations to protect APS assets.	N/A	3,596	07/19/22
68	TRIBAL RW RENEW	Tribal Land ROW Renewals	WA697659		Right of Way Payments for Tr bal Land (for Transmission lines)	1,468,010	Right of Way Payments for Tribal Land (for Transmission lines)	N/A	9,787	09/20/22

Arizona Public Service Company
2022 Transmission Actual Addition Dollars and O&M

Line #	Funding Project	Funding Project Name	WA#	Add'l WA's for the Funding Project	Description	Actual Cost	Purpose	Miles	Estimated O&M (a)	In-Service Date
69	TRNCH BSH RPLC	Trench Bushing Replacement Program	WA575885		Trench Bushing Replacement Program	502,723	The Trench Safety Advisory recommends replacement for 230kV class COTA bushings due to a higher than average in-service failure rate.	N/A	2,514	10/21/22
70	TRNCH BSH RPLC	Trench Bushing Replacement Program	WA549788		Trench Bushing Replacement Program	519,904	The Trench Safety Advisory recommends replacement for 230kV class COTA bushings due to a higher than average in-service failure rate.	N/A	1,733	11/25/22
71	TRNCH BSH RPLC	Trench Bushing Replacement Program	WA549787		Trench Bushing Replacement Program	487,506	The Trench Safety Advisory recommends replacement for 230kV class COTA bushings due to a higher than average in-service failure rate.	N/A	2,438	10/21/22
72	TRNCH BSH RPLC	Trench Bushing Replacement Program	WA549786		Trench Bushing Replacement Program	429,070	The Trench Safety Advisory recommends replacement for 230kV class COTA bushings due to a higher than average in-service failure rate.	N/A	1,430	11/18/22
73	TRNCH BSH RPLC	Trench Bushing Replacement Program	WA549785		Trench Bushing Replacement Program	619,870	The Trench Safety Advisory recommends replacement for 230kV class COTA bushings due to a higher than average in-service failure rate.	N/A	2,066	11/04/22
74	TWIN BUTTES SUB	Westland Substation	WE013272		Build ~2.5 mile double-circuit 69kV line with 795ACSS conductor from Westwing-Raceway 69kV line to Twin Buttes substation.	5,003,748	Provide capacity for the Vistancia North and Lake Pleasant Heights developments. The two 41.7MVA Calderwood transformers are forecasted to be loaded to a total of 66 MW in 2021.	2.50	75,056	04/06/22
75	UG CABLE REPL	UG Cable Replacement-Unplanned	<=250k	WA692553	Replace direct buried cable with cable in a conduit system to reduce power outages.	4,773	Replace direct buried cable with cable in a conduit system to reduce power outages.	N/A	40	08/29/22
76	UNPLND EMERG	Unplanned/Emergency	WA687406		Unplanned/Emergency: Replacement of Transmission capital equipment resulting from unforeseen system conditions that resulted in unplanned outages	250,939	To maintain and/or restore system operations	N/A	2,509	07/19/22
77	UNPLND EMERG	Unplanned/Emergency	WA681988		Unplanned/Emergency: Replacement of Transmission capital equipment resulting from unforeseen system conditions that resulted in unplanned outages	381,804	To maintain and/or restore system operations	N/A	4,454	06/24/22
78	UNPLND EMERG	Unplanned/Emergency	WA672573		Unplanned/Emergency: Replacement of Transmission capital equipment resulting from unforeseen system conditions that resulted in unplanned outages	2,213,793	To maintain and/or restore system operations	N/A	33,207	04/19/22
79	UNPLND EMERG	Unplanned/Emergency	WA663920		Unplanned/Emergency: Replacement of Transmission capital equipment resulting from unforeseen system conditions that resulted in unplanned outages	923,285	To maintain and/or restore system operations	N/A	13,849	04/28/22
80	UNPLND EMERG	Unplanned/Emergency	WA611244		Unplanned/Emergency: Replacement of Transmission capital equipment resulting from unforeseen system conditions that resulted in unplanned outages	318,023	To maintain and/or restore system operations	N/A	5,300	03/22/22
81	UNPLND EMERG	Unplanned/Emergency	<=250k	WA626941,WA65226,WA662043, WA389828,WA566680,WA697204, WA4485959,WA704391,WA627694, WA683369,WA627296,WA705957, WA667962,WA683572,WA663585, WA637800,WA619169,WA677732, WA678312,WA395381,WA684471, WA691751,WA702956,WA704088, WA712377,WA719142,WA707088, WA715365,WA657511,WA657884, WA683593,WA661067,WA669309, WA448020,WA641967,WA663752, WA658792,WA639937,WA599963, WA669763,WA685196,WA691002, WA709626,WA642095,WA699330, WA695236,WA709933,WA672497, WA652517,WA637171,WA702935, WA703611,WA704110,WA707076	Unplanned/Emergency: Replacement of Transmission capital equipment resulting from unforeseen system conditions that resulted in unplanned outages	2,455,402	To maintain and/or restore system operations.	N/A	45,016	02/15/22

Total Transmission

202,826,375

Arizona Public Service Company
2023 Transmission Estimated Addition Dollars and O&M:

Line #	Funding Project	Funding Project Name	WA#	Add'l WA's for the Funding Project	Description	Actual Cost	Purpose	Miles	Estimated O&M (a)	Estimated In-Service Date
1	AGEDINFASTRREPL	Aged Infrastructure Replacement	Program		Aged Infrastructure Replacement	1,175,619	Aged Infrastructure Replacement	N/A	1,959	12/31/23
2	AGEDRELAYREPL	Aged Relay Replacement	Program		Aged Relay Replacement	1,058,057	Aged Relay Replacement	N/A	1,763	12/31/23
3	DPWE016511	El Sol: Install New Fdr ES22 (OH)	WE016515		Install new 12kV feeder at El Sol substation. New feeder will tie into existing ES21.	2,078,106	ES21 is forecasted to be 101% loaded in 2021 and 108% in 2024. ES14 is forecasted to be 98% loaded in 2021 and 100% in 2024. This new feeder would be able to offload ES09, ES14 and ES21, which are slated to add ~3.5 MW of new residential and commercial load by summer 2021.	N/A	34,635	03/15/23
4	DPWE017864	Wagner: Sun Valley Sub-69KV Sub	WE017880		Build new substation for Trillium subdivision.	15,555	Provide a 69/12kV substation source to the Trillium development.	N/A	.26	12/01/23
5	DV 230 KV SPOF	Deer Valley 230kV Single Points of Failure (SUB)	WE013402		Single points of failure were identified on the following pieces of equipment: A. 230/69kV Transformer #6 (Reference Drawing G-74164) B. 230/69kV Transformer #10 (Reference Drawing G-68828) C. 230kV Breaker Trip Colls D. 125VDC Battery E. 230/69kV #6 XFMR F. 230/69kV #10 XFMR G. 230/69kV #14 XFMR.	1,934,976	TPL-001-4/TPL-001-5 identifies single points of failure and requires that utilities simulate loss of non-redundant elements to review the impact. The purpose of this project is to add redundancy to the identified single points of failure.	N/A	35,475	02/16/23
6	EPRI XFMR	EPRI Transformer Replacement	Program		EPRI Transformer Replacement: Replace aging, end-of-life substation class transformers prior to failure.	352,686	Replace aged, end-of-life assets to ensure a reliable system.	N/A	.588	12/31/23
7	GARFIELD SUB	Garfield_Evans Churchill_Country Club 69kV OH Lines	WE012149		Rebuild the Garfield Substation to a standard layout with standard Network Substation equipment: Option 1: Purchase new land and build new substation. Option 2: Rebuild Garfield Substation on current site. The current site may need to be expanded.	396,252	Maintenance issue due to the fact that the transformers and switchgear are too close for clearance. This is also a network substation that needs to have the 12kV bus ties closed with a Fault Current Limiter to balance the load on the transformers at the customer sites. Have the bus ties closed is critical to prevent high fault currents that can potential cause fires.	N/A	3,963	07/07/23
8	GARFIELD SUB	Evans Churchill 69kV UG Cable/Term/Splice	WE017188		Pull 1100 ft of 6-2500A in existing duct bank being installed on separate work orders. Termination, splicing, fiber and building 3- 69kV underground dips is included. Line 1 is Country Club to Evans Churchill; Line 2 is Country Club to Evans Churchill; Line 3 is Garfield to Evans Churchill II. Work is downtown 7 Street and Roosevelt and will require night and weekend work. Trench and conduit will be worked on WE013337, WE013338 and WE013339 separately.	1,480,729	Pull 1100 ft of 6-2500A in existing duct bank being installed on separate work orders. Termination, splicing, fiber and building 3- 69kV underground dips is included. Line 1 is Country Club to Evans Churchill; Line 2 is Country Club to Evans Churchill; Line 3 is Garfield to Evans Churchill. Work is downtown 7 Street and Roosevelt and will require night and weekend work. Trench and conduit will be worked on WE013337, WE013338 and WE013339 separately.	N/A	14,807	07/07/23
9	GP PTS69KVLINE	Gillespie - Patterson 69kV Upgrade OH	WE013370		Upgrade the Gillespie-Patterson 69kV north part and a small part out of the Gillespie substation. The total upgrade is an estimated about 4.25 miles to make whole line 69kV line. ACSS conductor.	3,362,616	With high solar and high load in the Buckeye/Gila Bend area the Gillespie-Patterson 69kV overloads with Gillespie-Lower River, Baseline-Lower River, or West Park-Lower River (Breaker to Breaker) outage.	4.25	16,813	10/27/23
10	LINEPTRL REPL	Overhead Planned Repl	Program		Overhead Planned Repl: Replacement of end-of-life, degraded or damaged equipment (noted during annual public safety line patrols and annual climbing inspections).	4,766,534	To ensure safety and reliability of the system.	N/A	.7,944	12/31/23
11	MURAL PALMNAS	Boothill to Adams 115kV Rebuild	WE012339		With the APS load and the contractual responsibility of being able to supply SSVEC with 40MW through the Palominas-Hereford tie, the Adams Tap-Boothill line is at risk of violating clearances. To eliminate this, eight poles need replacing. This allows all APS load and SSVEC emergency tie agreements to be served without clearance violations.	4,379,924	The purpose of these area improvements is to allow for a normally open emergency tie with SSVEC/AEPCO capable of 40MW. Under the single contingency of the Adams-Boothill 115kV line, Boothill-Mural 115kV line, or the 115/69kV Mural transformer outage, all APS costumers in the Cochise County lose service. The existing 69kV McNeal tie is not capable of serving all APS load. Additionally, the Douglas generator has a history of not being able to provide power when called upon. With the generation online, the generator is still not capable of serving all load at Fairview/Douglas (at peak demand) let alone serve the entire Cochise County load.	N/A	87,598	01/24/23
12	MURAL PALMNAS	Mural to Boothill 115kV Rebuild	WE012340		The current rating of the Boothill-Mural 115kV line is 54MW. With the APS load and the contractual responsibility of being able to supply SSVEC with 40MW through the Palominas-Hereford tie, the line overloads to ~128% in 2019. By addressing five spans, the rating increases to 112 MVA, eliminating the overload.	2,650,663	The purpose of these area improvements is to allow for a normally open emergency tie with SSVEC/AEPCO capable of 40MW. Under the single contingency of the Adams-Boothill 115kV line, Boothill-Mural 115kV line, or the 115/69kV Mural transformer outage, all APS costumers in the Cochise County lose service. The existing 69kV McNeal tie is not capable of serving all APS load. Additionally, the Douglas generator has a history of not being able to provide power when called upon. With the generation online, the generator is still not capable of serving all load at Fairview/Douglas (at peak demand) let alone serve the entire Cochise County load.	N/A	44,178	03/07/23
13	PARTICP BY APS	Participant Op by APS	Program		Participant Op by APS: Transmission assets and substation upgrades on participant lines where APS is the operating agent.	8,576,060	Replacement of end-of-life components will ensure a reliable transmission system. Facilities APS is a participant in and is the operator.	N/A	14,293	12/31/23
14	PARTICP BY OTH	Participant by Other	Program		Participant by Other: Transmission assets and substation upgrades on participant lines that APS is not the operating agent	4,996,380	Replacement of end-of-life components will ensure a reliable transmission system. Facilities APS is a participant in, but not the operator.	N/A	8,327	12/31/23
15	PP BV 69 LINE	Pinnacle Peak Sub Work For Boulevard - Pinnacle Peak 69 kV Line Rebuild (Sub)	WE015426		Replace any Pinnacle Peak substation equipment to achieve 1600 A rating to Boulevard.	17,871	Prevent overload for some N-1 contingencies.	N/A	.149	08/03/23
16	RELWDPOLEREPL	Wood Pole Replacement	Program		Wood Pole Replacement: Replacement of poles found to not have 10 years of remaining life.	2,085,270	Failure to replace will result in more frequent and longer outages due to downed poles and present hazards to the public.	N/A	3,475	12/31/23

Arizona Public Service Company
2023 Transmission Estimated Addition Dollars and O&M

Line #	Funding Project	Funding Project Name	WA#	Add'l WA's for the Funding Project	Description	Actual Cost	Purpose	Miles	Estimated O&M (a)	Estimated In-Service Date
17	STORM LINES	Storm - Lines	Program		Storm - Lines: The purpose of this program is to replace transmission lines damaged resulting from storm and unplanned events.	2,356,255	To maintain and/or restore system operations.	N/A	3,927	12/31/23
18	STRAT TEL	(Pinnacle Peak/Preacher Cyn) Pinnacle Peak - Mazatzal Fiber	WA514457		Pinnacle Peak-Mazatzal Fiber (Dale to Mazatzal)	9,807,622	Pinnacle Peak-Mazatzal Fiber (Dale to Mazatzal)	N/A	81,730	08/31/23
19	STRAT TEL	(Pinnacle Peak/Preacher Cyn) UG - Iron Mountain	WA604460		UG - Iron Mountain/101 Crossing	1,142,423	UG - Iron Mountain/101 Crossing	N/A	9,520	08/31/23
20	STRAT TEL	Ormes Fiber	WA611208		Ormes Fiber	411,779	Ormes Fiber	N/A	4,804	06/30/23
21	STRAT TEL	(Coconino/Cholla) Cholla - Winslow Fiber	WA559405		(Coconino/Cholla) Cholla - Winslow Fiber	165,434	(Coconino/Cholla) Cholla - Winslow Fiber	N/A	276	12/31/23
22	STRAT TEL	(Coconino/Cholla) Winslow - Padre Fiber	WA559407		(Coconino/Cholla) Winslow - Padre Fiber	132,444	(Coconino/Cholla) Winslow - Padre Fiber	N/A	221	12/31/23
23	STRAT TEL	(Cholla/Preacher Cyn) Chevelon - Bluff Wind Fiber	WA561231		(Cholla/Preacher Cyn) Chevelon - Bluff Wind Fiber	3,186,911	(Cholla/Preacher Cyn) Chevelon - Bluff Wind Fiber	N/A	63,738	01/06/23
24	SUBAGEDEQUIP	Panda RTAC RTU Replacement	WE018464		Replace RTAC RTU with OrionLX and 2 SEL-321 and 3 SEL-351.	458,873	Obsolete RTU and relays not compatible with DNP.	N/A	1,530	11/08/23
25	SUBAGEDEQUIP	Substation Aged Equipment Repl	Program		Replace aged, end-of-life assets to ensure a reliable system.	8,252,845	Replace aged, end-of-life assets to ensure a reliable system.	N/A	13,755	12/31/23
26	TAIMPNGLATS8	Cut-in Araby - Marine Air Base 69kV to Orchard	WE019135		Tie the Araby - Marine Air Base 69kV Line into Orchard substation.	1,058,533	This project is required to tie in the new Orchard substation into the 69 kV lines in the Yuma area and improve reliability by improving tie capability and reducing the impact of outages on the 69 kV lines in the Yuma area. In addition, this project will increase the capability of bringing outside generation into the Yuma area and reduce the dependence on the expensive generation at Yucca during peak loads.	N/A	14,114	05/30/23
27	TAIMPNGLATS8	Orchard (TS8) 230kV Substation: Site Preparation For Future 230/69kV substation in Yuma AZ	WA116036		This work order to provide the labor and materials needed to design, permit, and complete the site preparations for the future 230kV Orchard substation build out. These site preparations include grading and drainage, construction of equipment foundations, installation of conduit systems, pre-cast trench, ground grid, and a perimeter fence.	12,067,579	This project is needed to serve the need for electric energy, improved reliability, and continuity of service for the greater Yuma area. The Yuma system is nearing the maximum load serving capability of the 69kV system.	N/A	160,901	05/31/23
28	TAIMPNGLATS8	Orchard (TS8) 230kV Substation: Build New Substation in Yuma AZ	WA116051		This work order to provide the labor and materials needed to construct a new 230kV substation in the Yuma area. The initial build out of the substation will include the following equipment:	17,584,689	This project is needed to serve the need for electric energy, improved reliability, and continuity of service for the greater Yuma area. The Yuma system is nearing the maximum load serving capability of the 69kV system.	N/A	234,465	05/25/23
29	TAIMPNGLATS8	North Gila Substation: New 230kV Substation	WA140245		This work order to provide the labor and materials needed to add a new 230kV substation at the existing North Gila 500kV Substation. This will require expanding the existing substation footprint to the southwest of the yard. New foundations and equipment will be required for (1) new 500kV breaker, (2) new 500kV switches, (1) new 500/230kV, 600MVA transformer, (3) new 230kV breakers, (1) new 230kV control house, additional bus and its associate support structures. The control scope will require the installation of all new panels and relays in the new control house. Outages will not be required for the new 230kV substation work. All of the above mentioned work will be completed within the perimeter of the existing chain link fence.	13,837,371	This project is needed to serve the need for electric energy, improved reliability, and continuity of service for the greater Yuma area. The Yuma system is nearing the maximum load serving capability of the 69kV system.	N/A	230,623	03/03/23
30	TIWE017713	Q3 - TGP Development - Substation	WE017715		A transmission service request was initiated for added capacity on the Moenkopi - Four Corners 525kV Line and an agreement reached. To accommodate the added capacity, the C7 series capacitor bank located at the Moenkopi Substation will be upgraded from 1810A to 2200A. The project will be a turnkey operation with GE providing the engineering, material, and construction to upgrade the C7 series capacitor bank.	11,365,633	Provide a customer generating interconnection facility into the APS system.	N/A	151,542	05/09/23
31	TPWE014058	Buckeye - HubWest New 69kV Line (69kV Line Child)	WE014181		To build a new 6.5 mile long line from Buckeye substation to the new HubWest substation. This line will be double circuit the whole line length. It will start double circuit with the Buckeye - Komatke 69kV line going south and then be double circuit with the West Park - HubWest 69kV line going east. With double circuiting this line the portions of the current lines will be upgraded to R795X to upgrade the area for the future while we have those lines cut and working on them. There is about 1 mile of 12kV under-build on the line that will need to be put on the double circuit and upgraded according to DPE.	6,201,521	To eliminate the low voltages and overloads on the 69kV system around the Wintersburg, Baseline, and Valencia area during N-1's.	6.50	51,679	08/09/23

Arizona Public Service Company
2023 Transmission Estimated Addition Dollars and O&M.

Line #	Funding Project	Funding Project Name	WA#	Add'l WA's for the Funding Project	Description	Actual Cost	Purpose	Miles	Estimated O&M (a)	Estimated In-Service Date
32	TPWE014058	Buckeyes - HubWest New 69kV Line (69kV UG Line Child - Electrical Portion)	WE017786		To build a new 6.5 mile long line from Buckeye substation to the new HubWest substation. This line will be double circuit the whole line length. It will start double circuit with the Buckeye - Komatke 69kV line going south and then be double circuit with the West Park - HubWest 69kV line going east. With double circuiting this line the portions of the current lines will be upgraded to R795X to upgrade the area for the future while we have those lines out and working on them. There is about 1 mile of 12kV under-build on the line that will need to be put on the double circuit and upgraded according to DPE.	845,656	To eliminate the low voltages and overloads on the 69kV system around the Wintersburg, Baseline, and Valencia area during N-1's.	N/A	8,457	07/05/23
33	TPWE014060	West Phoenix 230kV Single Point of Failure (North Bus Sub Child)	WE014221		Update and upgrade protection schemes and equipment at West Phoenix 230kV yard. Upgrade the 230kV bus differentials, unit #1/2 leads differential, unit #3 leads differential, unit #4 leads differential, unit #5 differential, 230/69kV transformer #10, 230/69kV transformer #14, 230/69kV transformer #16, trips between the 230kV yard and generation, trips between 69kV yard and 230kV yard for #14 and #16 transformers, dual trip coils, and 230kV building DC system.	1,996,125	TPL-001-4/TPL-001-5 identifies single points of failure and requires that utilities simulate loss of non-redundant elements to review the impact. The purpose of this project is to add redundancy to the identified single points of failure.	N/A	6,654	11/07/23
34	TPWE014060	West Phoenix 230kV Single Point of Failure (South Bus Sub Child)	WE014312		Update and upgrade protection schemes and equipment at West Phoenix 230kV yard. Upgrade the 230kV bus differentials, unit #1/2 leads differential, unit #3 leads differential, unit #4 leads differential, unit #5 differential, 230/69kV transformer #10, 230/69kV transformer #14, 230/69kV transformer #16, trips between the 230kV yard and generation, trips between 69kV yard and 230kV yard for #14 and #16 transformers, dual trip coils, and 230kV building DC system.	1,797,017	TPL-001-4/TPL-001-5 identifies single points of failure and requires that utilities simulate loss of non-redundant elements to review the impact. The purpose of this project is to add redundancy to the identified single points of failure.	N/A	5,990	11/06/23
35	TPWE014078	PC-SDG Prescott City SUB	WE014218		Build approximately 1.5 miles of new 69 kV line from Sundog sub to the normally open Sundog Tap-Prescott City tap line. Remove the East Bus 7.2 MVAR capacitor bank from Sundog, and install a 14.4 MVAR at Bald Mountain, allowing the new line to use the 69kV bay. This will utilize the normally open line between Prescott city tap and Sundog tap creating a third line into Sundog, two of them from the Willow Lake source.	35,560	Project creates second 69kV source from Willow Lake to Sundog eliminating future 69kV line overloads.	1.50	178	10/25/23
36	TPWE014083	CQ_WM_Overhead LINE	WE014084		Rebuild first ~2.5 miles of CQ-Williams Tap 69kV line. Re-build portion of existing CQ-Woody Mnt line to double circuit, add new 69 kV line from I-40 into Woody Mountain. Re-terminate the Williams Tap to Coconino 69kV line into Soldiers Trail Substation, rebuilding existing line to double-circuit. Reconfigure Woody Mountain Substation to an in and out to accommodate the two lines coming in from Coconino and a third line from Williams.	7,287,198	This line will insure no load is dropped at Woody Mountain, reduce the exposure in the area and considerably help the voltage profile at Williams for the loss of the Williams to Williams tap line.	2.50	60,727	08/04/23
37	TPWE014083	CQ_WM Coconino SUB: Bay 7, Bay 11 Relays	WE014085		Rebuild first ~2.5 miles of CQ-Williams Tap 69kV line. Re-build portion of existing CQ-Woody Mnt line to double circuit, add new 69 kV line from I-40 into Woody Mountain. Re-terminate the Williams Tap to Coconino 69kV line into Soldiers Trail Substation, rebuilding existing line to double-circuit. Reconfigure Woody Mountain Substation to an in and out to accommodate the two lines coming in from Coconino and a third line from Williams.	293,193	This line will insure no load is dropped at Woody Mountain, reduce the exposure in the area and considerably help the voltage profile at Williams for the loss of the Williams to Williams tap line.	N/A	2,443	08/04/23
38	TPWE014330	Ocotillo-Polk 69kV Upgrade (OH)	WE014331		Upgrade the Ocotillo-Polk 69kV line to achieve a 1600A rating. Upgrade 5.5 miles of OH 795ACSR to 795ACSS. Approximately 0.5 miles of this line (from Polk substation to 48th street and Washington street) is double circuit with the Hohokam-Polk 69kV line. Per APS Transmission Line Section Book, the double circuited portion with Hohokam-Polk is 795ACSR and should up upgraded to 795ACSS at the same time as the Ocotillo-Polk upgrade.	7,132,564	Load growth in Tempe causes the Ocotillo-Polk 69kV line to overload 8% for the N-1 of the Hohokam-Tempe 69kV line. This load growth is primarily driven by the Iron Mountain data center load growth at Polk substation (an addition ~75MW, ramped up starting 2019 through 2024).	5.50	71,326	07/26/23
39	TPWE014330	Ocotillo-Polk 69kV Upgrade (OH Poles) CIAC	WE017771		Upgrade the Ocotillo-Polk 69kV line to achieve a 1600A rating. Upgrade 5.5 miles of OH 795ACSR to 795ACSS. Approximately 0.5 miles of this line (from Polk substation to 48th street and Washington street) is double circuit with the Hohokam-Polk 69kV line. Per APS Transmission Line Section Book, the double circuited portion with Hohokam-Polk is 795ACSR and should up upgraded to 795ACSS at the same time as the Ocotillo-Polk upgrade.	27,014	Load growth in Tempe causes the Ocotillo-Polk 69kV line to overload 8% for the N-1 of the Hohokam-Tempe 69kV line. This load growth is primarily driven by the Iron Mountain data center load growth at Polk substation (an addition ~75MW, ramped up starting 2019 through 2024).	N/A	270	07/30/23
40	TPWE014788	Pima Substation	WE014792		Pima Substation with the new line and cut in of Palm Valley-Sarival will have a total of 5 69kV line bays at it. There will be the addition of three line bays and the second bus tie breaker. Two of the line bays will take the positions of future 69kV caps.	922,538	To reliably serve the growing load demand around the Bullard substation in Goodyear.	N/A	10,763	06/30/23

Arizona Public Service Company
2023 Transmission Estimated Addition Dollars and O&M.

Line #	Funding Project	Funding Project Name	WA#	Add'l WA's for the Funding Project	Description	Actual Cost	Purpose	Miles	Estimated O&M (a)	Estimated In-Service Date
41	TPWE014788	Pima 69kV Cut In and Out	WE015827		Cut in and out the Palm Valley - Sarival 69kV line into the Pima Substation. The line The line runs next to the substation and across Cotton Lane. There will probably have to be line swaps or moves.	1,390,341	Add another 69kV source to the Bullard area to serve the ever growing load demand and future data centers.	N/A	16,221	06/30/23
42	TPWE014788	Bullard Substation	WE015828		Bullard substation will need the addition of the southern portion of the 69kV yard. Build the third 69kV line bay in northern position of the southern part of the 69kV yard. Install the second 69kV bus tie breaker.	1,112,184	To reliably serve the growing load demand around the Bullard substation in Goodyear.	N/A	12,975	06/30/23
43	TPWE015159	Downing - East End 69 kV Line Rebuild (OH)	WE015351		Rebuild whole Downing - East End 69 kV line to a 191 MVA rating with R795X.	1,039,306	To prevent overload during several N-1 contingencies.	N/A	12,125	06/15/23
44	TPWE015289	Lincoln Street 230kV Single Point of Failure - [Lin St Sub]	WE017389		Update and upgrade protection schemes and equipment at Lincoln Street 230kV yard. Upgrade 230/69kV Transformer #10, 230kV bus between LSS222 and LSS922, 230kV breaker trip coils and 125VDC battery.	1,039,305	TPL-001-4/TPL-001-5 identifies single points of failure and requires that utilities simulate loss of non-redundant elements to review the impact. The purpose of this project is to add redundancy to the identified single points of failure.	N/A	6,929	09/28/23
45	TPWE015312	Camelback Sub For C2MM 69kV Rebuild (SUB)	WE018067		Replace (2) switches with 2000 A model to achieve 191 MVA line rating. Add fiber, engineering access equipment, and replace Camelback Mountain line relay.	404,646	To prevent overload during the loss of the Orangewood C-E 69 kV bus tie.	N/A	7,419	02/10/23
46	TPWE015312	Mummy Mountain Sub For C2MM 69kV Rebuild (SUB)	WE018219		Add fiber and engineering access equipment.	319,098	Add fiber and engineering access equipment.	N/A	5,850	02/10/23
47	TPWE015421	Westwing 69kV Yard Breaker Upgrades (SUB)	WE015632		Rebuild 69 kV yard as an 10-element breaker a half scheme with 63 KA breakers. Will be rebuilding yard to the south of existing one, then removing old yard.	17,372,254	Upgrade breaker interrupting ratings and increase reliability	N/A	173,723	07/25/23
48	TPWE015421	Westwing 69kV Yard Breaker Upgrades (OH)	WE015745		The current 69kV breakers at Westwing are all rated for 40KA and future breaker duty evaluations show that Westwing 69kV yard shows over 40KA for single phase faults. With the need to rebuild the whole ring bus the plan is to build a new breaker and a half yard south of it. Overhead lines will need to be moved and re-terminated into the new yard.	735,058	Upgrade 69kV breakers to withstand the fault current seen at the substation for that voltage class.	N/A	7,351	07/25/23
49	TPWE015474	New Westwing 230/69 Transformer (SUB)	WE015636		Install 3rd 230/69 transformer at Westwing. Build new 230 kV control and move all north 230 kV bus relays to new house.	9,201,483	Alleviate the overload on one of the 230/69 transformers for the loss of the other. Existing control house can't hold any more relays, so new north yard control house will have to be built.	N/A	92,015	07/26/23
50	TPWE015723	Wickenburg Bus Tie Breaker	WE016679		Add 69 kV bus tie breaker at WICKENBURG	791,356	Add reliability to 69 kV system	N/A	9,232	06/09/23
51	TPWE015724	Tonto 69kV Bus Tie (Sub Breaker)	WE016680		Add 69 kV bus tie breaker at Tonto.	1,523,610	Add reliability to 69 kV system	N/A	20,315	05/31/23
52	TPWE015724	Tonto 69kV Bus Tie (Line Swap)	WE017966		Swap the Childs (Strawberry) and Owens 69kV line bays.	36,225	Add reliability to 69 kV system	N/A	483	05/02/23
53	TPWE015727	Lonesome Valley Bus Tie Breaker	WE016682		Add 69 kV bus tie breaker at LONESOME VALLEY	3,334,298	Add reliability to 69 kV system	N/A	16,671	10/27/23
54	TPWE015728	Dewey 69kv Bus Tie Breaker (SUB)	WE016683		Install a new 2000 A, 40 KA, 69 KV bus tie breaker at the Dewey Substation, along with new 2000A disconnect switches on either side of the new circuit breaker.	748,128	Add reliability to 69 kV system	N/A	12,469	03/17/23
55	TPWE015729	COPPER CANYON	WE016684		Install a new 2000 A, 40 KA, 69 KV bus tie breaker at Copper Canyon substation.	378,093	Add reliability to 69 kV system	N/A	5,671	04/28/23
56	TPWE015730	Adobe 69 kV Bus Tie-Breaker (SUB)	WE016634		Install 69 KV Bus tie breaker, replace old relays, and upgrade engineering access.	735,583	To prevent substation outage due to 69 kV bus fault or line breaker failure.	N/A	14,712	01/06/23
57	TPWE015732	Dixieland 69 kV Bus Tie-Breaker - Relay Upgrades (SUB)	WE016632		Install 69 KV Bus tie breaker, replace old relays, and upgrade engineering access.	3,124,828	To prevent substation outage due to 69 kV bus fault or line breaker failure.	N/A	10,416	11/28/23
58	TPWE015742	McMicken Sub Work (SUB)	WE015784		Install 69 KV Bus tie breaker, replace old relays and switches, and upgrade engineering access.	1,081,178	Prevent outage of substation during 69 kV bus fault or line breaker failure.	N/A	14,416	05/01/23
59	TPWE015743	Rio Vista Sub Work (SUB)	WE015786		Install 69 KV Bus tie breaker, replace old relays, and upgrade engineering access.	1,385,352	To prevent sub outage during 69 kV bus fault or line breaker failure.	N/A	18,471	05/01/23
60	TPWE015744	Watson Sub Work (SUB)	WE015785		Install 69 KV Bus tie breaker, replace old relays, and upgrade engineering access.	581,925	To prevent substation outage due to 69 kV bus fault or line breaker failure.	N/A	10,669	02/06/23
61	TPWE015953	Drainage at Saddle Mountain	WE015953		Complete/Redo the drainage around Saddle Mountain substation. Reconstruct the canal in front of substation and add riff raff around exterior of substation to prevent more erosion.	805,702	In times of heavy rain, adjacent farm fields get flooded due to inadequate culverts and drainage.	N/A	9,400	06/27/23
62	TPWE015954	Cholla Oil Containment-Reactors	WE018041		The T3 & T6 500/345kV transformers (Bays 3 & 10, respectively) within Cholla Substation have been leaking oil for some time. Cholla is a Spill Prevention Control and Countermeasures (SPCC) regulated site, and there is environmental concern with groundwater being only 35ft below the surface. Even with the transformers being re-gasketed, the leaking issues persist. There are also similar concerns with regards to the reactors within the 500kV yard, as they have also been known to leak. This project proposes that the two banks of transformers along with the 500kV reactors be evaluated, and permanent oil containment efforts be constructed, along with mitigation efforts for potential existing spillage into the soil.	2,460,539	This is an environmental concern, as the transformers & reactors have been leaking for some time. Cholla substation is a Spill Prevention Control and Countermeasures (SPCC) regulated site, and nearby groundwater is only 35ft below the surface.	N/A	12,303	10/16/23

Arizona Public Service Company

2023 Transmission Estimated Addition Dollars and O&M:

Line #	Funding Project	Funding Project Name	WA#	Add'l WA's for the Funding Project	Description	Actual Cost	Purpose	Miles	Estimated O&M (a)	Estimated In-Service Date
63	TPWE015970	Cholla 500 and 345kV Station Power	WE015971		There are common mode failure which could result in the Cholla control houses losing power. The project to fix this will consist of: (1) (Primary new source) one new source connected to transformer T2 (230/69/4.2kV) tertiary via a series reactor, with the 4.2 kV routed to a new 4.2kV/480 volt transformer just outside the 230/345kV control house; (2) (Primary new source) A new 34.5/4.2kV transformer (and one new spare) connected to the 500/345/34.5kV tertiary ring bus, then routed to the current 4.2kV/480 transformer connected to the 500 kV control house. (3) (Backup new source) A new 12.47 kV feed from the Construction substation (low side of T1091) to the 230/345 kV control house with a 12.47 kV/480 transformer, with 480v into the control house. Continue to 12.47 kV from the 230/345 kV control house to the 500 kV control house to a new 12.47/480 transformer just outside of the 500 kV control house, 480v into the control house.	2,219,276	Provide power to the 230/345 kV and 500 kV control houses.	N/A	3,699	12/14/23
64	TPWE016627	North Gila 69 kV Sync Scopes (SUB)	WE016653		Install sync scopes and CCVTs on the North Gila 69 kV breakers.	469,379	Improve ability to restore the system following a blackout.	N/A	4,694	07/05/23
65	TPWE016628	Yucca 69 kV Sync Scopes (SUB)	WE016652		Install sync scopes and CCVTs on the Yucca 69 kV breakers: Identified location YU162.	56,349	Improve ability to restore the system following a blackout.	N/A	563	07/03/23
66	TPWE016666	Wilhoit-Kirkland line rebuild	WE016688		Rebuild 6.8 mile Wilhoit to Kirkland OH line.	7,998,724	Mitigate overload of Wilhoit to Kirkland.	6.80	119,981	04/03/23
67	TPWE016695	Cataract Creek New CB OH Lines	WE017929		Install new Circuit Breaker in a new fenced area, and remove existing OCR protecting the line to Grand Canyon.	973,948	Existing OCR is in a deteriorated state, has had past mis-operations, and is unique to the system. A like-for-like replacement is not available, and will therefore be replaced with a circuit breaker.	N/A	8,116	08/16/23
68	TPWE016695	Cataract Creek New CB SUB	WE017930		Install new Circuit Breaker in a new fenced area, and remove existing OCR protecting the line to Grand Canyon.	987,024	Existing OCR is in a deteriorated state, has had past mis-operations, and is unique to the system. A like-for-like replacement is not available, and will therefore be replaced with a circuit breaker.	N/A	3,290	11/07/23
69	TPWE016729	West Phoenix 230/69kV Transformer Replacement (SUB)	WE016731		Replace Transformer T16 to a standard 230/69 kV transformer..	5,788,023	Under heavy load conditions, with West Phoenix generators GT1 and 2 offline, loss of either West Phoenix 230/69 kV transformer T10 or T14 would overload the West Phoenix T16 transformer.	N/A	77,174	05/01/23
70	TPWE016736	HPFF Mitigation Phase 0: Pre-Engineering & Cooling System Redundancy - [Lin St Sub]	WE016737		Include all pre-engineering studies including 1.. USI report refresh – Take 2014 USI and refresh the costs for HPFF upgrade. 2. Ground Penetrating Radar (GPR) – perform GPR to ensure the ground hasn't shifted under the HPFF system. 3. Asbestos testing – Perform asbestos testing to ensure conformance with safety regulations. 4. Coating inspection – Perform coating inspection to ensure piping protection and long-term viability of HPFF upgrade. 5. Pothead Inspection/Know – Ensures key potential failure points are in good health and condition for long-term project viability. 6. Oil Sample Testing (DGA) – Perform DGA testing to ensure HPFF system in good health and viability for long-term upgrade. 7. PCB Testing – Test for PCBs to ensure compliance with safety and handling procedure. 8. Soil Resistivity Testing – Test soil resistivity to ensure engineering estimated ampacity are realized. 9. Substation Oil Containment Review – Perform a substation review (Lin St, Grand Terminal, Country Club, Meadowbrook, and Sunnyslope) have acceptable oil containment for HPFF system. 10. Improved Signage – Add additional signage along route of HPFF to prevent encroachment. 11. Trend Data to ECC – Port HPFF cooling system data to ECC. 12. Spare Parts Acquisition/Testing 12a. Spare piping – Testing of existing in-stock piping and acquisition of additional piping as required. 12b. Cable – Testing of existing in-stock piping and acquisition of additional spare cables. Also include redundant cooling system power at Lin St. including - Add a new primary source connected to transformer #10 tertiary, via new pad mounted transformer. - Improve existing 12kV source by the addition of a power conditioner to act as the backup source. o Steve Goss to discuss with vendor this option and make sure they agree with it. - Add break before make ATS between the two sources; - Estimated cost: \$150K	642,600	Perform pre-engineering tasks for subsequent HPFF upgrade phase.	N/A	8,568	05/09/23
71	TPWE016736	HPFF Mitigation Phase 0: Pre-Engineering & Cooling System Redundancy - [Country Club Sub]	WE016738		Add a new primary source connected to transformer tertiary, via new pad-mounted transformer. Improve existing 12kV source by the addition of a power conditioner to act as the backup source. Steve Goss to discuss with vendor this option and make sure they agree with it; Add break before make ATS between the two sources; Examine need for relay upgrades and determine if there are any existing projects to upgrade; Estimated cost: \$150K	727,743	Improve electrical source feeding the cooling system at Country Club.	N/A	3,639	10/31/23
72	TPWE016822	Stratus PH II Substation 230kV	WE016846		Phase II of Stratus substation will consist of the construction of a 230 kV switchyard using a breaker and a half configuration, the cut-in of the Palm Valley - Freedom and Palm Valley - Runway 230 kV lines, the installation of two 230/69 kV transformers, two 21.6 MVAR 69 kV capacitor banks, and removal of the 69 kV cut-in.	6,013,300	A large customer is building a datacenter with an estimated load of 270MW. To serve this load, APS will be initially serving it off the 69kV system and then transitioning to 230kV as the load ramps up. The customer will take virtual transmission at 34.5kV.	N/A	90,200	04/01/23

Arizona Public Service Company
2023 Transmission Estimated Addition Dollars and O&M.

Line #	Funding Project	Funding Project Name	WA#	Add'l WA's for the Funding Project	Description	Actual Cost	Purpose	Miles	Estimated O&M (a)	Estimated In-Service Date
73	TPWE017033	El Sol-Waddell 69kV Pistol Grip Upgrade	WE017035		The Contrail substation has a datacenter with a large load which APS has agreed to. The derating of the pistol grips on all of the line segments between El Sol-Waddell lower the maximum load on the lines from 191MVA to 123MVA. In an N-1 condition, there is risk of shedding load from the key datacenter customer. The line segments that require replacement of pistol grip connectors are El Sol-Contrail and Waddell-Contrail. The total line distance is approximately 10.3 miles.	240,117	Prevent overload during an N-1 event that could adversely affect the large datacenter customers if load is shed.	10.30	4,002	03/10/23
74	TPWE017033	White Tanks-Sarival 69kV Pistol Grip Upgrade	WE017034		The Runway and Broadway substations each have a datacenter with a large load which APS has agreed to. The derating of the pistol grips on all of the line segments between White Tanks-Sarival lower the maximum load on the lines from 191MVA to 123MVA. In an N-1 condition, there is risk of shedding load from the key datacenter customers. The line segments that require replacement of pistol grip connectors includes White Tanks-Broadway, Runway-Broadway, Runway-Sarival. The total line distance is approximately 10.1 miles.	411,767	Prevent overload during an N-1 event that could adversely affect the large datacenter customers if load is shed.	10.10	6,177	04/28/23
75	TPWE017448	Cholla 345kV Shunt Reactors - [Cholla 345kV OH]	WE017861		Re-route Cholla-Cocino 230kV line to allow for installation of the new 120MVAR Cholla 345kV bus shunt reactor.	1,289,336	The purpose is to provide Operations the tools they need to be able to mitigate high voltage conditions, specifically but not limited to, the loss of both Cholla 500/345kV transformers.	N/A	2,149	12/15/23
76	TPWE017911	Thornton 69kV Cap Bank Substation Work	WE018317		Install 69kV capacitor banks at Thornton substation to provide voltage support. In an N-1 condition for the loss of the Casa Grande 230/69kV transformer, the bus voltage at the Thornton, Lucid, and Casa Grande 69kV buses is projected to fall below 0.9 p.u.	2,322,574	Provide voltage support with the load growth at Thornton substation.	N/A	27,097	06/30/23
77	TPWE018006	Project Hydrogen APS Equipment at Customer Sub	WE018012		SWITCHYARD AT THE PROJECT HYDROGEN SITE SCOPE - Add a new circuit breaker owned by APS and associated relay and controls to speak to Thornton substation - Metering equipment.	3,302,904	To serve a new 40 MW customer - project Hydrogen. Load demand requested at the time of interconnection is 30 MW with usage increasing to 40 MW in the 8 - 10 years time frame.	N/A	44,039	05/31/23
78	TPWE018006	Project Hydrogen Overhead Line Extension (OH)	WE018015		OH SCOPE - Build a new 69 kV line roughly 1 mile long north side of W Peters Road or based on Land Input (the south side is occupied by SCIP's 69 kV line).	1,668,567	To serve a new 40 MW customer - project Hydrogen. Load demand requested at the time of interconnection is 30 MW with usage increasing to 40 MW in the 8 - 10 years time frame.	1.00	22,248	05/30/23
79	TPWE018036	Cataract Creek Decommission SUB	WE016698		Complete decommissioning of the Cataract Creek 69/12kV substation, including the overhead tap (3 phases of R1/0V) located at pole 19/4A.	397,888	The power transformer onsite has been vandalized, and all existing equipment onsite has been de-energized, and is no longer fit for use.	N/A	1,326	11/09/23
80	TPWE018036	Cataract Creek Decommission OH Lines	WE017791		Complete decommissioning of the Cataract Creek 69/12kV substation, including the overhead tap (3 phases of R1/0V) located at pole 19/4A.	18,282	The power transformer onsite has been vandalized, and all existing equipment onsite has been de-energized, and is no longer fit for use.	N/A	122	09/29/23
81	TPWE018086	Pinnacle Peak to Downing Line Work	WE018094		To Remove and replace the overhead static wire with one new OPGW (432 Fiber) between the associated control house positions between PinnPk - Rawhide - Downing o Remove and Replace existing 69kV conductors (both circuits) with R795X (or equivalent) conductor o Rebuild the existing structures as needed to support these new loads Replace pistol grip terminations along this route with compression terminations.	2,898,758	To rebuild the existing infrastructure to meet the current and future loading conditions (mechanical, electrical and fiber-optic).	N/A	53,144	02/23/23
82	TPWE018138	Commerce Substation Work	WE018312		Rebuild Deer Valley to Commerce double circuit lines to 191 MVA. Upgrade corresponding switches at Deer Valley. Add an additional 69/12.4kV transformer at the Commerce substation.	4,552,506	Customer facility expansion	N/A	7,588	12/08/23
83	TPWE018138	Deer Valley Substation Work	WE018148		Upgrade disconnect switches at Deer Valley substation. (DV661, DV663, DV664, DV1661, DV1663, DV1664)	173,037	Customer facility expansion	N/A	2,019	06/16/23
84	TPWE018261	Lone Peak sub work	WE018305		Upgrade the Lone Peak to Union Hills 69kV line to have a 1600 Amp rating. The conductor on this line has already been upgraded. Substation components at Lone Peak and Union Hills still need to be upgraded.	9,174	Starting in 2025, the Lone Peak to Union Hills line will begin to overload during N-1 contingencies. Starting at 2% in 2025 and growing over time to over 17%.	N/A	61	09/19/23
85	TPWE018261	Union Hills sub work	WE018306		Upgrade the Lone Peak to Union Hills 69kV line to have a 1600 Amp rating. The conductor on this line has already been upgraded. Substation components at Lone Peak and Union Hills still need to be upgraded.	228,586	Starting in 2025, the Lone Peak to Union Hills line will begin to overload during N-1 contingencies. Starting at 2% in 2025 and growing over time to over 17%.	N/A	3,048	05/23/23
86	TPWE018318	Casa Grande - Thornton Rebuild (OH 69kV)	WE018321		Rebuild the Casa Grande-Thornton 69kV OH line (1.1-mile) to a 1600A conductor (795ACSS)	1,633,426	To relieve an overload of the line when Project Hydrogen comes in service.	1.10	5,445	11/14/23
87	TPWE018591	L10 Build New 69kV Substation and Lines - Land	WE019109		Build a new substation (initially a switchyard) into the Thornton - Eastgate 69kV line and Eastgate - Toltec 69kV line. Substation to have a breaker-and-a-half configuration. Install two 10.8 MVAR capacitor banks at the new substation. Install new control house, relays, control, and SCADA.	167,039	To relieve an overload of the Toltec - Milligan 69kV line for the loss of the Casa Grande 230/69 transformer and Casa Grande - Milligan paired element.	N/A	1,670	07/31/23

Arizona Public Service Company

2023 Transmission Estimated Addition Dollars and O&M:

Line #	Funding Project	Funding Project Name	WA#	Add'l WA's for the Funding Project	Description	Actual Cost	Purpose	Miles	Estimated O&M (a)	Estimated In-Service Date
88	TPWE018671	CIAC Sterling Grove Shopping Center - 69KV (OH) Relocates WA671550	WE018688		Funding Project/child Description is: Relocate 69kV OH lines and poles (remove 7 poles and install 10 steel transmission poles) located on Cotton Ln & Peoria to accommodate new commercial development street improvements. CPR pulled WA671550 to capture engineering and design of \$100K as a CIAC amount. CPR is Mark Lackey who will be managing the CIAC deposits. PM will draw from WA671550 to pay for total cost of project under WE#E. Material and total cost of project will be paid by commercial contractor including direct and overhead loads(CIAC). Commercial developer will provide easement for the relocated 69kV OH facilities as required.	250,160	Relocate 69kV Line per Developer request. All cost are paid by Customer.	N/A	4,169	03/23/23
89	TPWE018689	TS24 Casa Grande 230/69kV Sub Rebuild - Siting	WE018695		Rebuild Casa Grande substation to breaker and a half. Construct a the 230kV and 69kV switchyards as breaker and a half and provide for (5) 230kV lines, (6) 69kV lines, (3) 230/69kV transformers, and (3) 69/12kV transformers. Connect the 230 kV lines from Desert Basin and Milligan into the new substation. Connect the 69kV line from Thornton into the substation and build additional 69kV infrastructure as needed to support area needs.	593,836	As of May 2022, the import capability for the Casa Grande area is limited to approximately 25 MW, taking into account new and projected loads. Imports can be increased by adding additional transformers and lines from Casa Grande substation. However, the existing substation is space constrained and transformers cannot be added. In addition, this project will fix the issue of paired elements at Casa Grande	N/A	989	12/31/23
90	TPWE018689	TS24 Casa Grande 230/69kV Sub Rebuild - Land	WE018696		Rebuild Casa Grande substation to breaker and a half. Construct a the 230kV and 69kV switchyards as breaker and a half and provide for (5) 230kV lines, (6) 69kV lines, (3) 230/69kV transformers, and (3) 69/12kV transformers. Connect the 230 kV lines from Desert Basin and Milligan into the new substation. Connect the 69kV line from Thornton into the substation and build additional 69kV infrastructure as needed to support area needs.	2,339,376	As of May 2022, the import capability for the Casa Grande area is limited to approximately 25 MW, taking into account new and projected loads. Imports can be increased by adding additional transformers and lines from Casa Grande substation. However, the existing substation is space constrained and transformers cannot be added. In addition, this project will fix the issue of paired elements at Casa Grande.	N/A	7,798	11/30/23
91	TRANS RW RENEW	Trans Land ROW Renewals	Program		Trans Land ROW Renewals: Transmission lines constructed on State/Government land are issued a ROW with a schedule of payments.	7,771,243	Trans Land ROW Renewals: Transmission lines constructed on State/Government land are issued a ROW with a schedule of payments.	N/A	12,952	12/31/23
92	TRIBAL RW RENEW	Tribal Land ROW Renewals	Program		Right of Way Payments for Tribal Land (for Transmission lines)	1,048,770	Right of Way Payments for Tribal Land (for Transmission lines).	N/A	1,748	12/31/23
93	UNPLND EMERG	Unplanned/Emergency	Program		Unplanned/Emergency: Replacement of transmission capital equipment resulting from unforeseen system conditions that resulted in unplanned outages.	6,418,847	To maintain and/or restore system operations.	N/A	10,698	12/31/23
94	WSTWING-WSTBRK	Westbrook Sub Work (SUB)	WE012225		Rebuild about seven miles of OH 69kV from Westwing to Westbrook substation to obtain 1500A rating. Three Westbrook switches need to be replaced with 2000A switches.	1,173,531	Continued load growth has caused the Bell - Mountain View 69kV outage to overload the Westwing - Westbrook 69kV line to 102.2% in 2019. The Mountain View bus tie contingency causes the Westwing - Westbrook 69kV line to overload to 109.4%. Other contingencies cause the Westwing - Westbrook 69kV line to overload including: stuck breaker #7 at Deer Valley 230kV, and common structures for the Deer Valley and Westwing 230kV lines.	7.00	15,647	05/26/23

Total Transmission Estimate

262,080,656

Arizona Public Service Company
2024 Transmission Estimated Addition Dollars and O&M

Line #	Funding Project	Funding Project Name	WA#	Add'l WA's for the Funding Project	Description	Actual Cost	Purpose	Miles	Estimated O&M (a)	Estimated In-Service Date
1	AGEDINFASTRREPL	Aged Infrastructure Replacement	Program		Aged Infrastructure Replacement	1,175,619	Aged Infrastructure Replacement	N/A	1,959	12/31/24
2	AGEDRELAYREPL	Aged Relay Replacement	Program		Aged Relay Replacement	1,058,057	Aged Relay Replacement	N/A	1,763	12/31/24
3	DPWE014141	BUNKER PEAK: Build DC 69kV Line from WW-MCM with 12kV Underbuild; Rebuild WW18 to 795A (69OH)	WE014146		Build -2.2 miles of double-circuit in-and-out 69kV line with 795ACSS and single-circuit 12kV underbuild with 795AA conductor south to the Westwing-McMicken 69kV line. Substation site is assumed to be in the northwest corner of Jomax and 147th Avenue. Route is assumed to be along 147th Avenue alignment where a single-circuit 12kV line exists. New line should be capable of double-circuit 12kV underbuild. Rebuild WW18 overhead 2R feeder from P639273 to tap southwest of F534934 with 795A conductor.	3,819,459	Relieve forecasted 96% loading on WW20 in 2022.	2.20	76,389	01/30/24
4	DPWE018089	CHERRY CREEK: Build new 69kV double circuit from GS-CU (cut in) OH	WE018113		Estimate 2 miles of new double circuit 69kV line with 795acss, capability for 12kV underbuild double circuit. Fiber communication to be added to 69kV double circuit line. Include costs to cut access in along the line. Use steel poles. If the line maintenance group determines that steel cannot be used, use wood with burn wrap.	3,321,875	To reduce HD01 XMFR from 204% in 2025, CU11 XFMR from 107% in 2025, CU03 XMFR from 99% in 2025.	2.00	16,609	10/14/24
5	EPRI XFMR	EPRI Transformer Replacement	Program		EPRI Transformer Replacement: Replace aging, end-of-life substation class transformers prior to failure.	10,580,570	Replace aged, end-of-life assets to ensure a reliable system.	N/A	17,634	12/31/24
6	LINEPTRL REPL	Overhead Planned Repl	Program		Overhead Planned Repl: Replacement of end-of-life, degraded or damaged equipment (noted during annual public safety line patrols and annual climbing inspections).	4,903,421	To ensure safety and reliability of the system.	N/A	8,172	12/31/24
7	LONEPKUNIONHILL	Lone Peak - Union Hills Rebuild 69kV Line(UH SUB)	WE012045		Substation work at both Union Hills and Lone Peak needs to be performed to attain the 1600 A rating of the OH line conductor. The following work was performed: Rebuild about 2 miles of OH 69kV to obtain 1600A rating. A portion of this line is under built on a 230kV line. This small portion will require the use of composite conductor instead of the typical 795ACSS conductor. some of the metal 230KV structures will also need to be checked for structural integrity as their condition is unknown.	275,409	This line is overloaded for several outages in the area but the most notable is the Moon Valley- Sunnyslope 69kV outage. This project will mitigate the overload that is seen.	2.00	3,213	06/01/24
8	MG OK LINE	New McGuireville to Oak Creek Substation - OH 69kV Line	WE013292		New 69kV Line - McGuireville to Oak Creek Substation. - OPTION 1: Approximately 13.5 miles of new 69kV line, from McGuireville Substation to Oak Creek Substation. 11.5 miles will be new pole structures and wires, the remaining 2 miles will be double circuit with existing 69kV line from Oak Creek Tap. The 2 miles remaining to Oak Creek Substation will need to have the poles replaced to accommodate the double circuit from McGuireville. OPTION 2: Approximately 14.2 miles of new 69kV line, from McGuireville Substation to Oak Creek Substation along highways and Interstate 17. Entire 69kV line will have new pole structures and wires, the remaining 1 mile will be double circuit with existing 69kV line from Oak Creek Tap, and will need to have the poles replaced to accommodate the double circuit from McGuireville.	9,294,256	Solves 2 major contingencies for the NW - Outage of Verde - Oak Creek Tap which makes the line radial out of Coconino Substation, causing low voltage at Oak Creek - Outage of Verde - Cottonwood which makes the line radial out of Dugas, causing low voltage at Cottonwood.	13.50	15,490	12/10/24
9	MG OK LINE	New McGuireville to Oak Creek Substation - Sub Upgrade at McGuireville	WE013293		McGuireville Substation Upgrade	738,344	The purpose of this project is to prevent shedding of approximately 8MW of load at Oak Creek (according to the APS 2016 Summer Operating Study report) during van N-1 occurrence of the Verde to Oak Creek Tap line. The load shed only increases with time. Another contingency that this will help remediate is the Verde to Cottonwood Tie outage. So this project solves 2 contingencies.	N/A	13,536	02/01/24
10	MG OK LINE	New McGuireville to Oak Creek Substation - Sub Upgrade at Oak Creek	WE013294		McGuireville Substation Upgrade	918,406	The purpose of this project is to prevent shedding of approximately 8MW of load at Oak Creek (according to the APS 2016 Summer Operating Study report) during van N-1 occurrence of the Verde to Oak Creek Tap line. The load shed only increases with time. Another contingency that this will help remediate is the Verde to Cottonwood Tie outage. So this project solves 2 contingencies.	N/A	16,837	02/01/24
11	MG OK LINE	New McGuireville to Oak Creek Substation - UG	WE018165		New 69kV Line - McGuireville to Oak Creek Substation. - OPTION 1: Approximately 13.5 miles of new 69kV line, from McGuireville Substation to Oak Creek Substation. 11.5 miles will be new pole structures and wires, the remaining 2 miles will be double circuit with existing 69kV line from Oak Creek Tap. The 2 miles remaining to Oak Creek Substation will need to have the poles replaced to accommodate the double circuit from McGuireville. OPTION 2: Approximately 14.2 miles of new 69kV line, from McGuireville Substation to Oak Creek Substation along highways and Interstate 17. Entire 69kV line will have new pole structures and wires, the remaining 1 mile will be double circuit with existing 69kV line from Oak Creek Tap, and will need to have the poles replaced to accommodate the double circuit from McGuireville.	165,948	Solves 2 major contingencies for the NW - Outage of Verde - Oak Creek Tap which makes the line radial out of Coconino Substation, causing low voltage at Oak Creek - Outage of Verde - Cottonwood which makes the line radial out of Dugas, causing low voltage at Cottonwood.	13.50	277	12/10/24

**Arizona Public Service Company
2024 Transmission Estimated Addition Dollars and O&M**

Line #	Funding Project	Funding Project Name	WA#	Add'l WA's for the Funding Project	Description	Actual Cost	Purpose	Miles	Estimated O&M (a)	Estimated In-Service Date
12	PACIFIC NEWSUB	Pacific: Build New Sub - (69kV Line)	WE017198		Build the 350 feet of 69kV line to an In and Out configuration of the North Gila to Quechan 69kV transmission line. Remove Yuma Palm temporary 69kV tap.	1,321,710	The objective of this project is to prevent a thermal overload of T1294 transformer 3 at the temporary Yuma Palms substation. The transformer is forecasted to be at capacity in 2019 with 14.5MW on a 16MVA rated transformer. Transformer load actual in 2016 was of 13.7MW, additional load projects are forecasted to continue to infill the retail space adjoining the regional mall.	N/A	24,231	02/16/24
13	PARTICP BY APS	Participant Op by APS	Program		Participant Op by APS: Transmission assets and substation upgrades on participant lines where APS is the operating agent.	8,371,582	Replacement of end-of-life components will ensure a reliable transmission system. Facilities APS is a participant in and is the operator.	N/A	13,953	12/31/24
14	PARTICP BY OTH	Participant by Other	Program		Participant by Other: Transmission assets and substation upgrades on participant lines that APS is not the operating agent.	5,409,023	Replacement of end-of-life components will ensure a reliable transmission system. Facilities APS is a participant in, but not the operator.	N/A	9,015	12/31/24
15	PP BV 69 LINE	Boulevard - Pinnacle Peak 69 kV Line Rebuild (OH)	WE013217		Rebuild 3.5 miles of line with R795X and double circuit capable poles in order to achieve a 191 MVA rating.	4,028,106	Line overloads for some N-1 contingencies.	3.50	53,708	05/30/24
16	PP.GRF.69 LINE	Granite Reef - Pinnacle Peak 69 kV line(OH)	WE013218		Reconductor 2 miles of the 69kV line between Pinnacle Peak and Granite Reef substations in order to achieve a 1600A rating on the line. About one mile is already 1600 rating double circuit with Rawhide. Underground portion should be upgraded from 2250, to standard underground 2500 and 1.25 miles OH portion left should be upgraded to 795ACSS.	1,951,425	Eliminate overloads on the Pinnacle Peak - Granite Reef 69 kV line cause by Chaparral - Century 69 kV line (6% in 2023). Many outages lead to overloads in later years.	2.00	29,271	04/16/24
17	PP.GRF.69 LINE	Granite Reef - Pinnacle Peak 69 kV line(UG)	WE013355		Reconductor 2 miles of the 69kV line between Pinnacle Peak and Granite Reef substations in order to achieve a 1600A rating on the line. About one mile is already 1600 rating double circuit with Rawhide. Underground portion should be upgraded from 2250, to standard underground 2500 and 1.25 miles OH portion left should be upgraded to 795ACSS.	2,511,427	Eliminate overload on the Pinnacle Peak - Granite Reef 69 kV line.	2.00	37,671	04/22/24
18	PP.GRF.69 LINE	Granite Reef - Pinnacle Peak 69 kV line(SUB)	WE014336		Nothing was identified as needing replacement at the substations. Minor work may be needed for protection. Some work needed for fiber upgrade.	25,404	Eliminate overload on the Pinnacle Peak - Granite Reef 69 kV line.	N/A	381	04/03/24
19	RELWDPOLEREPL	Wood Pole Replacement	Program		Wood Pole Replacement: Replacement of poles found to not have 10 years of remaining life.	2,267,542	Failure to replace will result in more frequent and longer outages due to downed poles and present hazards to the public.	N/A	3,779	12/31/24
20	SG.115 KV SPOF	Saguaro 115kV Single Points of Failure (SUB)	WE013399		Single points of failure were identified on the following pieces of equipment: A. 115kV East Bus Differential B. 115kV West Bus Differential C. 115kV Breaker Relays D. 125VDC Battery.	689,218	TPL-001-4/TPL-001-5 identifies single points of failure and requires that utilities simulate loss of non-redundant elements to review the impact. The purpose of this project is to add redundancy to the identified single points of failure.	N/A	9,190	05/01/24
21	STORM LINES	Storm - Lines	Program		Storm - Lines: The purpose of this program is to replace transmission lines damaged resulting from storm and unplanned events.	2,488,702	To maintain and/or restore system operations	N/A	4,148	12/31/24
22	STRAT TEL	(Coconino/Cholla) Padre - Coconino Fiber	WA560367		(Coconino/Cholla) Padre - Coconino Fiber	4,525,753	(Coconino/Cholla) Padre - Coconino Fiber	N/A	7,543	12/31/24
23	STRAT TEL	(Pinnacle Peak/Preacher Cyn) Tonto - Preacher Canyon	WA561227		(Pinnacle Peak/Preacher Cyn) Tonto - Preacher Canyon	10,402,436	(Pinnacle Peak/Preacher Cyn) Tonto - Preacher Canyon	N/A	17,337	12/31/24
24	STRAT TEL	(Pinnacle Peak/Preacher Cyn) Mazatzal - Preacher Canyon [Forestry]	WA561221		(Pinnacle Peak/Preacher Cyn) Mazatzal - Preacher Canyon [Forestry]	5,028,417	(Pinnacle Peak/Preacher Cyn) Mazatzal - Preacher Canyon [Forestry]	N/A	8,381	12/31/24
25	STRAT TEL	(Cholla/Preacher Cyn) Preacher Canyon - Chevelon Fiber	WA559408		(Cholla/Preacher Cyn) Preacher Canyon - Chevelon Fiber	8,428,361	(Cholla/Preacher Cyn) Preacher Canyon - Chevelon Fiber	N/A	98,331	06/30/24
26	SUBAGEDEQUIP	Substation Aged Equipment Repl	Program		Replace aged, end-of-life assets to ensure a reliable system.	8,438,492	Replace aged, end-of-life assets to ensure a reliable system.	N/A	14,064	12/31/24
27	SUBSECURITY	Shaw 69kV Substation Hardening	WE019226		Build solid perimeter wall with interior security fence along with double gate entry (sally port). Security sensors and camera barrier installed around APS's substation.	359,752	The need for increased Substation Security is due to the recent events in the industry, FERC and EEI recommendations/standards, existing security improvement opportunities, proactive approach vs. reactive, protection systems need to protect against people, vehicles and bullets, Meet APS' Physical Security Plan.	N/A	5,996	03/28/24
28	TAIMPNGILATS8	Orchard - Marine Air Base 69kV Line Upgrade OH	WE013868		Upgrade the 69kV line from Orchard to Marine Air Base to R795X ACSS. It is an estimated 5.10 miles of work. The poles look to majority single circuit wood poles along County 14th St before transitioning to double circuit steel poles on Avenue 3E. The portion along County 14th St could be upgraded to double circuit with the new Orchard - Waldrip 69kV line.	3,996,306	This project is required to tie in the new Orchard substation into the 69 kV lines in the Yuma area and improve reliability by improving tie capability and reducing the impact of outages on the 69 kV lines in the Yuma area. In addition, this project will increase the capability of bringing outside generation into the Yuma area and reduce the dependence on the expensive generation at Yucca during peak loads.	5.10	19,982	10/22/24
29	TAIMPNGILATS8	Orchard - Waldrip 69kV New Line OH	WE013869		Install new single 69 kV circuit between Orchard substation and Waldrip substation. Upgrade 69 kV Marine Air Base to Orchard circuit along county 14th between Canal A and Orchard substation. Upgrade 12 kV Araby to Marine Air Base circuit along county 14th between Canal A and Orchard substation.	7,663,481	This project is required to tie in the new Orchard substation into the 69 kV lines in the Yuma area and improve reliability by improving tie capability and reducing the impact of outages on the 69 kV lines in the Yuma area. In addition, this project will increase the capability of bringing outside generation into the Yuma area and reduce the dependence on the expensive generation at Yucca during peak loads.	N/A	127,725	03/13/24
30	TAIMPNGILATS8	Waldrip Substation 69kV Addtions	WE016054		This work order to provide the labor and materials needed for a 69kV line into Waldrip Substation. This work order is for substation work needed at Waldrip to add a new 69kV ring bus breaker for the addition of the new Orchard - Waldrip.	370,719	This project is required to tie in the new Orchard substation into the 69 kV lines in the Yuma area and improve reliability by improving tie capability and reducing the impact of outages on the 69 kV lines in the Yuma area. In addition, this project will increase the capability of bringing outside generation into the Yuma area and reduce the dependence on the expensive generation at Yucca during peak loads.	N/A	5,561	04/11/24

**Arizona Public Service Company
2024 Transmission Estimated Addition Dollars and O&M**

Line #	Funding Project	Funding Project Name	WA#	Add'l WA's for the Funding Project	Description	Actual Cost	Purpose	Miles	Estimated O&M (a)	Estimated In-Service Date
31	TAIMPNGILATS8	Marine Air Base Substation Additions	WE016055		This work order to provide the labor and materials needed to replace switches MA 161 and MA 163, install a 69 kV bus tie breaker, and upgrade relays and RTU. This work is supporting the reconductor of the Orchard to Marine Air Base line.	590,369	This project is required to tie in the new Orchard substation into the 69 kV lines in the Yuma area and improve reliability by improving tie capability and reducing the impact of outages on the 69 kV lines in the Yuma area. In addition, this project will increase the capability of bringing outside generation into the Yuma area and reduce the dependence on the expensive generation at Yucca during peak loads.	N/A	7,872	05/24/24
32	TAIMPNGILATS8	Araby Substation 69kV Additions	WE015973		This work order is for substation labor and materials needed at Araby to add two new 69kV line breakers for the addition of the new double circuit line out of Araby feeding the Foothills and Redondo lines and a new 69kV bus section breaker.	571,474	This project is required to tie in the new Orchard substation into the 69 kV lines in the Yuma area and improve reliability by improving tie capability and reducing the impact of outages on the 69 kV lines in the Yuma area. In addition, this project will increase the capability of bringing outside generation into the Yuma area and reduce the dependence on the expensive generation at Yucca during peak loads.	N/A	10,477	02/23/24
33	TEN WEST LINK	Ten West Link - Delaney OH Line	WE015820		Wires to Wires interconnection request of a 500 kV line into the Delaney 500 kV yard. (1) Add four 500 kV breaker into yard to create breaker and half. (2) Add new 150 MVAR (525 kV base) shunt reactor and connecting 500 kV breaker to new Ten West Link line in Delaney yard.	96,007	Meet interconnection request requirements.	N/A	1,440	04/01/24
34	TPWE014059	Freedom - Willis New 69kV Line (69kV Line Child)	WE014191		To build a new 11 mile long line from Willis substation to the new Freedom substation. This line will be a new single circuit 69kV line with several different crossings. There is about ?? miles of 12kV circuits along the line that will need to be under-built on the new line.	12,615,386	To eliminate the low voltage issues in the Komatke/Estreita area during N-1's.	11.00	189,231	04/01/24
35	TPWE014078	Prescott City - Sundog 69kv (OH)	WE014079		Build approximately 1.5 miles of new 69 kV line from Sundog sub to the normally open Sundog Tap-Prescott City tap line. Remove the East Bus 7.2 MVAR capacitor bank from Sundog, and install a 14.4 MVAR at Bald Mountain, allowing the new line to use the 69kV bay. This will utilize the normally open line between Prescott city tap and Sundog tap creating a third line into Sundog, two of them from the Willow Lake source.	3,801,535	Project creates second 69kV source from Willow Lake to Sundog eliminating future 69kV line overloads.	1.50	44,351	06/05/24
36	TPWE014078	PC-SDG Bald Mountain SUB	WE014080		Build approximately 1.5 miles of new 69 kV line from Sundog sub to the normally open Sundog Tap-Prescott City tap line. Remove the East Bus 7.2 MVAR capacitor bank from Sundog, and install a 14.4 MVAR at Bald Mountain, allowing the new line to use the 69kV bay. This will utilize the normally open line between Prescott city tap and Sundog tap creating a third line into Sundog, two of them from the Willow Lake source.	559,179	Project creates second 69kV source from Willow Lake to Sundog eliminating future 69kV line overloads.	N/A	8,388	04/11/24
37	TPWE014078	PC-SDG Sundog SUB	WE014217		Build approximately 1.5 miles of new 69 kV line from Sundog sub to the normally open Sundog Tap-Prescott City tap line. Remove the East Bus 7.2 MVAR capacitor bank from Sundog, and install a 14.4 MVAR at Bald Mountain, allowing the new line to use the 69kV bay. This will utilize the normally open line between Prescott city tap and Sundog tap creating a third line into Sundog, two of them from the Willow Lake source.	627,335	Project creates second 69kV source from Willow Lake to Sundog eliminating future 69kV line overloads.	N/A	10,456	03/27/24
38	TPWE014167	Cactus to Century 69kV (Siting)	WE014235		New Cactus-Century 69kv line to fix overloads in the Northeast Valley.	450,071	In 2027 as a result of customer load increase and the retirement of the 230kV high Pressure Oil Filled (HPFF) system, Cactus to Century 69kV line is proposed to alleviate overloads on nine elements during N-1 contingency.	N/A	5,251	06/12/24
39	TPWE014788	Bullard - Goodyear 69kV Line	WE015826		Build a new single circuit 69kV line from Bullard to Goodyear substations. The line will cut through two customers properties from Bullard Ave to 143rd Ave. The estimated length is 1 mile long.	6,025,791	Add another 69kV source to the Bullard area to serve the ever growing load demand and future data centers.	1.00	20,086	11/08/24
40	TPWE014788	Pima - Bullard Double Circuit 69kV Line	WE014791		Rebuild existing single circuit 69kV line to double circuit 69kV. The line goes from Pima substation to the intersection of Van Buren and Bullard. The estimated length of the lines is 5.65 miles. Portions of it go through state land and to keep with the existing ROW the design is to stack the 69kV lines.	8,926,590	Add another 69kV source to the Bullard area to serve the ever growing load demand and future data centers.	5.65	119,021	05/30/24
41	TPWE014788	Pima - Bullard: Wildflower OH (Mitigation)	WE019124		UPDATE (9/23/2022): There is risk the Pima-Bullard line will not be in service before summer 2023. This would prevent us from serving customer load ramps. An alternative scope was proposed that could provide enough capacity for summer 2023. The original project scope would then be completed. The details of this temporary mitigation scope can be found in the scope tab of this child project.	106,636	To reliably serve the growing load demand around the Bullard substation in Goodyear.	N/A	355	11/08/24
42	TPWE014788	Pima - Bullard: Wildflower Sub (Mitigation)	WE019105		UPDATE (9/23/2022): There is risk the Pima-Bullard line will not be in service before summer 2023. This would prevent us from serving customer load ramps. An alternative scope was proposed that could provide enough capacity for summer 2023. The original project scope would then be completed. The details of this temporary mitigation scope can be found in the scope tab of this child project.	331,250	To reliably serve the growing load demand around the Bullard substation in Goodyear.	N/A	1,104	11/08/24
43	TPWE014833	Three Rivers Sub/Compass Phase 3 (230kV Line)	WE014836		Phase 3 of Compass Data Center to serve their load past 100 MWs. Siting, Design, and construction of two 230kV lines and a 230/69kV substation.	44,297,785	To supply over 100 MWs of power to Compass Data Center.	N/A	442,978	07/26/24

Arizona Public Service Company
2024 Transmission Estimated Addition Dollars and O&M

Line #	Funding Project	Funding Project Name	WA#	Add'l WA's for the Funding Project	Description	Actual Cost	Purpose	Miles	Estimated O&M (a)	Estimated In-Service Date
44	TPWE015287	Sunnyslope 230kV Single Point of Failure - [Summyslope Sub]	WE017388		Update and upgrade protection schemes and equipment at Sunnyslope 230kV yard. Upgrade 230/69kV Transformer #1, 230/69kV Transformer #3, 230kV gas insulated bus, 230kV oil system, 230kV breaker trip coils, 125VDC battery, and possibly the polarizing scheme.	3,517,249	TPL-001-4/TPL-001-5 identifies single points of failure and requires that utilities simulate loss of non-redundant elements to review the impact. The purpose of this project is to add redundancy to the identified single points of failure.	N/A	52,759	04/29/24
45	TPWE015311	Orangewood Sub Work For Griswold - Orangewood 69 kV Line Rebuild (Sub)	WE015373		(2) switches needed for replacement to achieve 191 MVA rating.	229,613	To prevent overload during Orangewood to Meadowbrook 69 kV line outage.	N/A	383	12/16/24
46	TPWE015313	Country Club - Encanto 69 kV Line Rebuild (OH)	WE015379		Rebuild whole line (~3.10 miles OH) with R795X and double circuit capable poles to achieve 191 MVA line rating. Consolidate lines on east and west side of 3rd Street between Sheridan and Thomas to single pole.	5,355,214	To prevent overload during the loss of the McDowell to West Phoenix 69 kV line and mitigate tunnel effect on 3rd Street.	3.10	80,328	04/10/24
47	TPWE015313	Country Club Sub Work For Country Club - Encanto 69 kV Line Rebuild (Sub)	WE015380		Replace (3) substation switches with new 2000 A models to achieve 191 MVA line rating.	219,180	To prevent overload during the loss of the McDowell to West Phoenix 69 kV line.	N/A	4,018	02/22/24
48	TPWE015316	Buckeye Substation Jumper Upgrade (SUB)	WE018569		The current 69 kV line between Celeborn and Buckeye line is limited by A336V conductor to 532 Amps. With this limitation the line overloads, and how much it overloads is dependent on the Badger solar generation as well as future loads set to be located in this area. Upgrading the line to current standard 1600 Amp rated will allow for future growth in the area. In upgrading this line, we also need to upgrade the jumpers in the Buckeye substation to accommodate this increase.	82,767	Upgrade Jumpers at Buckeye Substation 795 ASCC to accommodate the 1600 Amp rating of the line upgrade.	N/A	1,517	02/12/24
49	TPWE015316	Badger - Celeborn 69kV Line Rebuild	WE015629		The current 69kV line between Badger and Celeborn is limited by A336V conductor to 532 Amps. With this limitation the line overloads and how much it overloads is dependent on the Badger solar generation. Upgrading the line to current standard 1600 Amp rated will allow for future growth in the area. Part of the line is already upgraded to this R795X conductor so the other portions will need to be upgraded. Desert Sky is tapped off the line between Celeborn and Badger so the upgrade project will be split into two portions of Desert Sky - Celeborn and Desert Sky - Badger. All three substation 69kV equipment needs to be verified to be above 1600 Amps.	4,971,736	Upgrade Badger - Celeborn to R795X conductor to achieve a rating of 1600 Amps.	N/A	74,576	04/29/24
50	TPWE015316	Celeborn - Buckeye 69kV Line Rebuild	WE018536		The current 69kV line between Celeborn and Buckeye is limited by A336V and A477V conductors to 500 Amps. With this limitation the line overloads and how much it overloads is dependent on the Badger solar generation as well as future loads set to be located in this area. Upgrading the line to current standard 1600 Amp rated will allow for future growth in the area. Affected 69kV substations need to have their equipment verified to be above 1600 Amps.	5,805,990	Upgrade Celeborn - Buckeye to R795X to achieve a rating of 1600 Amps.	N/A	77,413	05/10/24
51	TPWE015316	Wintersburg Tap (Phillips) - Badger 69kV Line Rebuild	WE018537		The current 69kV line between Wintersburg Tap and Badger is limited by A336V conductor to 532 Amps. With this limitation the line overloads and how much it overloads is dependent on the Badger solar generation as well as future loads set to be located in this area. Upgrading the line to current standard 1600 Amp rated will allow for future growth in the area. Part of the line is already upgraded to this R795X conductor so the other portions will need to be upgraded. Affected 69kV substations need to have their equipment verified to be above 1600 Amps.	1,502,227	Upgrade Wintersburg Tap - Badger to R795X to achieve a rating of 1600 Amps.	N/A	25,037	03/22/24
52	TPWE015679	TS2: Build New Switchyard	WE015704		Build a 230kV switch yard at the TS2 location. The site is located at the North West corner of the 303 and Olive Ave in Section 25 Township 3 North, Range 2 West. The switch yard will consist of 4 230kV line terminations. Load growth in the West Valley is showing a need for the site for both Transmission and Distribution Planning. Estimated cost is \$15 mil ion.	21,314,288	The site is located centrally in the West Valley and will allow for load growth with adding another source to the West Valley 69 kV system. The West Valley is growing, and the current 230 kV sources at Surprise and El Sol don't allow for added 230/69kV transformers in their current design. The West Valley is seeing growing growth in economic development with the influx of data centers, distribution centers, and large customers such as Red Bull. These larger customers require more 230 kV sources to serve their energy demands. The location of the substation also allows for APS to connect two North to South 230 kV systems: Westwing - White Tanks and Trilly Wash - Palm Valley. The site is located in an area where residential growth and commercial growth is happening along the 303. Current distribution substations are all over 3 miles away, allowing for a good spot to split feeders up and add a second source to customers looking for two alternate feeds.	N/A	284,191	05/10/24

**Arizona Public Service Company
2024 Transmission Estimated Addition Dollars and O&M**

Line #	Funding Project	Funding Project Name	WA#	Add'l WA's for the Funding Project	Description	Actual Cost	Purpose	Miles	Estimated O&M (a)	Estimated In-Service Date
53	TPWE015679	TS2 Switchyard: Build new 230kV OH lines	WE015708		Build a 230kV switch yard at the TS2 location. The site is located at the North West corner of the 303 and Olive Ave in Section 25 in Township 3 North, Range 2 West. The switch yard will consist of 4 230kV line terminations. Load growth in the West Valley is showing a need for the site for both Transmission and Distribution Planning. Estimated cost is \$15 million.	6,030,303	The site is located centrally in the west valley and will allow for load growth with adding another source to the West Valley 69kV system. The West Valley is growing and the current 230kV sources at Surprise and El Sol don't allow for added 230/69kV transformers in their current design. The West Valley is seeing growing growth in Economic Development with the influx of data centers, distribution centers, and large customers such as Red Bull. These larger customers require for more 230kV sources to serve their energy demands. The location of the substation also allows for APS to connect two North to South 230kV systems: Westwing - White Tanks and Triby Wash - Palm Valley. The site is located in an area where residential growth and commercial growth is happening along the 303. Current distribution substations are all over 3 miles away allowing for a good spot to split feeders up and add a second source to customers looking for two alternate feeds.	N/A	80,404	05/07/24
54	TPWE015726	QUAIL SPRINGS Bus Tie Breaker - Sub	WE016681		Add 69 kV bus tie breaker at Quail Springs.	1,416,212	Add reliability to 69 kV system	N/A	4,721	11/18/24
55	TPWE015726	QUAIL SPRINGS Bus Tie Breaker - OH	WE016799		Install a new 2000 A, 40 kA, 69 kV bus tie breaker at Quail Springs.	584,543	Add reliability to 69 kV system	N/A	1,948	11/21/24
56	TPWE015731	Desert Springs 69 kV Bus Tie-Breaker (SUB)	WE016633		Install 69 kV Bus tie breaker, replace old relays, and upgrade engineering access.	3,386,373	To prevent substation outage due to 69 kV bus fault or line breaker failure.	N/A	50,796	04/04/24
57	TPWE015774	Hatfield 69 kV Cap Banks (SUB)	WE016630		Install two (2) 69 kV, 14.4 MVar cap banks on the east bus at Hatfield.	2,456,244	To keep voltage above TPE voltage criteria of 0.90 at Hatfield during N-1 contingencies, and above TOE voltage criteria of 0.95 at Hatfield, Hedgepeth Hills and Eagle after loss of Westwing - Hatfield line.	N/A	32,750	05/02/24
58	TPWE015954	Cholla Oil Containment-xfmrs T3 & T6 Banks	WE015954		Construct new oil containment for Transformers T3 and T6 banks. Relocate the trench away from transformers and containments.	3,912,392	This is an environmental concern as the transformers have been leaking for some time.	N/A	52,165	05/30/24
59	TPWE016460	White Tanks SPOF Work (SUB)	WE016463		Fix all SPOF issues. Remove 69 kV APS-SRP tie. Install new 69 kV bus tie breaker. Install new station power off new transformer #12.	4,278,794	SPOF will increase reliability and protection with redundant equipment. New breaker will have the 230/69 transformers #8, 12 on separate buses.	N/A	49,919	06/27/24
60	TPWE016460	New Breaker, Station Power, Tie Removal Work (SUB)	WE016464		Fix all SPOF issues. Remove 69 kV APS-SRP tie. Install new 69 kV bus tie breaker. Install new station power off new transformer #12.	935,618	SPOF will increase reliability and protection with redundant equipment. New breaker will have the 230/69 transformers #8, 12 on separate buses.	N/A	12,475	05/30/24
61	TPWE016554	Redhawk SPOF (SUB)	WE016629		Fix 525 kV Protection Issues at Redhawk	1,446,067	Eliminate Single Point of Failure (SPOF) at Redhawk 525 kV	N/A	28,921	01/18/24
62	TPWE016665	SUMMIT - Williams line rebuild	WE016687		Rebuild 8 mile Summit- Williams OH line	6,228,980	Mitigate Summit-Williams overload	8.00	124,580	01/31/24
63	TPWE016665	SUMMIT Sub work	WE016740		Rebuild 8 mile Summit- Williams OH line	174,475	Mitigate Summit-Williams overload	N/A	872	10/16/24
64	TPWE016665	Williams Sub work	WE016763		Rebuild 8 mile Summit- Williams OH line	184,117	Mitigate Summit-Williams overload	N/A	1,534	08/26/24
65	TPWE016668	Kirkland - Yamell rebuild	WE016691		Rebuild 11.25 miles Kirkland-Yamell line	13,989,910	Mitigate overload of Aguila - Flying. This an old line	11.25	279,798	01/23/24
66	TPWE016668	Kirkland Substation	WE016770		Rebuild 11.25 miles Kirkland-Yamell line	273,220	Mitigate overload of Aguila - Flying. This an old line	N/A	5,464	01/23/24
67	TPWE016668	Yamell Substation SUB - Relay work	WE016771		Upgrade relaying, New communications, protection.	765,577	Mitigate overload of Aguila - Flying. This an old line	N/A	10,208	05/10/24
68	TPWE016741	HPFF Mitigation Phase 1: Country Club - Lincoln St - [UG]	WE018820		HPFF Mitigation Phase 1: Country Club - Lincoln St UG includes the following tasks: (1) Removed mineral oil from cooling system and existing 1750kcmil cable (2) Smart pig both primary and return piping fixing any piping concerns (3) Pull new 3000kcmil in both the primary and the return pipe (4) Add 80-100 MVAR breaker switched shunt reactor at Country Club 230.	64,738,791	Mitigate the following system conditions that can result in line overloads: (1) Static or cooling failure before 2025 (2) Long-term HPFF failure n=0 cooled (3) Long-term n-t > 4 hours (see Ops 2020 study) (4) Common Corridor outage conditions.	N/A	971,082	04/29/24
69	TPWE016741	HPFF Mitigation Phase 1: Country Club - Lincoln St - [Lincoln St Sub]	WE016742		HPFF Mitigation Phase 1: Country Club - Lincoln St includes the following tasks: (1) Removed mineral oil from cooling system and existing 1750kcmil cable (2) Smart pig both primary and return piping fixing any piping concerns (3) Pull new 3000kcmil in both the primary and the return pipe (4) Add 80-100 MVAR breaker switched shunt reactor at Country Club 230.	2,519,219	Mitigate the following system conditions that can result in line overloads: (1) Static or cooling failure before 2025 (2) Long-term HPFF failure n=0 cooled (3) Long-term n-t > 4 hours (see Ops 2020 study) (4) Common Corridor outage conditions	N/A	46,186	02/06/24
70	TPWE016741	HPFF Mitigation Phase 1: Country Club - Lincoln St - [County Club Sub]	WE016743		HPFF Mitigation Phase 1: Country Club - Lincoln St includes the following tasks: (1) Removed mineral oil from cooling system and existing 1750kcmil cable (2) Smart pig both primary and return piping fixing any piping concerns (3) Pull new 3000kcmil in both the primary and the return pipe (4) Add 80-100 MVAR breaker switched shunt reactor at Country Club 230.	8,108,102	Mitigate the following system conditions that can result in line overloads: (1) Static or cooling failure before 2025 (2) Long-term HPFF failure n=0 cooled (3) Long-term n-t > 4 hours (see Ops 2020 study) (4) Common Corridor outage conditions.	N/A	108,108	05/16/24
71	TPWE016820	Contrail Phase 2 - 230kV Line El Sol to Contrail	WE019241		Phase 2 includes moving Contrail substation onto the 230 kV system. This required building (3) new 230 kV lines - one from TS2, the other 2 would cut-in to the existing El Sol - White Tanks 230 kV line. Include 69kV underbuild. The preferred route: https://www.aps.com/-/media/APSC/APSCOM-PDFs/About/Construction-and-Power-Line-Siting/Power-Line-Siting/Power-Line-Siting-Projects/West-Valley-Central/FIG_Prefered_Route.ashx?la=en&hash=1D4F703AC14FC8B7EF8D537C69D6BBE2	17,193,970	To help meet customers load ramp.	N/A	28,657	12/20/24
72	TPWE017081	230 kV TSMC Tie Lines (UG)	WE017086		Build four (4) UG 230 kV 0.5 mile tie lines to TSMC as phase 1 and phase 2.	8,578,863	Provide 230 kV service to customer.	2.00	28,596	11/08/24

**Arizona Public Service Company
2024 Transmission Estimated Addition Dollars and O&M**

Line #	Funding Project	Funding Project Name	WA#	Add'l WA's for the Funding Project	Description	Actual Cost	Purpose	Miles	Estimated O&M (a)	Estimated In-Service Date
73	TPWE017448	Cholla 345kV Shunt Reactors - [Cholla 345kV Sub]	WE017449		A potential unmitigable voltage concern can arise during loss of both Cholla 500/345kV transformers. The main risk occurs during maintenance on one of the Cholla 500/345kV transformers for the loss of the other. During this situation there are limited options for Operations other than to open the entire Cholla 345kv yard. To reduce the local voltages to within the acceptable 5% nominal voltage Further, the shut down of Cholla power stations and reduced loading during n-0 conditions continue to have the Cholla 345kV system operating at or near acceptable voltage limits. The proposed solution is 2-120MVAR switchable bus shunt reactors.	18,174,761	The purpose if to provide Operations the tools they need to be able to mitigate high voltage conditions, specifically but not limited to, the loss of both Cholla 500/345kV transformers.	N/A	30,291	12/30/24
74	TPWE017448	Cholla 345kV Shunt Reactors - Relay Upgrades - [Preacher Canyon 345kV Sub]	WE017862		Replace 345kV line relays for the Preacher Canyon - Cholla line.	272,579	The purpose if to provide Operations the tools they need to be able to mitigate high voltage conditions, specifically but not limited to, the loss of both Cholla 500/345kV transformers.	N/A	2,271	08/02/24
75	TPWE017448	Cholla 345kV Shunt Reactors - Relay Upgrades - [Four Corners 345kV Sub]	WE017898		A potential unmitigable voltage concern can arise during loss of both Cholla 500/345kV transformers. The main risk occurs during maintenance on one of the Cholla 500/345kV transformers for the loss of the other. During this situation there are limited options for Operations other than to open the entire Cholla 345kv yard. To reduce the local voltages to within the acceptable 5% nominal voltage Further, the shut down of Cholla power stations and reduced loading during n-0 conditions continue to have the Cholla 345kV system operating at or near acceptable voltage limits. The proposed solution is 2-120MVAR switchable bus shunt reactors.	290,406	The purpose if to provide Operations the tools they need to be able to mitigate high voltage conditions, specifically but not limited to, the loss of both Cholla 500/345kV transformers.	N/A	2,420	08/02/24
76	TPWE017448	Cholla 345kV Shunt Reactors - Relay Upgrades - [Mazatzal 345kV Sub]	WE017900		A potential unmitigable voltage concern can arise during loss of both Cholla 500/345kV transformers. The main risk occurs during maintenance on one of the Cholla 500/345kV transformers for the loss of the other. During this situation there are limited options for Operations other than to open the entire Cholla 345kv yard. To reduce the local voltages to within the acceptable 5% nominal voltage Further, the shut down of Cholla power stations and reduced loading during n-0 conditions continue to have the Cholla 345kV system operating at or near acceptable voltage limits. The proposed solution is 2-120MVAR switchable bus shunt reactors.	144,196	The purpose if to provide Operations the tools they need to be able to mitigate high voltage conditions, specifically but not limited to, the loss of both Cholla 500/345kV transformers.	N/A	1,202	08/02/24
77	TPWE017448	Cholla 345kV Shunt Reactors - [Cholla 345kV UG]	WE017860		Underground the existing overhead 69kV line section between the 69kV bus and the Cholla 345/69kV #8 transformer as required to allow for the installation of the new 120MVAR bus shunt reactor tied to the west 345kV bus.	1,077,109	The purpose if to provide Operations the tools they need to be able to mitigate high voltage conditions, specifically but not limited to, the loss of both Cholla 500/345kV transformers.	N/A	17,952	03/31/24
78	TPWE017906	West Phoenix Transformer#10-Fix protection gap (Sub)	WE017908		While on the transfer bus, we lose differential capabilities and have limited communication between the 230kv and the 69kv yard. For a fault on the 69kv bus, the 311L in the 230kv yard has no way to detect a fault condition and open 230kv breakers. We considered sending a transfer trip via the 311L for a fault condition detected by transfer relay but we would mis-operate for any 69kv fault at or around West Phoenix and it would introduce potential error traps for field personnel. Proposed solution: Setup a differential scheme using transfer relay/breaker. 1. Upgrade 311C transfer relay to 311L2. Upgrade existing 311L's protecting 69kv leads 3. Communication reconfiguration 4. Input from 69kV PTs to SEL-311L relay located on low side of transformer #10	174,416	Fix the protection gap related to T10 in West Phoenix	N/A	.872	10/01/24
79	TPWE017913	Vista 69kV Cap Bank Substation Work	WE018576		Install a 69kV capacitor bank at Vista substation to provide voltage support. In an N-1 condition with the Eastgate - Vista 69kV line out, Vista substation will see .93 per unit voltage levels.	2,996,334	Provide voltage support at Vista substation.	N/A	29,963	07/02/24
80	TPWE018138	Deer Valley to Commerce OH Double Circuit 69kV Line Rebuild	WE018147		Rebuild Deer Valley to Commerce double circuit lines to 191 MVA with substation work at Deer Valley.	10,388,944	Customer facility expansion.	N/A	138,519	05/14/24
81	TPWE018238	Project Skyway Customer Sub	WE018258		A large data center is going to be constructed near N 40th St and the 202 (north of Sky Harbor). This load will be over 350 MW when completed. Project Skyway has 4 phases. Phase 1 is considered here. A new Gas Insulated Switchgear (GIS) Substation will be built on the customer property and will connect to the system by cutting into the nearby 23rd St to 40th Place 69kV line. UPDATE(10/12/22); UPDATE(1/31/23)	922,552	To serve a new data center.	N/A	13,838	04/22/24
82	TPWE018316	Thunderbird to Vogel (OH 69kV)	WE018348		Replace around 54 poles from Thunderbird Rd to Vogel Ave due to mechanical overloads, upgrade conductor and fiber.	3,865,824	To prevent line collapse.	N/A	57,987	04/17/24
83	TPWE018533	Ocotillo Bay Swap (OH)	WE018543		Right now all elements on the North 230kV bus at Ocotillo draw power from Ocotillo and cause high loading on the bus tie. Need to swap one 230kV line on the North 230kV bus at Ocotillo with one on the Center 230kV bus	283,760	The loss of the North/Center 230kV bus breaker will overload Oco 230/69 T1 by 1.1% in 2025. Other outages will cause the bus tie to overload in later years.	N/A	3,783	05/03/24
84	TPWE018591	L10 69kV OH Line Siting	WE018778		Build a new substation (initially a switchyard) into the Thornton - Eastgate 69kV line and Eastgate - Toltec 69kV line. Install two 10.8 MVAR capacitor banks at the new substation. Build a new 69kV line from Arica to the new substation. Build a new 69kV line from Toltec to the new substation	467,679	To relieve an overload of the Toltec - Milligan 69kV line for the loss of the Casa Grande 230/69 transformer and Casa Grande - Milligan paired element.	N/A	6,236	05/01/24

**Arizona Public Service Company
2024 Transmission Estimated Addition Dollars and O&M**

Line #	Funding Project	Funding Project Name	WA#	Add'l WA's for the Funding Project	Description	Actual Cost	Purpose	Miles	Estimated O&M (a)	Estimated In-Service Date
85	TPWE018615	Dysart to El Sol 69 kV Reconductor (OH)	WE018650		Reconductor 69kV line from Dysart - El Sol with 795ACSS (4.1 miles). Replace tap switch at Marquette tap (69K6376) with 1200A switch. Add 288 count fiber on rebuilt line.	5,596,607	Starting in Summer 2024, Dysart - El Sol 69kV line becomes overloaded (105%) under N-1 conditions during loss of Dysart - Surprise 69kV line. The overload continues to grow year-over-year as load in the area is projected to increase.	4.10	83,949	04/19/24
86	TPWE018615	Dysart to El Sol 69 kV Reconstructor (Dysart SUB)	WE018658		Replace/upgrade 2 jumpers at Dysart Substation on the Dysart - El Sol 69 kV line to >1600A: DY561 to DY562 DY562 to DY563 Replace 3 switches to >1600A: DY561 DY562 DY861 Replace one 69kV breaker with >1600A: DY562 Replace DY562 SEL-321 Relay (20+ yrs old).	453,494	Starting in Summer 2024, Dysart - El Sol 69kV line becomes overloaded (105%) under N-1 conditions during loss of Dysart - Surprise 69kV line. The overload continues to grow year-over-year as load in the area is projected to increase.	N/A	6,802	04/26/24
87	TPWE018615	Dysart to El Sol 69 kV Reconstructor (El Sol SUB)	WE018749		Replace/upgrade 2 jumpers at El Sol Substation on the Dysart - El Sol 69 kV line to >1600A: ES2663 to ES2662 ES2662 to ES2661. Replace 2 switches to >1600A: ES2663 ES2664.	303,615	Starting in Summer 2024, Dysart - El Sol 69kV line becomes overloaded (105%) under N-1 conditions during loss of Dysart - Surprise 69kV line. The overload continues to grow year-over-year as load in the area is projected to increase.	N/A	4,554	04/15/24
88	TPWE018648	Freedom - West Park 69kV Line Rebuild (OH)	WE018660		Rebuild the ~3.4mi section of the West Park - Freedom 69kV (portion between Lower Buckeye Rd./S. Tuhill Rd. intersection and S. Watson Rd.) line with R795X-ACSS.	3,878,685	Summer 2025 shows 103% loading with no additional load additions, outside of forecasted load, with loss of Buckeye - Watson 230kV line. Significant customer loads recently proposed in this area which would drive this need to Summer 2023.	N/A	58,180	04/18/24
89	TPWE018649	Hubwest - West Park 69kV Line Rebuild (OH)	WE018667		Rebuild 3.5mi of existing Hubwest - Valencia - West Park 69 kV line. Install 288 count f ber along rebuilt route.	2,631,935	Summer 2027 shows 108% loading with no additional load additions, outside of forecasted load, with loss of Buckeye - Watson 230kV line. Significant customer loads recently proposed in this area which would drive this need to Summer 2025.	N/A	30,706	06/07/24
90	TPWE018758	Dugas-Copper Canyon (NW-4-6) Bay Move - SUB	WE018773		The Dugas-Copper Canyon 69kV line currently terminates on the Southern Copper Canyon 69kV bus (Bay 7). This project proposes a build out of the Northern-most 69kV line bay (Bay 1) and a Bay Move of the Dugas-Copper Canyon 69kV line from Bay 7 into Bay 1, relocating it to the Northern Copper Canyon 69kV bus section.	561,478	Once the Copper Canyon 69kV Bus Tie Breaker (WE015729) is installed in 2023, in the event of a separation of the North and South busses (fault on CU XFRMR 11), the Copper Canyon, Hayfield Draw, & Quail Springs substations become exclusively dependent on the Verde source to the North, straining the Verde-Cottonwood Tie, Cottonwood Tie-Clarkdale, Clarkdale-Cottonwood Tap, and Cottonwood Tap-Quail Springs 69kV lines.	N/A	9,358	03/22/24
91	TPWE018758	Dugas-Copper Canyon (NW-4-6) Bay Move - OH	WE018774		The Dugas-Copper Canyon 69kV line currently terminates on the Southern Copper Canyon 69kV bus (Bay 7). This project proposes a build out of the Northern-most 69kV line bay (Bay 1) and a Bay Move of the Dugas-Copper Canyon 69kV line from Bay 7 into Bay 1, relocating it to the Northern Copper Canyon 69kV bus section.	406,165	Once the Copper Canyon 69kV Bus Tie Breaker (WE015729) is installed in 2023, in the event of a separation of the North and South busses (fault on CU XFRMR 11), the Copper Canyon, Hayfield Draw, & Quail Springs substations become exclusively dependent on the Verde source to the North, straining the Verde-Cottonwood Tie, Cottonwood Tie-Clarkdale, Clarkdale-Cottonwood Tap, and Cottonwood Tap-Quail Springs 69kV lines.	N/A	6,092	04/09/24
92	TPWE018781	Saguaro T829 Transformer Replacement	WE017391		Install (1) new 500-230/115kV 600MVA transformer - T4 (Maximo T828) needs to be done prior to T7 (Maximo T829). - Both pads will need to be removed and new ones installed - Wiring and controls to and from the control house will need to be reviewed and scoped - Soil remediation round the pads will be required - Install new oil retention - Impedance study was completed in order to spec out the transformers - Relays not needed, they were replaced with the last 500kV SPOE	9,058,584	Transformer upgrade	N/A	60,391	09/16/24
93	TPWE018781	Saguaro T828 Transformer Replacement	WE017390		Install (1) new 500-230/115kV 600MVA transformer - T4 (Maximo T828) needs to be done prior to T7 (Maximo T829). - Both pads will need to be removed and new ones installed - Wiring and controls to and from the control house will need to be reviewed and scoped - Soil remediation round the pads will be required - Install new oil retention - Impedance study was completed in order to spec out the transformers - Install Firewall - Relays not needed, they were replaced with the last 500kV SPOE	8,849,720	Transformer upgrade	N/A	147,495	03/08/24
94	TRANS RW RENEW	Trans Land ROW Renewals	Program		Trans Land ROW Renewals: Transmission lines constructed on State/Government land are issued a ROW with a schedule of payments.	1,016,910	Trans Land ROW Renewals: Transmission lines constructed on State/Government land are issued a ROW with a schedule of payments.	N/A	1,695	12/31/24
95	TRIBAL RW RENEW	Tribal Land ROW Renewals	Program		Right of Way Payments for Tribal Land (for Transmission lines)	22,847,313	Right of Way Payments for Tribal Land (for Transmission lines)	N/A	38,079	12/31/24
96	UNPLND EMERG	Unplanned/Emergency	Program		Unplanned/Emergency: Replacement of Transmission capital equipment resulting from unforeseen system conditions that resulted in unplanned outages.	6,980,900	To maintain and/or restore system operations	N/A	11,635	12/31/24
97	WSTWING-WSTBRK	Westwing - Westbrook 69 kV Line Rebuild (OH)	WE012086		Rebuild about seven miles of OH 69kV from Westwing to Westbrook substation to obtain 1600A rating. About 3.3 miles of this line is double circuited with the Westwing - Rio Vista 69kV line. This line route crosses state land which requires a 24 month permitting process.	7,952,395	Continued load growth has caused the Bell - Mountain View 69kV outage to overload the Westwing - Westbrook 69kV line to 102.2% in 2019. The Mountain View bus tie contingency causes the Westwing - Westbrook 69kV line to overload to 109.4%. Other contingencies cause the Westwing - Westbrook 69kV line to overload including: stuck breaker #7 at Deer Valley 230kV, and common structures for the Deer Valley and Westwing 230kV lines.	7.00	79,524	07/01/24

Total Transmission Estimate

493,325,024

ATTACHMENT H

Attachment H

Arizona Public Service Company
Formula Rate -- Appendix A

Shaded cells are input cells

Allocators

		Notes	FERC Form 1 Page # or Instruction	2022
1	Wages & Salary Allocation Factor			
1	Transmission Wages Expense	p354.21.b		24,856,252
2	Total Wages Expense	p354.28b		405,808,171
3	Less A&G Wages Expense	p354.27b		120,347,936
4	Total	(Line 2 - 3)		286,460,235
5	Wages & Salary Allocator	(Line 1 / 4)		8.6072%
6	Plant Allocation Factors			
6	Electric Plant in Service	(Note B)	Attachment 5	23,266,195,622
7	Total Plant in Service		(Sum Line 6)	23,266,195,622
8	Accumulated Depreciation (Total Electric Plant)		Attachment 5	8,736,429,033
9	Total Accumulated Depreciation		(Line 8)	8,736,429,033
10	Net Plant		(Line 7 - 9)	14,529,766,589
11	Transmission Gross Plant		(Line 22 - Line 41)	3,904,712,755
12	Gross Plant Allocator		(Line 11 / 7)	16.7828%
13	Transmission Net Plant		(Line 32 - Line 41)	2,743,393,088
14	Net Plant Allocator		(Line 13 / 10)	18.8812%
Plant Calculations				
15	Plant In Service (Note O)			
15	Transmission Plant In Service	(Note B)	Attachment 5	3,582,103,476
16	New Transmission Plant Additions for Current Calendar Year. (weighted by months in service)		Attachment 6	115,823,921
17	Total Transmission Plant In Service		(Line 15 + 16)	3,697,927,397
18	General & Intangible		Attachment 5	2,429,709,246
19	Total General		(Line 18)	2,429,709,246
20	Wage & Salary Allocation Factor		(Line 5)	8.6072%
21	General Plant Allocated to Transmission		(19 * 20)	209,130,330
22	TOTAL Plant In Service		(Line 17 + 21)	3,907,057,727
Accumulated Depreciation				
23	Transmission Accumulated Depreciation	(Note B)	Attachment 5	1,026,918,316
24	Accumulated Depreciation for Transmission Plant Additions for Current Rate Year		Attachment 6	631,546
25	Total Transmission Accumulated Depreciation		(Line 23 + Line 24)	1,027,750,664
26	Accumulated General Depreciation		Attachment 5	484,343,111
27	Accumulated Intangible Depreciation		Attachment 5	1,067,485,006
28	Total Accumulated Depreciation		(Sum Lines 26 to 27)	1,551,828,119
29	Wage & Salary Allocation Factor		(Line 5)	8.6072%
30	General Allocated to Transmission		(Line 28 * 29)	133,569,203
31	TOTAL Accumulated Depreciation		(Line 25 + 30)	1,161,319,667
32	TOTAL Net Property, Plant & Equipment		(Line 22 - 31)	2,745,738,060
Adjustment To Rate Base				
33	Accumulated Deferred Income Taxes			
33	ADIT net of FASB 106 and 109		Attachment 1	-365,340,346
34	Accumulated Deferred Income Taxes Allocated To Transmission		(Line 33)	-365,340,346
35	Regulatory Assets and Liabilities			
35	Deficit Deferred Taxes Regulatory Asset (Account 182.3)		Attachment 9	7,994,581
36	Excess Deferred Taxes Regulatory Liability (Account 254)		Attachment 9	-229,872,449
37	Deficit/Excess Deferred Taxes Regulatory Assets and Liabilities Allocated to Transmission		(Line 35 + 36)	-221,877,468
38	Transmission O&M Reserves			
38	Total Balance Transmission Related Account 242 Reserves	Enter Negative	Attachment 5	-13,980,332
39	Prepayments			
39	Prepayments	(Note A)	Attachment 5	6,316,246
40	Total Prepayments Allocated to Transmission		(Line 39)	6,316,246
41	Land Held for Future Use			
42	Materials and Supplies			
42	Undistributed Stores Exp	(Note A)	p227.6c & 16.c	1,946,988
43	Wage & Salary Allocation Factor		(Line 5)	8.6072%
44	Total Transmission Allocated		(Line 42 * 43)	167,581
45	Transmission Materials & Supplies		p227.8c	62,625,376
46	Total Materials & Supplies Allocated to Transmission		(Line 44 + 45)	62,992,957
47	Cash Working Capital			
47	Operation & Maintenance Expense		(Line 75)	73,432,023
48	Zero Cash Working Capital		Zero	0.0%
49	Total Cash Working Capital Allocated to Transmission		(Line 47 + 48)	0
50	Network Credits			
50	Outstanding Network Credits	(Note N)	Attachment 5	23,789,220
51	Less Accumulated Depreciation Associated with Facilities with Outstanding Network Credits	(Note N)	Attachment 5	5,359,626
52	Net Outstanding Credits		(Line 50 - 51)	18,429,594
53	TOTAL Adjustment to Rate Base		(Line 34 + 37 + 38 + 40 + 41 + 46 + 49 - 52)	-547,973,565
54	Rate Base		(Line 32 + 53)	2,197,764,495

Attachment H

O&M

Transmission O&M			
55 Transmission O&M	p321.112.b		96,260,620
56 Less Account 565	p321.96.b		41,137,207
57 Transmission O&M	(Line 55 - 56)		55,123,413
Allocated General Expenses			
58 Total A&G	p323.197.b		159,849,226
59 Less PBOP Adjustment	Attachment 5		-32,297,585
60 Less Property Insurance Account 924	p323.185b		3,940,023
61 Less Regulatory Commission Exp Account 928	p323.189b		22,739,161
62 Less General Advertising Exp Account 930.1	p323.191b		9,841,274
63 Less EPRU Dues	p352.353		430,650
(Note E)			
64 General Expenses	(Line 58) - Sum (59 to 63)		155,195,683
65 Wage & Salary Allocation Factor	(Line 5)		8,607%
66 General Expenses Allocated to Transmission	(Line 64 * 65)		13,358,028
Directly Assigned A&G			
67 Regulatory Commission Exp Account 928	(Note G)	Attachment 5	4,206,659
68 General Advertising Exp Account 930.1	(Note K)	Attachment 5	0
69 Subtotal - Transmission Related	(Line 67 + 68)		4,206,659
70 Property Insurance Account 924	p323.185b		3,940,023
71 General Advertising Exp Account 930.1	Attachment 5		0
72 Total	(Line 70 + 71)		3,940,023
73 Net Plant Allocation Factor	(Line 14)		18,881%
74 A&G Directly Assigned to Transmission	(Line 72 * 73)		743,923
75 Total Transmission O&M	(Line 57 + 66 + 69 + 74)		73,432,023
Depreciation & Amortization Expense			
Depreciation Expense (Note P)			
76 Transmission Depreciation Expense	p336.7f		73,273,862
77 New plant Depreciation Expense	Attachment 6		2,493,573
78 Total Transmission Depreciation Expense	(Line 76 + Line 77)		75,767,435
79 General Depreciation	p336.10f		81,107,945
80 Intangible Amortization	p336.11f		84,869,740
81 Total	(Line 79 + 80)		165,977,685
82 Wage & Salary Allocation Factor	(Line 5)		8,607%
83 General Depreciation Allocated to Transmission	(Line 81 * 82)		14,286,058
84 Total Transmission Depreciation & Amortization	(Line 78 + 83)		90,053,493
Taxes Other than Income			
85 Taxes Other than Income	Attachment 2		42,897,618
86 Total Taxes Other than Income	(Line 85)		42,897,618
Return / Capitalization Calculations			
Long Term Interest			
87 Long Term Interest	p117.62c through 67c		247,582,223
88 Long Term Interest	(Line 87)		247,582,223
89 Preferred Dividends	enter positive	p118.29c	0
Common Stock			
90 Proprietary Capital	p112.18c		6,941,726,156
91 Less Preferred Stock	(Line 99)		0
92 Less Accumulated Other Comprehensive Income Account 219	p112.15c		15,596,457
93 Less Account 216.1	p112.12c		0
94 Common Stock	(Sum Lines 90 to 93)		6,957,322,613
Capitalization			
95 Long Term Debt	p112.18c through 23c		6,872,134,016
96 Less Loss on Reacquired Debt	p111.81c		-9,468,114
97 Plus Gain on Reacquired Debt	p113.61c		25,259
98 Total Long Term Debt	(Sum Lines 95 to 97)		6,862,691,161
99 Preferred Stock	p112.3c		0
100 Common Stock	(Line 94)		6,957,322,613
101 Total Capitalization	(Sum Lines 98 to 100)		13,820,013,774
102 Debt %	(Line 98 / 101)		50%
103 Preferred %	(Line 99 / 101)		0%
104 Common %	(Line 100 / 101)		50%
105 Debt Cost			
106 Preferred Cost	(Line 88 / 98)		0.0361
107 Common Cost	(Line 89 / 99)		0.0000
(Note J)	Fixed		0.1075
108 Weighted Cost of Debt	(Line 102 * 105)		0.0179
109 Weighted Cost of Preferred	(Line 103 * 106)		0.0000
110 Weighted Cost of Common	(Line 104 * 107)		0.0541
111 Total Return (R)	(Sum Lines 108 to 110)		0.0720
112 Investment Return = Rate Base * Rate of Return	(Line 54 * 111)		158,311,149

Attachment H

Composite Income Taxes			
Income Tax Rates			
113	FIT=Federal Income Tax Rate		21.00%
114	SIT=State Income Tax Rate or Composite		4.72%
115	p	(Note i)	0.00%
116	T = 1-[(1-SIT) * (1-FIT)]/(1-SIT * FIT * p)}		24.73%
117	T/ (1-T)		32.85%
ITC Adjustment			
118	Amortized Investment Tax Credit	(Note i) enter negative.	0
119	T/(1-T)	p266.6f (Line 117)	32.85%
120	Net Plant Allocation Factor	(Line 14)	18.8812%
121	ITC Adjustment Allocated to Transmission	(Line 118 * (1 + 119) * 120)	0
Deficient/Excess Deferred Taxes Amortization			
122	Amortized Deficient Deferred Taxes (Account 410.1)	Attachment 9	401,241
123	Amortized Excess Deferred Taxes (Account 411.1)	Attachment 9	-5,850,679
124	Total	(Line 122 + 123)	5,449,338
125	T/(1-T)	(Line 117)	32.85%
126	Deficient/Excess Deferred Taxes Allocated to Transmission	(Line 124 * (1 + 125))	-7,239,606
127	Income Tax Component =	[Line 117 * 112 * (1-(108 / 111))]	39,074,865
128	Total Income Taxes	(Line 121 + 126 + 127)	31,835,259
REVENUE REQUIREMENT			
Summary			
129	Net Property, Plant & Equipment	(Line 32)	2,745,738,060
130	Adjustment to Rate Base	(Line 53)	-547,973,565
131	Rate Base	(Line 54)	2,197,764,495
132	O&M	(Line 75)	73,432,023
133	Depreciation & Amortization	(Line 84)	90,053,493
134	Taxes Other than Income	(Line 86)	42,897,618
135	Investment Return	(Line 112)	158,311,149
136	Income Taxes	(Line 128)	31,835,259
137	Gross Revenue Requirement	(Sum Lines 132 to 136)	396,529,543
Adjustment to Remove Revenue Requirements Associated with Excluded Transmission Facilities			
138	Transmission Plant In Service	(Line 15)	3,582,103,476
139	Excluded Transmission Facilities	(Note M) Attachment 5	140,952,268
140	Included Transmission Facilities	(Line 138 - 139)	3,441,151,208
141	Inclusion Ratio	(Line 140 / 138)	96.07%
142	Gross Revenue Requirement	(Line 137)	396,529,543
143	Adjusted Gross Revenue Requirement:	(Line 141 * 142)	380,926,493
Revenue Credits & Interest on Network Credits			
144	Revenue Credits	Attachment 3	47,185,885
145	Interest on Network Credits	(Note N) Attachment 5	441,294
146	Net Revenue Requirement	(Line 143 - 144 + 145)	334,181,902
Net Plant Carrying Charge			
147	Net Revenue Requirement	(Line 146)	334,181,902
148	Net Transmission Plant	(Line 15 - 23)	2,555,184,560
149	Net Plant Carrying Charge:	(Line 147 / 148)	13.0786%
150	Net Plant Carrying Charge without Depreciation	(Line 147 - 76) / 148	10.2109%
151	Net Plant Carrying Charge without Depreciation; Return, nor Income Taxes	(Line 147 - 76 - 112 - 128) / 148	2.7693%
Net Plant Carrying Charge Calculation per 100 Basis Point Increase in ROE			
152	Net Revenue Requirement Loss Return and Taxes	(Line 146 - 135 - 136)	144,035,494
153	Increased Return and Taxes	Attachment 4	197,386,014
154	Net Revenue Requirement per 100 Basis Point Increase in ROE	(Line 152 + 153)	341,421,508
155	Net Transmission Plant	(Line 15 - 23)	2,555,184,560
156	Net Plant Carrying Charge per 100 Basis Point increase in ROE	(Line 154 / 155)	13.3619%
157	Net Plant Carrying Charge per 100 Basis Point in ROE without Depreciation	(Line 154 - 76) / 155	10,4943%
158	Net Revenue Requirement	(Line 146)	334,181,902
159	True-up amount	Attachment 6	(6,556,858)
160	Plus any increased ROE calculated on Attachment 7	Attachment 7	—
161	Facility Credits under Section 30.9 of the APS OATT	Attachment 5	322,752
162	Net Adjusted Revenue Requirement	(Line 158 + 159 + 161)	327,947,796
Annual Point-to-Point Transmission Rate			
163	Average of the 4 Summer CP	(Note L) Network Transmission Peak Report	9,351,827
164	Annual Point-to-Point Transmission Rate	(Line 162 / 163)	35.07
165	Average of the 8 Non-Summer CP	(Note L) Network Transmission Peak Report	6,517,211
166	Implied Non-Summer Revenue Requirement	((Line 164/12)*8 Line 165)	152,362,725
167	Implied Summer Revenue Requirement	(Line 146 - Line 166)	181,819,178
168	Implied Annualized Summer Point-to-Point Transmission Rate	((Line 162- line 166/Line 163/4)*12)	56.33
Retail Transmission Rates			
169	Residential (kWh)	Rate Design Worksheet	0.01060
170	Gen Serv < 3MW Without Demand Meters -Includes All Customers 20 kW and less (kWh)	Rate Design Worksheet	0.00657
171	Gen Serv < 3MW (kW)	Rate Design Worksheet	2.253
172	Gen Serv > 3MW (kW)	Rate Design Worksheet	2.144

Notes

- A Electric portion only.
- B Exclude Construction Work In Progress expensed as O&M (rather than amortized). New Transmission plant that is expected to be placed in service in the current calendar year weighted by number of months it is expected to be in-service. New Transmission plant expected to be placed in service in the current calendar year that is not included in the Transmission Plan must be separately detailed on Attachment 5. For the Reconciliation, new transmission plant that was actually placed in service weighted by the number of months it was actually in service.
- C Transmission Portion Only
- D All EPRI Annual Membership Dues
- E All Regulatory Commission Expenses
- F Safety related advertising included in Account 930.1
- G Regulatory Commission Expenses directly related to transmission service, RTO filings, or transmission siting itemized in Form 1 at 351.h
- I The currently effective income tax rate, where FIT is the Federal income tax rate; SIT is the State income tax rate, and p = "the percentage of federal income tax deductible for state income taxes". If the utility includes taxes in more than one state, it must explain in Attachment 5 the name of each state and how the blended or composite SIT was developed. Furthermore, a utility that elected to use amortization of tax credits against taxable income, rather than book tax credits to Account No. 255 and reduce rate base, must reduce its income tax expense by the amount of the Amortized Investment Tax Credit (Form 1, 266.8.f) multiplied by (1/p-T). A utility must not include tax credits as a reduction to rate base and as an amortization against taxable income. If the tax rates change during a calendar year, an average tax rate will be used - calculated based on the number of days each was effective in the calendar year.
- J ROE of 10.75%
- K Education and outreach expenses relating to transmission, for example siting or billing
- L Based on APS Network Transmission Peak Report
- M Amount of transmission plant excluded from rates per Attachment 5.
- N Outstanding Network Credits is the balance of Network Facilities Upgrades Credits due Transmission Customers who have made lump-sum payments (net of accumulated depreciation) towards the construction of Network Transmission Facilities consistent with Paragraph 657 of Order 2003-A. Interest on the Network Credits as booked each year is added to the revenue requirement to make the Transmission Owner whole on Line 145. AFUDC shall not be applied to the portion of a Network Upgrade for which the customer has provided the funds.
- O Changes in depreciation or amortization rates must be filed with the Commission, as well as any new depreciation or amortization rates.

END

Arizona Public Service Company

Attachment 1 - Accumulated Deferred Income Taxes (ADIT) Worksheet

	Transmission Related	Plant Related	Labor Related	Total ADIT
ADIT- 282	0	(2,513,421,009)	0	(2,513,421,009)
ADIT-283	(1,978,360)	(3,162,053)	0	(5,138,413)
ADIT-190	56,824,469	6,244	25,129,091	81,959,804
ADITC-252	0	0	0	0
Subtotal-End of Year	54,848,109	(2,515,570,818)	25,129,091	(2,436,599,618)
Subtotal-Beginning of Year	56,637,531	(2,566,208,078)	23,783,512	(2,465,847,035)
End of Year for Est./Average for Final	55,742,620	(2,541,422,746)	24,456,302	8,6072%
Wages & Salary Allocator (Appendix A, Line 5)				
Gross Plant Allocator (Appendix A, Line 12)				
ADIT-End of Year for Estimate	54,848,109	(422,351,370)	2,162,915	(365,340,346)
ADIT-Average for Final	55,742,620	(426,521,206)	2,105,007	(368,673,379)
				Average is only used for true up portion of the formula rate
				Allocator provided by Revenue and Regulatory Accounting Dept
				Allocator provided by Revenue and Regulatory Accounting Dept

In filing out this attachment, a full and complete description of each item and justification for the allocation to Columns B-E and each separate ADIT item will be listed, dissimilar items w/ amounts exceeding \$100,000 will be listed separately.

A	B Total	C Gas, Prod Or Other Related	D Only Transmission Related	E Plant Related	F Labor Related	G Justification
ADIT-190						
Deferred Credits - Injury Reserve	321,607	321,607				Book liability for Injuries recorded in FERC account(s) 228. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Deferred Credits - SFAS 112	1,535,606	1,080,511				Book liability for FAS 112 is recorded in FERC account(s) 228 and 242. Only the amount included in account 242 is included in rate base (see Attachment 5). As such, only the ADIT associated with book liability recorded in account 242 is included in rate base.
Deferred Credits - Legal Reserves	774,713	629,120				Book liability for legal reserves recorded in FERC account(s) 242 and 253. Only the amount included in account 242 is included in rate base (see Attachment 5). As such, only the ADIT associated with book liability recorded in account 242 is included in rate base.
Deferred Credits - Legal Reserves- Attorney General Settlement	0	0				Book liability for Legal Reserve AG Settlement is recorded in FERC account(s) 242. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Deferred Credits - Coal Reclamation	44,311,832	44,311,832				Book liability for coal reclamation recorded in FERC account(s) 253. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Deferred Credits - Def Comp	12,031,880	10,316,007				Book liability for Deferred Compensation recorded in FERC account(s) 228 and 242. Only the amount included in account 242 is included in rate base (see Attachment 5). As such, only the ADIT associated with book liability recorded in account 242 is included in rate base.
Deferred Credits - Medical Reserve	2,406,245	0				Book liability for medical reserve recorded in FERC account(s) 242. The underlying book account is included in rate base, as such ADIT is included in rate base.
Deferred Credits - Option II	108,159	108,159				Book liability for Option II recorded in FERC account(s) 253. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Deferred Credits - Retention Units	11,452,723	11,452,723				Book liability for retention units recorded in FERC account(s) 253. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Deferred Credits - Roosevelt Irrigation District Reserve	59,328	59,328				Book liability for Roosevelt Irrigation District Reserve recorded in FERC account(s) 253. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Accounts Payable Reserve	1,236,000	1,236,000				Book liability for Accounts Payable Reserve recorded in FERC account(s) 232. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Liab - ARO	87,509,338	87,509,338				Book liability for ARO regulatory liability recorded in FERC account(s) 254. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Liab - Gain on Sale of Property	(822)	(822)				Book liability for Gain on Sale of Property regulatory liability recorded in FERC account(s) 254. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Liab - PV ISFSI	9,694,333	9,694,333				Book liability for PV ISFSI regulatory liability recorded in FERC account(s) 254. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Liab - Unamortized Gain on Reacquired Debt	6,244	0		6,244		Book components of unamortized gain/loss on reacquired debt are recovered vis-a-vis the cost of capital calculation. As such, rate base is reduced for the ADIT associated with these regulatory accounts by designating such ADIT as plant related.
Reg Liab - Deferred ITC	(69,328)	(69,328)				Book liability for Deferred ITC regulatory liability recorded in FERC account(s) 254. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Liab - Sundance Maintenance	4,176,003	4,176,003				Book liability for Sundance Maintenance regulatory liability recorded in FERC account(s) 254. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Liab - SFAS 109 - AZ/NM Rate Change	2,410,554	2,410,554				Book liability for SFAS 109 AZ Rate Change regulatory liability recorded in FERC account(s) 254. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Liab - Demand Side Management Program	2,091,573	2,091,573				Book liability for Demand Side Management Program recorded in FERC account(s) 254. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Liab - Coal Reclamation	13,900,823	13,900,823				Book liability for Coal Reclamation regulatory liability recorded in FERC account(s) 254. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Liab - Removal Costs-Cholla	3,987,393	3,987,393				Book liability for Removal Costs-Cholla regulatory liability recorded in FERC account(s) 254. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Liab - Removal Costs-Saguaro	2,941,205	2,941,205				Book liability for Removal Costs-Saguaro regulatory liability recorded in FERC account(s) 254. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Liab - Renewable Energy Standard	864,033	864,033				Book liability for RES regulatory liability recorded in FERC account(s) 254. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Pension Liabilities	30,436,204	26,714,386				Book liability for Pension recorded in FERC accounts(s) 228 and 242. Only the amount included in account 242 is included in rate base (see Attachment 5). As such, only the ADIT associated with book liability recorded in account 242 is included in rate base.
Reg Liab - Other Postretirement benefits	66,893,406	66,893,406				Book liability for Other Postretirement benefits regulatory liability recorded in FERC account(s) 254. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Liab - Power Supply Adjustor MTM	23,822,035	23,822,035				Book liability for Power Supply Adjustor MTM regulatory liability recorded in FERC account(s) 254. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Mark to market	14,064,535	14,064,535				Book liability for mark to market recorded in FERC account(s) 175, 176, 244, and 245. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Other Tax Accruals	8,311,618	8,311,618				Deferred Taxes primarily associated with the book liability for Sales and Use Tax and other accruals recorded in FERC account(s) 232/38/24/253. The underlying book accounts are not included in rate base, as such ADIT is not included in rate base.
Interest on Tax Reserve	291,948	291,948				Book liability for interest on tax reserve recorded in FERC account(s) 237. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Severance Reserve	26,059	(0)				Book liability for severance reserve recorded in FERC account(s) 228 and 242. Only the amount included in account 242 is included in rate base (see Attachment 5). As such, only the ADIT associated with book liability recorded in account 242 is included in rate base.

Attachment H

Workers' Compensation	1 410 092	1 046 269			363 624	Book liability for workers compensation recorded in FERC account(s) 228 and 242. Only the amount included in account 242 is included in rate base (see Attachment 5). As such, only the ADIT associated with book liability recorded in FERC account 242 is included in rate base.
Renewable Energy Incentives	19 948 119	19 948 119				Deferred Taxes associated with the tax only liability for renewable energy incentives is not included in rate base, as such ADIT is not included in rate base.
Accrued Vacation	2,749,440	(0)			2,749,440	Book liability for vacation accrual recorded in FERC account 242. The underlying book account is included in rate base, as such ADIT is included in rate base.
Accrued Payroll	698 619	0			698 619	Book liability for accrued payroll recorded in FERC account 242. The underlying book account is included in rate base, as such ADIT is included in rate base.
Accrued Incentive	20,177,843	7,399,168			12,778,676	Book liability for accrued incentive recorded in FERC account 242. The underlying book account is included in rate base, as such ADIT is included in rate base. The book liability associated with the participant portion of accrued incentive is not included in rate base, thus the ADIT associated with the participant portion is not included in rate base.
TCJA Excess Deferred Taxes	297,647,704	240,823,235	56,824,469			Excess Deferred Taxes regulatory liability recorded in FERC account(s) 254. The transmission-related component of the underlying book account is included in the transmission FERC formula, as such the transmission-related component of the ADIT associated with this regulatory account is included in rate base.
Lease Liability	182,662,771	182,662,771				Book liability for leases recorded in FERC accounts 227 and 243. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Staples Rebate	189,853	122,004			67,849	Book liability for Staples Rebate recorded in FERC account(s) 242 and 253. Only the amount included in account 242 is included in rate base (see Attachment 5). As such, only the ADIT associated with book liability recorded in account 242 is included in rate base.
Credit Carryforwards	19,274,102	19,274,102				Deferred Taxes associated with credit carryforwards. The income tax benefit of credits are not reflected in cost of service. As such, the Credit Carryforward ADIT is not included in rate base.
AZ NOL Carryforwards	0	0			0	Depreciation with respect to AZ NOL carryforward are related to depreciation on plant additions. The plant add to rate and associated ADIT (FERC 282) are included in rate base, as such AZ NOL Carryforward ADIT is included in rate base.
CC&B Prod Based Incentive	2,036,199	2,036,199				Book liability for CC&B Production Based Incentive Accrual recorded in FERC account(s) 232. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Coal Community Transition	5,747,400	5,747,400				Book liability for Coal Community Transition recorded in FERC account(s) 242 and 253. Only the amount included in account 242 is included in rate base (see Attachment 5); however is allocated at 0%. As such ADIT is not included in rate base.
Coal Contract Shortfall Accrual	1,039,781	1,039,781				Book liability for Coal Contract shortfall recorded in FERC account(s) 242. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
ITC-SOLAR FULL RATE	46,439,417	46,439,417				Book liability for ITC Solar Full Rate regulatory liability recorded in FERC account(s) 254. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
ITC-SOLAR FULL RATE CURRENT	1,604,693	1,604,693				Book liability for ITC Solar Full Rate Current regulatory liability recorded in FERC account(s) 254. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Subtotal - p238	946,281,284	864,321,480	56,824,469	6,244	25,129,091	
Less FASB 109 Above if not separately removed	2,410,554	2,410,554	0	0	0	
Total	943,870,729	861,910,925	56,824,469	6,244	25,129,091	

Instructions for Account 190:

1. ADIT items related only to Non-Electric Operations (e.g., Gas, Water, Sewer) or Production are directly assigned to Column C.
2. ADIT items related only to Transmission are directly assigned to Column D.
3. ADIT items related to Plant and not in Columns C & D are included in Column E.
4. ADIT items related to labor and not in Columns C & D are included in Column F.
5. Deferred income taxes arise when items are included in taxable income in different periods than they are included in rates, therefore if the item giving rise to the ADIT is not included in the formula, the associated ADIT amount shall be excluded.
6. Re: Form 1-F filer. Sum of subtotals for Accounts 282 and 283 should be to Form No. 1-F, p.113.57.c

Attachment 1 - Accumulated Deferred Income Taxes (ADIT) Worksheet

A ADIT- 282	B Total	C Gas, Prod Or Other Related	D Only Transmission Related	E Plant Related	F Labor Related	G Justification
Net Plant Book/Tax Differences	(2,533,015,264)			(2,533,015,264)		Book assets for plant recorded in FERC account(s) 101,106,107 are included in rate base, as such ADIT is included in rate base.
Reg Lstb - Removal Costs	19,594,255			19,594,255		Book liability for removal costs recorded in FERC account(s) 108. The underlying book account is included in rate base, as such ADIT is included in rate base.
Subtotal - p275 (Form 1 F filer; see note 6 below)	(2,513,421,009)	0	0	(2,513,421,009)	0	
Less FASB 109 Above if not separately removed	0	0	0	0	0	
Total	(2,513,421,009)	0	0	(2,513,421,009)	0	

Instructions for Account 283:

1. ADIT items related only to Non-Electric Operations (e.g., Gas, Water, Sewer) or Production are directly assigned to Column C.
2. ADIT items related only to Transmission are directly assigned to Column D.
3. ADIT items related to Plant and not in Columns C & D are included in Column E.
4. ADIT items related to labor and not in Columns C & D are included in Column F.
5. Deferred income taxes arise when items are included in taxable income in different periods than they are included in rates, therefore if the item giving rise to the ADIT is not included in the formula, the associated ADIT amount shall be excluded.
6. Re: Form 1-F filer. Sum of subtotals for Accounts 282 and 283 should be to Form No. 1-F, p.113.57.c

Attachment 1 - Accumulated Deferred Income Taxes (ADIT) Worksheet

A ADIT-283	B Total	C Gas Prod Or Other Related	D Only Transmission Related	E Plant Related	F Labor Related	G Justification
Reg Asset - AFUDC	(44 404 889)	(44 404 889)				Book asset for AFUDC regulatory asset recorded in FERC account(s) 182. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Asset - Active Union Medical Trust	(4,505,471)	(4,505,471)				Book asset for Active Union Medical Trust regulatory asset recorded in FERC account(s) 182. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Asset - Mead Phx Line	(2 236 694)	(2 236 694)				Book asset for Mead Phx Line regulatory asset recorded in FERC account(s) 182. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Asset - Unamortized loss on Reacquired Debt	(2,340,518)			(2,340,518)		Book components of unamortized gain/loss on reacquired debt are recovered vis-a-vis the cost of capital calculation. As such, rate base is reduced for the ADIT associated with these regulatory accounts by designating such ADIT as labor related.
Reg Asset - Power Supply Adjustor MTM	(114 231 744)	(114 231 744)				Book asset for Power Supply Adjustor MTM regulatory asset recorded in FERC account(s) 182. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Asset - Coal Reclamation	(3 426 579)	(3 426 579)				Book asset for Coal Reclamation regulatory asset recorded in FERC account(s) 182. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Asset - COVID Relief Deferral	(444,960)	(444,960)				Book asset for COVID Relief Deferral regulatory asset recorded in FERC account(s) 182. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Asset - Customer Bill Transaction Fee Deferral	(97 867)	(97 867)				Book asset for Customer Transaction Fee Deferral regulatory asset recorded in FERC account(s) 182. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Asset - Demand Side Management	(199,846)	(199,846)				Book asset for Demand Side Management Program regulatory asset recorded in FERC account(s) 182. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Asset - Pension	(157 628 517)	(157 628 517)				Book asset for Pension regulatory asset recorded in FERC account(s) 182. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Asset - Option II	(8 320 715)	(8 320 715)				Book asset for Option II regulatory asset recorded in FERC account(s) 182. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Asset - SFAS 109	21,371	21,371				Book asset for SFAS 109 regulatory asset recorded in FERC account(s) 182. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Asset - OPEB Subsidy PPACA	(610 408)	(610 408)				Book asset for OPEB Subsidy PPACA regulatory asset recorded in FERC account(s) 182. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Asset - ITC Basis Adjustment	(5,035,206)	(5,035,206)				Book asset for Deferred ITC Basis Adjustment regulatory asset recorded in FERC account(s) 182. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Asset - Property Tax Deferral	(10 149 314)	(10 149 314)				Book asset for Property Tax Deferral regulatory asset recorded in FERC account(s) 182. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Asset - Lost Fixed Cost	(2 359 943)	(2 359 943)				Book asset for Lost Fixed Cost regulatory asset recorded in FERC account(s) 182. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Asset - Four Corners Deferral (Units 1/2/3)	(3,581,089)	(3,581,089)				Book asset for Four Corners Deferral (Units 1/2/3) regulatory asset recorded in FERC account(s) 182. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Asset - Ocotillo Deferral	(34 148 995)	(34 148 995)				Book asset for Ocotillo Deferral regulatory asset recorded in FERC account(s) 182. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Asset - Retired Power Plant Costs	(24,396,751)	(24,396,751)				Book asset for Retired Power Plant Costs regulatory assets recorded in FERC account(s) 182. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Asset - Four Corners SCE Proforma Deferral	(373 745)	(373 745)				Book asset for Four Corners SCE Proforma Deferral regulatory assets recorded in FERC account(s) 182. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Asset - Four Corners SCR Debt Return Deferral	(24 132 722)	(24 132 722)				Book asset for Four Corners SCR Debt Return Deferral regulatory assets recorded in FERC account(s) 182. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Reg Asset - Tax Expense Adjuster Mechanism	(1,444,969)	(1,444,969)				Book asset for Tax Expense Adjuster Mechanism regulatory asset recorded in FERC account(s) 182. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
TCA Balancing Account	(285 503)	(285 503)				Book asset for TCA Balancing Account regulatory asset recorded in FERC account(s) 182. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Other Special Use Funds	(57,572,120)	(57,572,120)				Book asset for OPEB Active Union Medical Trust Reimb recorded in FERC account 128. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Pension & Other Postretirement	(98 195 954)	(98 195 954)				Book asset for Pension & Other Postretirement Benefits recorded in FERC account(s) 186. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Mark to market	(37 886 704)	(37 886 704)				Book asset for Mark to market recorded in FERC account(s) 175, 176, 244, and 245. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
ROU Asset for Leases	(182,662,771)	(182,662,771)				Book asset for Right of Use Assets recorded in FERC account 101. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Active Union Trust Income	(2 725 773)	(2 725 773)				Book asset for Active Union Trust Investment recorded in FERC account 128. The underlying book account is not included in rate base, as such ADIT is not included in rate base.
Other Deferred Debts	(3,575,803)	(3,575,803)				Deferred Taxes primarily associated with the insurance policies owned by APS (COLI). The underlying book accounts are not included in rate base, as such ADIT is not included in rate base.
Prepays	(821 535)			(821 535)		Book asset for prepaids recorded in FERC account(s) 165. The full amount included in account 165 is included in rate base (see Attachment 5). As such, the ADIT associated with the book asset recorded in account 165 is included in rate base.
TCJA Excess Deferred Taxes	(2,633,697)	(667 307)	(1,976,360)			Excess Deferred Taxes regulatory asset recorded in FERC account(s) 182. The transmission-related component of the underlying book account is included in the transmission FERC formula, as such the transmission-related component of the ADIT associated with this regulatory account is included in rate base.
Subtotal - 2771 (Form 1-F filer - see note 6, below)	(821,731,089)	(822,499,575)	(1,976,360)	(3 162 053)	0	
Less FASB 109 Above If not separately removed	(44 383,518)	(44 383,518)				
Less FASB 106 Above If not separately removed	(58 567,349)	(58 567,349)				
Total	(724 787 119)	(719 648 706)	(1,976,360)	(3 162 053)	—	

Instructions for Account 283:

1. ADIT items related only to Non-Electric Operations (e.g., Gas, Water, Sewer) or Production are directly assigned to Column C

2. ADIT items related only to Transmission are directly assigned to Column D

3. ADIT items related to Plant and not in Columns C & D are included in Column E

4. ADIT items related to labor and not in Columns C & D are included in Column F

5. Deferred income taxes arise when items are included in taxable income in different periods than they are included in rates, therefore if the item giving rise to the ADIT is not included in the formula, the associated ADIT amount shall be excluded

6. Re: Form 1-F filer - Sum of subtotals for Accounts 282 and 283 should tie to Form No. 1-F, p.113 \$7,600

Attachment 1 Accumulated Deferred Income Taxes (ADIT) Worksheet

ADITC 255

		Balance	Amortization
1	Rate Base Treatment		
2	Balance to Attachment 1, Page 1, Transmission Related ADIT 255 (a)	—	—
3	Amortization		One or the other but not both.
4	Amortization to line 115 of Appendix A	—	—
5	Total	—	—
6	Total Form No. 1 (p 266 & 267)	—	—
7	Difference /f	—	—

/f Difference must be zero

(a) The ADITC-255 table reflects Accumulated Deferred Income Tax Credits related to transmission investments.

Arizona Public Service Company

Attachment 2 - Taxes Other Than Income Worksheet

Other Taxes	Page 263 Col (L)	Allocator	Allocated Amount
Plant Related			
1 Transmission Personal Property Tax (directly assigned to Transmission)	\$ 40,541,411	100%	\$ 40,541,411
2 Capital Stock Tax	16.7828%		—
3 Gross Premium (insurance) Tax	16.7828%		—
4 PURTA	16.7828%		—
5 Corp License	16.7828%		—
Total Plant Related	40,541,411		\$ 40,541,411
Labor Related			
6 Federal FICA & Unemployment & state unemployment	27,374,777		
Total Labor Related	\$ 27,374,777	8.6072%	\$ 2,356,206
Other Included			
7 Miscellaneous	0		
Total Other Included	\$ 0	16.7828%	\$ 0
Total Included			\$ 42,897,618
Currently Excluded			
8 Use & Sales Tax	0		
9 Adjust state and local tax reserve.	38,663		
10 Other Sales & Use Tax	0		
11 Other Personal Property Tax (excluded)	179,084,485		
12			
13			
14			
15			
16			
17			
18			
19			
20			
21 Total "Other" Taxes (included on p. 263)	<u>247,039,336</u>		
22 Total "Taxes Other Than Income Taxes" - acct 408.10 (p. 114.14)	<u>247,039,336</u>		
23 Difference:		(0)	

Criteria for Allocation:

- A Other taxes that are incurred through ownership of plant including transmission plant will be allocated based on the Gross Plant Allocator. If the taxes are 100% recovered at retail they will not be included
- B Other taxes that are incurred through ownership of only general or intangible plant will be allocated based on the Wages and Salary Allocator. If the taxes are 100% recovered at retail they will not be included
- C Other taxes that are assessed based on labor will be allocated based on the Wages and Salary Allocator
- D Other taxes except as provided for in A, B and C above, that are incurred and (1) are not fully recovered at retail or (2) are directly or indirectly related to transmission service will be allocated based on the Gross Plant Allocator; provided, however, that overheads shall be treated as in footnote B above
- E Excludes prior period adjustments in the first year of the formula's operation and reconciliation for the first year

Arizona Public Service Company***Attachment 3 - Revenue Credit Workpaper*****Account 454 - Rent from Electric Property**

1 Rent from Electric Property - Transmission Related (Note 3)	(Sum Lines 1)	94,305
2 Total Rent Revenues		94,305

Account 456 - Other Electric Revenues (Note 1)

3 Scheduling, System Control & Dispatch (Ancillary Service)	p398 line 1 column g	\$ 2,682,644
4 Net revenues associated with Network Integration Transmission Service (NITS) for which the load is not included in the divisor (Note 4)		
5 Point to Point Service revenues for which the load is not included in the divisor received by Transmission Owner (Note 4)		\$ 43,766,905
6 Transitional Revenue Neutrality (Note 1)		—
7 Transitional Market Expansion (Note 1)		
8 Professional Services (Note 3)		175,472
9 Revenues from Directly Assigned Transmission Facility Charges (Note 2)		1,239,673
10 Rent or Attachment Fees associated with Transmission Facilities (Note 3)		
11 Gross Revenue Credits	(Sum Lines 2-10)	47,959,000
12 Line 17g		(773,115)
13 Total Revenue Credits		47,185,885

Revenue Adjustment to determine Revenue Credit

- 14 Note 1: All revenues related to transmission that are received as a transmission owner (i.e., not received as a LSE), for which the cost of the service is recovered under this formula, except as specifically provided for elsewhere in this Attachment or elsewhere in the formula will be included as a revenue credit or included in the peak on line 162 of Appendix A.
- 15 Note 2: If the costs associated with the Directly Assigned Transmission Facility Charges are included in the Rates, the associated revenues are included in the Rates. If the costs associated with the Directly Assigned Transmission Facility Charges are not included in the Rates, the associated revenues are not included in the Rates.
- 16 Note 3: Ratemaking treatment for the following specified secondary uses of transmission assets: (1) right-of-way leases and leases for space on transmission facilities for telecommunications; (2) transmission tower licenses for wireless antennas; (3) right-of-way property leases for farming, grazing or nurseries; (4) licenses of intellectual property (including a portable oil degasification process and scheduling software); and (5) transmission maintenance and consulting services (including energized circuit maintenance, high-voltage substation maintenance, safety training, transformer oil testing, and circuit breaker testing) to other utilities and large customers (collectively, products). Company will retain 50% of net revenues consistent with Pacific Gas and Electric Company, 90 FERC ¶ 61,314. Note: In order to use lines 17a - 17g, the utility must track in separate subaccounts the revenues and costs associated with each secondary use (except for the cost of the associated income taxes).

17a Revenues included in lines 1-11 which are subject to 50/50 sharing.	1,239,673
17b Costs associated with revenues in line 17a	306,556
17c Net Revenues (17a - 17b)	933,117
17d 50% Share of Net Revenues (17c / 2)	466,558
17e Costs associated with revenues in line 17a that are included in FERC accounts recovered through the formula times the allocator used to functionalize the amounts in the FERC account to the transmission service at issue.	—
17f Net Revenue Credit (17d + 17e)	466,558
17g Line 17f less line 17a	(773,115)
18 Note 4: If the facilities associated with the revenues are not included in the formula, the revenue is shown here but not included in the total above and is explained in the Cost Support; for example revenues associated with distribution facilities.	—
19 Amount offset in line 4 above	
20 Total Account 454 and 456	47,959,000
Composite Tax Rate	24.73%

Arizona Public Service Company

Attachment 4 - Calculation of 100 Basis Point Increase in ROE

A.	100 Basis Point increase in ROE and Income Taxes	Line 12 + Line 23	197,386,014
B.	100 Basis Point increase in ROE		1.00%

Return Calculation

1	Rate Base	Appendix A, Line 54	2,197,764,495
2	Debt %	Appendix A, Line 102	49.7%
3	Preferred %	Appendix A, Line 103	0.0%
4	Common %	Appendix A, Line 104	50.3%
5	Debt Cost	Appendix A, Line 105	3.61%
6	Preferred Cost	Appendix A, Line 106	0.00%
7	Common Cost	Appendix A % plus 100 Basis Pts	10.75%
8	Weighted Cost of Debt	Appendix A, Line 108	0.0179
9	Weighted Cost of Preferred	Appendix A, Line 109	—
10	Weighted Cost of Common	Line 4 * Line 7	0.0541
11	Total Return (R)	Sum Lines 8 to 10	0.0720

12.	Investment Return = Rate Base * Rate of Return	Line 11 * Line 1	158,311,149
-----	---	------------------	--------------------

Composite Income Taxes

Income Tax Rates			
13.	FIT=Federal Income Tax Rate	Appendix A, Line 113	21.00%
14.	SIT=State Income Tax Rate or Composite	Appendix A, Line 114	4.72%
15.	p (percent of federal income tax deductible for state purposes)	Appendix A, Line 115	0.00%
16.	T = 1 - {[(1 - SIT) * (1 - FIT)] / (1 - SIT * FIT * p)} =	Appendix A, Line 116	24.73%
17.	T / (1-T)	Appendix A, Line 117	32.85%
ITC Adjustment			
18.	Amortized Investment Tax Credit	Appendix A, Line 118	—
19.	1/(1-T)	Appendix A, Line 119	32.8529%
20.	Net Plant Allocation Factor	Appendix A, Line 120	18.8812%
21.	ITC Adjustment Allocated to Transmission	Appendix A, Line 121	0
22.	Income Tax Component = CIT=(T/1-T) * Investment Return	Line 17*Line 12*(1-(Line 8/Line 11))	39,074,865
23.	Total Income Taxes	Line 21 + 22"	39,074,865

Arizona Public Service Company

Attachment 5 - Cost Support

Plant In Service Worksheet

Attachment A Line #s, Descriptions, Notes, Form 1 Page #s and Instructions				Details
Calculation of Transmission Plant In Service	Source		Balance For True up	
December	p206.58.b	2021	3,373,903.20	
January	company records	2022	3,448,959,691	
February	company records	2022	3,457,906,431	
March	company records	2022	3,470,227,523	
April	company records	2022	3,474,345,237	
May	company records	2022	3,479,873,400	
June	company records	2022	3,549,915,747	
July	company records	2022	3,548,072,415	
August	company records	2022	3,554,747,249	
September	company records	2022	3,556,371,383	
October	company records	2022	3,569,020,088	
November	company records	2022	3,571,154,034	
December	p207.58.g	2022	3,582,103,476	
Transmission Plant In Service			3,512,046,769	3,582,103,476
Calculation of Distribution Plant In Service	Source			
December	p206.75.b	2021	7,517,399,567	
January	company records	2022	7,544,010,993	
February	company records	2022	7,565,650,386	
March	company records	2022	7,595,153,486	
April	company records	2022	7,639,903,477	
May	company records	2022	7,670,702,791	
June	company records	2022	7,763,311,806	
July	company records	2022	7,797,467,871	
August	company records	2022	7,825,371,423	
September	company records	2022	7,849,402,055	
October	company records	2022	7,897,076,424	
November	company records	2022	7,910,818,167	
December	p207.75.g	2022	7,950,772,030	
Distribution Plant In Service			7,732,849,270	7,950,772,030
Calculation of Intangible Plant In Service	Source			
December	p204.5.b	2021	1,017,092,940	
December	p205.5.g	2022	1,051,489,923	1,085,886,905
Intangible Plant In Service			1,051,489,923	1,085,886,905
Calculation of General Plant In Service	Source			
December	p206.99.b	2021	1,283,830,556	
December	p207.99.g	2022	1,313,831,100	1,343,822,341
General Plant In Service			1,313,831,100	1,343,822,341
Calculation of Production Plant In Service	Source			
December	p204.46.b	2021	9,219,692,044	
January	company records	2022	9,219,103,899	
February	company records	2022	9,205,080,123	
March	company records	2022	9,200,337,190	
April	company records	2022	9,219,016,296	
May	company records	2022	9,254,676,279	
June	company records	2022	9,248,096,131	
July	company records	2022	9,260,439,826	
August	company records	2022	9,249,170,152	
September	company records	2022	9,267,090,704	
October	company records	2022	9,272,573,659	
November	company records	2022	9,287,030,231	
December	p205.46.g	2022	9,303,610,870	
Production Plant In Service			9,246,609,185	9,303,610,870
Total Plant In Service	Sum of averages above		22,856,826,245	23,266,195,622

Accumulated Depreciation Worksheet

Attachment A Line #s, Descriptions, Notes, Form 1 Page #s and Instructions			Details
Calculation of Transmission Accumulated Depreciation	Source		
December	Prior year p219.25	2021	970,090,075
January	company records	2022	973,421,769
February	company records	2022	977,823,652
March	company records	2022	981,802,914
April	company records	2022	986,227,588
May	company records	2022	992,754,005
June	company records	2022	998,540,175
July	company records	2022	1,003,542,637
August	company records	2022	1,008,823,473
September	company records	2022	1,013,444,904
October	company records	2022	1,017,165,176
November	company records	2022	1,022,035,502
December	p219.25	2022	1,026,918,916
Transmission Accumulated Depreciation			
			997,892,376
			1,026,918,916
Calculation of Distribution Accumulated Depreciation	Source		
December	Prior year p219.26	2021	1,380,357,026
January	company records	2022	1,358,137,956
February	company records	2022	1,369,989,749
March	company records	2022	2,002,742,027
April	company records	2022	2,034,774,227
May	company records	2022	2,041,078,867
June	company records	2022	2,053,024,594
July	company records	2022	2,060,914,230
August	company records	2022	2,067,283,211
September	company records	2022	2,076,854,776
October	company records	2022	2,087,810,308
November	company records	2022	2,097,229,849
December	p219.26	2022	2,111,569,076
Distribution Accumulated Depreciation			
			2,044,444,300
			2,111,569,076
Calculation of Intangible Accumulated Depreciation	Source		
December	Prior year p200.21.c	2021	977,625,298
December	p200.21c	2022	1,067,485,008
Accumulated Intangible Depreciation			
			1,022,555,153
			1,067,485,008
Calculation of General Accumulated Depreciation	Source		
December	Prior year p219.28	2021	428,811,790
December	p219.28	2022	484,343,111
Accumulated General Depreciation			
			455,577,451
			484,343,111
Calculation of Production Accumulated Depreciation	Source		
December	Prior year p219.20 thru 219.24	2021	3,853,750,683
January	company records	2022	3,909,786,587
February	company records	2022	3,895,902,356
March	company records	2022	3,912,647,288
April	company records	2022	3,919,722,062
May	company records	2022	3,935,705,196
June	company records	2022	3,920,282,572
July	company records	2022	3,939,853,980
August	company records	2022	3,953,272,886
September	company records	2022	3,986,385,901
October	company records	2022	4,009,645,063
November	company records	2022	4,023,804,213
December	p219.20 thru 219.24	2022	4,046,112,922
Production Accumulated Depreciation			
			3,949,759,992
			4,046,112,922
Total Accumulated Depreciation	Sum of averages above		8,470,229,271
			8,736,429,033

Attachment H

Electric / Non electric Cost Support			
Attachment A Line #s, Descriptions, Notes, Form 1 Page #s and Instructions		Form 1 Amount	Electric Portion
		Non-electric Portion	Details
27	Plant Allocation Factors Accumulated Intangible Depreciation	p200.21.c 1 067 485.098	1 067 485.098 0
42	Materials and Supplies Undistributed Stores Exp	p227.16.c 1 946 988	1 946 988 0
80	Depreciation Expense Intangible Amortization	p336.1d&e 84 869 740	84 869 740 0

Transmission / Non transmission Cost Support			
Attachment A Line #s, Descriptions, Notes, Form 1 Page #s and Instructions		Begin of year	End of Year for Est. Average for Final
		End of Year	Details
41	Plant Held for Future Use	p214 Total Non-transmission Related Transmission Related	10,206,915 7,861,943 2 344 972 10,206,915 7,861,943 2 344 972 2,344,972

PBOPs Cost Support			
Attachment A Line #s, Descriptions, Notes, Form 1 Page #s and Instructions		Form 1 Amount	PBOPs
		All other	Details
59	Allocated General Expenses Account 926 (2016) Account 926 (Current Year) Change in PBOP Expense	p323.187.b 64,872,042 (6,409,483)	(12,343,744) (44,641,309) 77,215,786 Base year 38,231,826 Current Year (32,297,565)

EPRI Dues Cost Support			
Attachment A Line #s, Descriptions, Notes, Form 1 Page #s and Instructions		Form 1 Amount	EPRI Dues
		A&G	Details
63	Allocated General Expenses Less EPRI Dues	p352.353 -430 650	-430 650

Regulatory Expense Related to Transmission Cost Support			
Attachment A Line #s, Descriptions, Notes, Form 1 Page #s and Instructions		Form 1 Amount	Non transmission Related
		Transmission Related	Details
67	Directly Assigned A&G Regulatory Commission Exp Account 928	p350.1 thru 350.21 22,739,161	4,206,659 18,532,502

Safety Related Advertising Cost Support			
Attachment A Line #s, Descriptions, Notes, Form 1 Page #s and Instructions		Form 1 Amount	Safety Related
		Non safety Related	Details
71	Directly Assigned A&G General Advertising Exp Account 930.1	p323.191.b 9,841,274	— 9,841,274

Attachment H

MultiState Workpaper		Attachment A Line #s, Descriptions, Notes, Form 1 Page #s and Instructions					State 1	State 2	State 3	State 4	State 5	Composite
Income Tax Rates	SIT State Income Tax Rate or Composite	AZ	NM	CA	TX	UT	4.680%	0.020%	0.020%	0.000%	0.000%	4.72%
Education and Outreach Cost Support												
Directly Assigned A&G	General Advertising Exp Account 930.1	p323.191.b	Form 1 Amount	Education & Outreach	Other	Details	9,841,274	0	9,841,274	0		
Excluded Gross Plant Cost Support												
Attachment A Line #s, Descriptions, Notes, Form 1 Page #s and Instructions						Excluded Gross Transmission Facilities	Description of the Facilities					
139	Excluded Gross Transmission Facilities		140,952,268	General Description of the Facilities								
1.	Instructions:	Remove all investment below 69 kV facilities, including the investment allocated to distribution of a dual function substation, generator, interconnection and local and	Enter \$	136,952,268	None							
2.	If unable to determine the investment below 69kV in a substation with investment of 69 kV and higher as well as below 69 kV, the following formula will be used:	Example		1,250,000	Step Up Xfmrs							
	A Total investment in substation	1,000,000		2,750,000	FERC Settlement							
	B Identifiable investment in Transmission (provide workpapers)	500,000			West Phoenix to Lincoln Substation 345 kV transmission line							
	C Identifiable investment in Distribution (provide workpapers)	400,000										
	D Amount to be excluded (A x (C / (B + C)))	444,444										
					Add more lines if necessary							
Transmission Related Account 242 Reserves												
38	Transmission Related Account 242 Reserves (exclude current year environmental site related reserves)	Attachment A Line #s, Descriptions, Notes, Form 1 Page #s and Instructions	Beginning of year	End of Year	End of Year for Est.	Average for Final	Allocation	Trans. Related	Details			
	Directly Assignable to Transmission		Enter \$									
		Deposits Land Rights	352,160	352,160								
			3,373,480	3,458,092								
		Sum Directly Transmission	3,725,640	3,810,252	3,767,946	100%	3,810,252	3,767,946				
	Total Not Directly Assignable to Transmission	(A) Total Not Directly Transmission	135,653,141	135,953,668	135,803,405							
	Labor Related, or General plant related	Vacation Accrual - Old Plan Accrued Payroll Medical - Dental Short Term Software License Workmen's Compensation Liability Vacation Accrual Vacation Accrual - Participants SFAS 112 Incentive Accrual Severance SERBP Deferred Compensation	13,371,922 8,168,597 9,059,000 4,420,020 1,368,283 1,996,184 2,742,020 1,640,000 47,275,604 215,385 14,640,028 6,100,047	12,335,725 11,321,482 9,734,000 4,454,243 1,471,779 1,007,544 2,195,603 1,841,000 51,093,672 105,417 15,055,899 6,941,233	12,853,824 9,745,040 9,396,500 4,437,131 1,420,031 1,501,864 2,468,811 1,740,500 49,484,638 160,401 14,847,964 6,520,640							
		(B) Sum Labor Related	110,997,089	118,157,598	114,577,344	8.6072%	10,170,080	9,861,920				
	Other	(A) - (B)	24,656,052	17,796,070	21,226,061	0.00%	—	—				
	Total Transmission Related Reserves		139,378,781	139,763,920	check		13,980,332	13,629,866				

Attachment H

Prepayments				Attachment A Line #s, Descriptions, Notes, Form 1 Page #s and Instructions				Beg of year	End of Year	End of Year for Est.	Average for Final	Allocation	Trans. Related	Details
39	Prepayments	Labor Related	Worksheet 5			25,071,350	29,150,992	27,111,171	8.607%	2,509,089	2,333,517			
		Plant Related	Worksheet 5			16,723,044	4,536,790	10,629,917	18.881%	856,600	2,007,055			
		100% Transmission Related	Worksheet 5			2,739,055	2,950,557	2,844,806	100.000%	2,950,557	2,844,806			
		Other (Excluded)	Worksheet 5			21,712,669	13,167,552	17,440,110	0.000%	—	—			
										6,318,246	7,185,378			
Materials & Supplies				Attachment A Line #s, Descriptions, Notes, Form 1 Page #s and Instructions				Beg of year	End of Year	End of Year for Est.	Average for Final	Details		
42	Stores Expense Undistributed	p227.16				(270,325)	1,946,988							
						(270,325)	1,946,988			838,332				
45	Transmission Materials & Supplies	p227.8				52,770,104	62,825,376	57,797,740						
Outstanding Network Credits Cost Support				Attachment A Line #s, Descriptions, Notes, Form 1 Page #s and Instructions				Beg of year	End of Year	End of Year for Est.	Average for Final	Description of the Credits		
50	Network Credits	Outstanding Network Credits				Account 252	2021	22,422,792		22,422,792			General Description of the Credits	
		December				Account 252	2022	23,789,220		23,789,220				
		December						23,106,006						
		Average Beginning and End of Year												
51		Accumulated Depreciation Associated with Facilities with Outstanding Network Credits				Account 252	2021	4,888,577		4,888,577				
		December				Account 252	2022	5,359,626		5,359,626				
		December						5,124,101						
		Average Beginning and End of Year												
Interest on Outstanding Network Credits Cost Support				Attachment A Line #s, Descriptions, Notes, Form 1 Page #s and Instructions				Interest on Network Credits	Description of the interest on the Credits					
145	Interest on Network Credits							441,294						Add more lines if necessary
Facility Credits under Section 30.9 of the APS OATT				Attachment A Line #s, Descriptions, Notes, Form 1 Page #s and Instructions				Facility Credits under Section 30.9 of the APS OATT						
161	Facility Credits under Section 30.9 of the APS OATT							322,752						Add more lines if necessary

Arizona Public Service Company

Attachment 6 - Estimate and Reconciliation Worksheet

Exec Summary

Step	Month	Year	Action
1	April	Year 2	TO populates the formula with Year 1 data from FERC Form 1.
2	April	Year 2	TO estimates all transmission Cap Adds, Retirements, and associated depreciation for Year 2 based on Months expected to be in service in Year 2.
3	April	Year 2	TO adds estimates from Step 2 to Appendix A
4	May	Year 2	Post results of Step 3 on APS web site.
5	June	Year 2	Results of Step 3 go into effect.
6	April	Year 3	TO populates the formula with Year 2 data from FERC Form 1.
7	April	Year 3	Reconciliation - TO calculates the true up amount by subtracting the results of Step 6 by Step 3.
8	April	Year 3	Reconciliation - TO calculates interest and amortization associated with the true up calculated in Step 7 and applies that amount to line 159 of the formula.
9	April	Year 3	TO estimates all transmission Cap Adds, Retirements, CW P and associated depreciation for Year 3 based on Months expected to be in service and monthly CWIP balances in Year 3.
10	April	Year 3	TO adds 13 month average Cap Adds and retirements (line 16 and 24) to the Formula.
11	May	Year 3	Post results of Step 10 on APS web site.
12	June	Year 3	Results of Step 9 go into effect for the Rate Year 2.

Reconciliation details

1	April	Year 2	TO populates the formula with Year 1 data from FERC Form 1. 305,046,485 Rev Req based on Year 1 data	Must run Appendix A to get this number (without estimated cap adds) from Appendix A
2	April	Year 2	TO estimates all transmission Cap Adds, Retirements, and associated depreciation for Year 2 based on Months expected to be in service in Year 2.	
			(A) Other Project PIS (B) other retirements (C) Project X PIS (D) Project X PIS retirements	(E) (F) (G)
				Other Project PIS Project X PIS Total
Dec				0 0 0
Jan			45,765,416	45,765,416 — 45,765,416
Feb			23,450,318	0 69,215,734 — 69,215,734
Mar			8,464,339	0 77,680,073 — 77,680,073
Apr			92,505,501	0 170,185,574 — 170,185,574
May			30,542,624	0 200,728,198 — 200,728,198
Jun			30,476,318	0 231,204,516 — 231,204,516
Jul			4,994,438	0 236,198,954 — 236,198,954
Aug			4,244,172	0 240,443,126 — 240,443,126
Sep			4,003,639	0 244,446,765 — 244,446,765
Oct			1,082,616	0 245,529,381 — 245,529,381
Nov			7,184,703	0 252,714,084 — 252,714,084
Dec			69,109,894	0 321,823,978 — 321,823,978
Total			321,823,978	— 179,687,369 — 179,687,369

13 month avg of new plant additions = Col F + Col H

179,687,369 goes to line 16 of the formula

	(I) = F Total Other Project PIS	(J) Composite Trans Deprec Rate	(K) = I * J Depreciation Expense	(L) Accum Deprec	(M) = H Total Project X PIS	(N) Composite Trans Deprec Rate	(O) = L * M Depreciation Expense	(P) Accum Deprec
Jan	45,765,416	0.17%	76,038	76,038	—	—	0.17%	—
Feb	69,215,734	0.17%	115,001	191,039	—	—	0.17%	—
Mar	77,680,073	0.17%	129,064	320,104	—	—	0.17%	—
Apr	170,185,574	0.17%	282,761	602,864	—	—	0.17%	—
May	200,728,198	0.17%	333,507	936,371	—	—	0.17%	—
Jun	231,204,516	0.17%	384,143	1,320,513	—	—	0.17%	—
Jul	236,198,954	0.17%	392,441	1,712,954	—	—	0.17%	—
Aug	240,443,126	0.17%	399,492	2,112,446	—	—	0.17%	—
Sep	244,446,765	0.17%	406,144	2,518,591	—	—	0.17%	—
Oct	245,529,381	0.17%	407,943	2,926,534	—	—	0.17%	—
Nov	252,714,084	0.17%	419,880	3,346,414	—	—	0.17%	—
Dec	321,823,979	0.17%	534,705	3,881,119	—	—	0.17%	—
Total			3,881,119	1,534,230	—	—	—	—

13 mo. Avg accumulated depreciation = Col L + Col P:
 Depreciation Expense = Col K + Col O

1,534,230 goes to line 24 of the formula
 3,881,119 goes to line 77 of the formula

- | | | | | | | | | | | | | | | | | |
|----------------------|--------------------|----------------|--|--|--------------------|--------------------|---------------|----------------|----------------|----------------|----------------|--|----------------|----------------------|--|----------------|
| 3 | April | Year 2 | TO adds estimates from Step 2 to Appendix A
324,792,808 | Include inputs to Appendix A Lines 77 | | | | | | | | | | | | |
| 4 | May | Year 2 | Post results of Step 3 on APS web site.
\$ 324,792,808 | Must run Appendix A to get this number (with results of step 2) | | | | | | | | | | | | |
| 5 | June | Year 2 | Results of Step 3 go into effect.
324,792,808 | | | | | | | | | | | | | |
| 6 | April | Year 3 | TO populates the formula with Year 2 data from FERC Form 1.
318,560,707 Rev Req based on Prior Year data | step 6 file | | | | | | | | | | | | |
| 7 | April | Year 3 | Reconciliation - TO calculates the true up amount by subtracting the results of Step 6 by Step 3. | <table border="0"> <tr> <td>Prior Year True Up</td> <td>First Year True up</td> <td>Total True Up</td> </tr> <tr> <td>\$ 318,560,707</td> <td>\$ 324,792,808</td> <td>\$ 318,560,707</td> </tr> <tr> <td>\$ 324,792,808</td> <td></td> <td>\$ 324,792,808</td> </tr> <tr> <td>True up w/o interest</td> <td></td> <td>\$ (6,232,101)</td> </tr> </table> | Prior Year True Up | First Year True up | Total True Up | \$ 318,560,707 | \$ 324,792,808 | \$ 318,560,707 | \$ 324,792,808 | | \$ 324,792,808 | True up w/o interest | | \$ (6,232,101) |
| Prior Year True Up | First Year True up | Total True Up | | | | | | | | | | | | | | |
| \$ 318,560,707 | \$ 324,792,808 | \$ 318,560,707 | | | | | | | | | | | | | | |
| \$ 324,792,808 | | \$ 324,792,808 | | | | | | | | | | | | | | |
| True up w/o interest | | \$ (6,232,101) | | | | | | | | | | | | | | |

			True Up to be recovered	Divide True up w/o interest by the number of months the rate was in effect and place that result in the (6,232,101) month that the rate went in effect in the interest calculation below				
8	April	Year 3	Reconciliation - TO calculates interest and amortization associated with the true up calculated in Step 7 and applies that amount to line 159 of the formula.					
			Interest on Amount of Refunds or Surcharges					
			In accordance with FERC Section 35.19a Electric Interest Rates					0.41%
Month	Yr		1/12 of Step 7	35.19a Electric Interest Rates March Current Yr	Months	Interest	Refunds Owed	
Jun	Year 1		(519,342)	0.41%	11.5	(24,487)	(543,829)	
Jul	Year 1		(519,342)	0.41%	10.5	(22,358)	(541,699)	
Aug	Year 1		(519,342)	0.41%	9.5	(20,228)	(539,570)	
Sep	Year 1		(519,342)	0.41%	8.5	(18,099)	(537,441)	
Oct	Year 1		(519,342)	0.41%	7.5	(15,970)	(535,311)	
Nov	Year 1		(519,342)	0.41%	6.5	(13,840)	(533,182)	
Dec	Year 1		(519,342)	0.41%	5.5	(11,711)	(531,053)	
Jan	Year 2		(519,342)	0.41%	4.5	(9,582)	(528,924)	
Feb	Year 2		(519,342)	0.41%	3.5	(7,453)	(526,794)	
Mar	Year 2		(519,342)	0.41%	2.5	(5,323)	(524,665)	
Apr	Year 2		(519,342)	0.41%	1.5	(3,194)	(522,536)	
May	Year 2		(519,342)	0.41%	0.5	(1,065)	(520,406)	
Total			(6,232,101)				(6,385,411)	
			Balance	Interest	Amort	Balance		
Jun	Year 2		(6,385,411)	0.41%	(546,405)	(5,865,186)		
Jul	Year 2		(5,865,186)	0.41%	(546,405)	(5,342,828)		
Aug	Year 2		(5,342,828)	0.41%	(546,405)	(4,818,329)		
Sep	Year 2		(4,818,329)	0.41%	(546,405)	(4,291,679)		
Oct	Year 2		(4,291,679)	0.41%	(546,405)	(3,762,870)		
Nov	Year 2		(3,762,870)	0.41%	(546,405)	(3,231,893)		
Dec	Year 2		(3,231,893)	0.41%	(546,405)	(2,698,739)		
Jan	Year 3		(2,698,739)	0.41%	(546,405)	(2,163,399)		
Feb	Year 3		(2,163,399)	0.41%	(546,405)	(1,625,864)		
Mar	Year 3		(1,625,864)	0.41%	(546,405)	(1,086,125)		
Apr	Year 3		(1,086,125)	0.41%	(546,405)	(544,174)		
May	Year 3		(544,174)	0.41%	(546,405)	0		
Total with interest						(6,556,858)		

The difference between the Reconciliation in Step 6 and the forecast in Prior Year with interest (6,556,858)

- 9 April Year 3 TO estimates all transmission Cap Adds, Retirements, CW P and associated depreciation for Year 3 based on
Note: Jan and Feb are actuals, Mar-Dec forecasted. Retirements are not forecasted.

	(A) Other Project PIS	(B) other retirements	(C) Project X PIS	(D) Project X PIS retirements	(E) Other Project PIS	(F) Accumulated Balance Project X PIS	(G) Total
Dec					0	0	0
Jan	8,302,418				8,302,418	—	8,302,418
Feb	6,139,403				14,441,821	—	14,441,821
Mar	19,804,544				34,246,365	—	34,246,365
Apr	14,801,883				49,048,248	—	49,048,248
May	58,907,210				107,955,459	—	107,955,459
Jun	8,968,817				116,924,275	—	116,924,275
Jul	37,883,779				154,808,055	—	154,808,055
Aug	25,723,775				180,531,830	—	180,531,830
Sep	1,066,761				181,598,591	—	181,598,591
Oct	9,920,756				191,519,347	—	191,519,347
Nov	12,734,557				204,253,904	—	204,253,904
Dec	57,826,752				262,080,656	—	262,080,656
Total	262,080,656	—	—	—	115,823,921	—	115,823,921

13 month avg of new plant additions = Col F + Col H

115,823,921 goes to line 16 of the formula

	(I) = F Total Other Project PIS	(J) Composite Trans Deprec Rate	(K) = I * J Depreciation Expense	(L) Accum Deprec	(M) = H Total Project X PIS	(N) Composite Trans Deprec Rate	(O) = L * M Depreciation Expense	(P) Accum Deprec
Jan	8,302,418	0.17%	13,749	13,749	—	0.17%	—	—
Feb	14,441,821	0.17%	23,917	37,666	—	0.17%	—	—
Mar	34,246,365	0.17%	56,715	94,381	—	0.17%	—	—
Apr	49,048,248	0.17%	81,228	175,608	—	0.17%	—	—
May	107,955,459	0.17%	178,783	354,391	—	0.17%	—	—
Jun	116,924,275	0.17%	193,636	548,027	—	0.17%	—	—
Jul	154,808,055	0.17%	256,374	804,401	—	0.17%	—	—
Aug	180,531,830	0.17%	298,975	1,103,375	—	0.17%	—	—
Sep	181,598,591	0.17%	300,741	1,404,116	—	0.17%	—	—
Oct	191,519,347	0.17%	317,171	1,721,287	—	0.17%	—	—
Nov	204,253,904	0.17%	338,260	2,059,547	—	0.17%	—	—
Dec	262,080,656	0.17%	434,026	2,493,573	—	0.17%	—	—
Total	2,493,573	—	831,548	—	—	—	—	—

13 mo. Avg accumulated depreciation = Col L + Col P:

Depreciation Expense = Col K + Col O

831,548 goes to line 24 of the formula

2,493,573 goes to line 77 of the formula

- 10 April Year 3 TO adds 13 month average Cap Adds and retirements (line 16 and 24) to the Formula.
Rev Req based on Year 2 data with estimated Cap Adds, Rets, and Deprec for Year 3 Cap Adds (Step 9) and True up of Year 1 data (Step 8)
Must run App A to get this # (with 13 mo. avg cap adds, depreciation for Year 3 cap adds)

- 11 May Year 3 Post results of Step 10 on APS web site.
\$ 334,504,654

- 12 June Year 3 Results of Step 9 go into effect for the Rate Year 2.
\$ 327,947,796 Step 11 plus the difference between the Reconciliation in Step 6 and the forecast in Prior Year with interest

Attachment H

Arizona Public Service Company

Attachment 7 - Transmission Enhancement Charge Worksheet

Line #	Formula Line		
1	160	Plus any increased ROE calculated on Attachment 7 Incentive - Revenue Credit for the corresponding rate year.	\$
			—
Fixed Charge Rate (FCR) if not a CIAC			
2	A	150 Net Plant Carrying Charge without Depreciation	10.2109%
3	B	157 Net Plant Carrying Charge per 100 Basis Point in ROE without Depreciation:	10.4043%
4	C	Line B less Line A	0.2833%
FCR if a CIAC			
5	D	151 Net Plant Carrying Charge without Depreciation, Return, nor Income Taxes	2.7693%

The FCR resulting from Formula in a given year is used for that year only.
Therefore actual revenues collected in a year do not change based on cost data for subsequent years

Total Sum of Revenue for Project CWIP and PIS Incentive Total for "W Increased ROE" row Revenue Credit Total for "FCR W base ROE" row

Arizona Public Service Company

Attachment 8 - Depreciation Rates

Plant Account	Depreciation Rates
352.01 - Structures	1.84%
353 - Station Equipment	2.14%
354 - Towers and Fixtures	1.34%
355.01 - Poles and Fixtures - Wood	2.21%
355.02 - Poles and Fixtures - Steel	2.10%
356 - Overhead Conductors and Devices	1.87%
357 - Underground Conduit	1.55%
358 - Underground Conductors and Devices	1.33%

ARIZONA PUBLIC SERVICE COMPANY
ATTACHMENT 9 REGULATORY IMPACTS DEFICIENT/EXCESS ADIT

Section I. Current Year Deficient and Excess Deferred Taxes

1 When there is a change in the statutory tax rate during the year Section 1 will reflect any Deficient and/or Excess Deferred Taxes created. Full details of these Deficient and/or Excess Deferred Taxes can be found at Attachment 10.

Section II. Regulatory Assets and Liabilities for Deficient/Excess Deferred Income Taxes

Section II Instructions

- 1.** Section II is to be updated annually to reflect changes in the underlying regulatory asset and regulatory liability for Deficient and/or Excess Deferred Taxes.
2. Amounts reflected in Section I, Columns F - I, flow to Section II as Additions. If balances are positive, they represent Deficient Deferred Taxes and are recorded as additions to Account 1823. If balances are negative, they represent Excess Deferred Taxes and are recorded as additions to Account 2561.

A	B	C	D	E	F	G	H	I	J	K	L	M	
ACCOUNT 182.3 Deficient Deferred Taxes Regulatory Assets													
					Non FERC Jurisdictional		FERC Jurisdictional		Total Non FERC Jurisdictional Column F+G		Total FERC Column H+I		
					Protected	Unprotected	Protected	Unprotected					
					Amortization Through (Year)								
					2046	2020	2058	2037	2,772,158	8,527,979	8,527,979	FERC Form 1 page 232	
					Deficient Deferred Taxes Regulatory Asset (Account 182.3) Beginning of Year	2,772,158	—	—	2,772,158	8,527,979	8,527,979	FERC Form 1 page 232	
					Additions for ADIT-190 Deficient Deferred Taxes	[A]	—	—	—	—	—	—	
					Additions for ADIT-282 Deficient Deferred Taxes	[A]	—	—	—	—	—	—	
					Additions for ADIT-283 Deficient Deferred Taxes	[A]	—	—	—	—	—	—	
					Other Additions/(Reductions) - Including Prior Year True-Ups	(balance sheet only)	—	—	—	—	—	—	
					Regulatory Tax-on-tax Gross-up Offset to ADIT 283	(balance sheet only)	—	—	—	—	—	—	
					Amortization - From Section III, Below	[B]	(113,148)	—	—	(532,998)	(113,148)	(532,998)	FERC Form 1 page 232
					Deficient Deferred Taxes Regulatory Asset (Account 182.3) End of Year	2,659,010	—	7,994,981	2,659,010	7,994,981	7,994,981	FERC Form 1 page 232	
					End of Year for Est./Average for Final	2,715,584	—	8,261,480	2,659,010	8,261,480	8,261,480	FERC Form 1 page 232	
					End of Year for Estimate for FERC Formula	(balance sheet only)	—	—	—	—	—	—	
					Average for Final FERC Formula	(balance sheet only)	—	—	—	—	—	—	
					Average for Final FERC Formula	(balance sheet only)	—	—	—	—	—	—	
ACCOUNT 254 Excess Deferred Taxes Regulatory Liabilities													
					Non FERC Jurisdictional		FERC Jurisdictional		Total Non FERC Jurisdictional Column F+G		Total FERC Column H+I		
					Protected	Unprotected	Protected	Unprotected					
					Amortization Through (Year)								
					2046	2020	2058	2037	2,046	(36,835,034)	(1,015,220,568)	(237,644,206)	FERC Form 1 page 278
					Excess Deferred Taxes Regulatory Liability (Account 254) Beginning of Year	(1,015,220,568)	—	(201,009,172)	(36,835,034)	(1,015,220,568)	(237,644,206)	FERC Form 1 page 278	
					Additions for ADIT-190 Excess Deferred Taxes	[A]	—	—	—	—	—	—	
					Additions for ADIT-282 Excess Deferred Taxes	[A]	—	—	—	—	—	—	
					Additions for ADIT-283 Excess Deferred Taxes	[A]	—	—	—	—	—	—	
					Other Additions/(Reductions) - Including Prior Year True-Ups	(balance sheet only)	—	—	—	—	—	—	
					Regulatory Tax-on-tax Gross-up Offset to ADIT 190	(balance sheet only)	—	—	—	—	—	—	
					Amortization - From Section III, Below	[C]	41,016,543	—	5,482,067	2,289,690	41,016,543	7,771,757	FERC Form 1 page 278
					Excess Deferred Taxes Regulatory Liability (Account 254) End of Year	(974,204,025)	—	(195,527,105)	(34,345,344)	(974,204,025)	(229,872,449)	FERC Form 1 page 278	
					End of Year for Est./Average for Final	(994,712,297)	—	(198,268,139)	(35,490,189)	(994,712,297)	(233,758,328)	(233,758,328)	Attachment H line 36
					End of Year for Estimate for FERC Formula	(balance sheet only)	—	(195,527,105)	(34,345,344)	(195,527,105)	(34,345,344)	(233,758,328)	Attachment H line 36
					Proof:	(balance sheet only)	—	(198,268,139)	(35,490,189)	(198,268,139)	(35,490,189)	(233,758,328)	Attachment H line 36
								Non FERC Jurisdictional		FERC Jurisdictional			
								Protected	Unprotected	Protected	Unprotected (Combined)		
								TRUE	TRUE	TRUE	TRUE		
					Sum of [A]'s - Should equal totals from Section I		—	—	—	—	—		

Section III. Amortization of Deficient and Excess Deferred Taxes Regulatory Asset and Liability

Section III: Instructions

1. Protected deficient and/or excess deferred taxes¹ in Accounts 182.3 and 254 resulting from a change in corporate income tax rates shall be amortized consistent with IRS requirements - e.g., over the remaining regulatory life. The remaining regulatory life is not constant and will need to be re-determined for each change in the statutory rate and applied to any new deficient and/or excess deferred taxes associated with such later statutory rate change.
 2. FERC Jurisdictional unprotected deficient or excess deferred taxes in Accounts 182.3 and 254 respectively, are not subject to IRS normalization requirements and shall be amortized consistent with FERC guidance. If no such guidance has been issued as of the effective date of a rate change for the first year amortization begins, the Company shall choose an amortization period (or periods) that it believes is appropriate and provide an explanation of its choice(s) below.
 3. In the event FERC guidance related to the amortization of unprotected deficient or excess deferred taxes is issued after the Company has begun amortization of the deficient and/or excess deferred taxes associated with a specific rate change, the unamortized net balance of unprotected deficient and/or excess deferred taxes as of the date of the issuance of such FERC guidance shall be amortized straight-line over the remaining amortization period. The remaining amortization period shall be determined by reducing the amortization period provided by such FERC guidance for the number of periods that the unprotected deficient and/or excess deferred taxes have previously been amortized.
 4. In no event shall amortization begin sooner than the first 12 months following the effective date of a statutory rate change.

Attachment H

A	B	C	D	E	F	G	H	I	J	K	L
Deficient Deferred Tax Amortization Accounts 182.3, 283, 410.1											
Allocated Amortization to Income Tax Expense (Account 410.1)	debit (credit)	[IS Portion]	2046	Non FERC Jurisdictional Protected	Unprotected	2020	FERC Jurisdictional Protected	Unprotected	2058	2037	Total Non FERC Jurisdictional Column F+G
Allocated Amortization to Accumulated Deferred Income Taxes (Account 283)	debit (credit)	[Tax-on-tax gross-up]	27,969	—	—	—	401,241	—	85,179	401,241	Attachment H line 122
Amortization of Deficient Taxes Regulatory Asset (Account 182.3)	debit (credit)	[B]	(113,148)	—	—	—	(532,998)	—	(113,148)	(532,998)	FERC Form 1 page 232

Excess Deferred Tax Amortization Accounts 190, 254, 411.1		Non FERC Jurisdictional	FERC Jurisdictional	Total Non FERC Jurisdictional Column F+G	Total FERC Column H+I
Allocated Amortization to Income Tax Expense (Account 411.1)	debit (credit)	Protected 2046	Unprotected 2020	Protected 2058	Unprotected 2037
Allocated Amortization to Accumulated Deferred Income Taxes (Account 190)		[IS Portion] [Tax-on-tax gross-up]	(30,877,253) (10,139,290)	— —	(4,126,901) (1,355,166)
Amortization of Excess Deferred Taxes Regulatory Liability (Account 254)	debit (credit)	[C]	41,016,543	—	(1,723,578) (568,012)
				5,482,067	(1,723,578) (568,012)
				2,289,690	(1,921,178)
				41,016,543	7,771,757
					FERC Form 1 page 278

Details Regarding Amortization Period To be completed annually.

(Insert Additional Rows As Needed)

Attachment H

ARIZONA PUBLIC SERVICE COMPANY
A. ACHMEN 10 DEFICIEN AND EXCESS DEFERRED AXI

Section I Beginning of Year and End of Year Statutory Tax Rates

Section 11: Financial Information
1. To be completed annually showing any changes in the corporate liability as may accrue since the beginning of the year.
2. If a rate change is applicable over more than one year, show the final rate used in Ending Rate, and provide a disclosure of the rates of acc. at each year. Previous or rates should be reflected annually in the financial statement until either a July 1 review and audit copy of L1 should be completed, or just new rate if there are no excess deferred amounts created by such change of the rate change.

	Beginning Rate	Ending Rate	Change
Federal Statutory Income Tax Rate	21.00%	21.00%	0.00%
Ala n. St. July 1, 2017 - T.R.A. I.	90%	90%	0.00%
California Statutory Income Tax Rate	8.8 %	8.8 %	0.00%
New Mexico Statutory Income Tax Rate	5.20%	5.90%	0.00%
			0.90%
			0.00%
			0.00%

Enactment Date of Rate Change:	Description of Rate Change
Month/Year:	

[Print Additional Rows As Needed](#)

Section II. Calculation of Deficient/(Excess) Deferred Income Taxes

Section 101 - Interest:

1. When there is a change in the policy, accrue during the year, due to either a one-time rechange, or a switch in the rechange, as reflected in Section I - Section H is complete to prove details on my Deferred Energy Defenses Taxes needed to the day rechange. Interest is a change in the daily rate for the year - interest rates per Sec 1m - blank table.
2. Total Deferred Income Defenses taxes are directly assigned to Column E if projected - or subject to IRS home rule rules. Remaining Deferred Energy Defenses taxes are considered unrealized - or - if realized = RS amounts are added - and reflected in Column F.
3. Prepaid and Unpaid Deferred Energy Defenses taxes are reflected in Non-FERC Operations - p. One Year - Sheet 2, P. reduction or Non-FERC Jurisdictions are directly assigned to Columns G & H
4. Prepaid and Unpaid Deferred Energy Defenses taxes are reflected in Taxable and directly assigned to Column B & C.
5. Prepaid and Unpaid Deferred Energy ADT items are reflected in Taxable and reflected in Column K & L
6. The Company does not require supporting schedules to aid in the calculation of prebooked and unanticipated excess and deficit deferred taxes which shall be made available upon request.
7. The sum of Columns E and F would again be Column G through H.

Import Auto-invest Plans for Blendin

Arizona Public Service Company

Worksheet 1 - Revenue Allocation

NETWORK TRANSMISSION PEAK REPORT 2022														Enter Annual Revenue Requirement Here: \$327,947,796			
Line #	Date/Time of Monthly Peak	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	4CP Average	Allocation of ARR	% of Allocation	
1	Balancing Authority Load	4,205,213	4,205,213	3,785,901	4,251,623	5,810,807	7,001,406	7,551,549	7,175,207	6,995,071	5,245,014	3,721,145	4,517,544				
2	Part IV Loads outside BAA	117,000	116,000	101,000	111,000	144,000	173,000	154,000	150,000	123,000	107,000	110,000					
3	Company Use	(7,945)	(9,332)	(7,023)	(8,820)	(12,757)	(14,543)	(14,980)	(14,300)	(15,031)	(11,693)	(8,650)	(8,366)				
4	less NTS Loads in BAA included below	(70,669)	(102,668)	(125,978)	(154,121)	(175,970)	(188,480)	(186,673)	(154,792)	(168,065)	(128,858)	(111,683)	(80,134) (A)				
5	less PTP Loads in the BAA included below	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
6	APS Part IV Load	4,245,298	4,298,824	3,783,902	4,299,681	5,775,080	6,956,473	7,532,887	7,160,215	6,951,921	5,328,560	3,709,782	4,539,172		7,150,374	\$250,747,724	76.46%
Grandfathered Transmission Services																	
7	Public Service Company of New Mexico	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000				
8	Yuma Cooper Associates	50,850	50,850	50,850	50,850	50,850	50,850	50,850	50,850	50,850	50,850	50,850	50,850				
9	Total Grandfathered Transmission Services	180,850		180,850	\$6,342,006	1.93%											
NTS Loads in BAA																	
10	Ajo Improvement District	1,520	1,641	1,081	1,737	2,216	2,654	2,895	2,641	2,851	1,790	4,019	1,790				
11	Cochise Irrigation	7,038	8,016	4,936	3,384	6,664	8,100	8,293	7,420	7,550	6,349	8,834	6,663				
12	Navajo Tribal Utility Authority In	4,865	4,529	2,489	2,334	2,995	3,065	3,638	3,925	3,211	2,496	3,869	4,420				
13	Tonto O'odham Utility Authority	11,327	10,357	6,590	7,773	10,095	12,177	12,791	12,420	12,216	8,585	7,985	10,981				
14	Southwest Public Power Agency	45,419	78,123	110,900	136,903	154,000	161,784	159,062	128,556	110,648	92,096	54,860					
15	Total NTS Loads in BAA	70,669	102,668	125,978	154,121	175,970	188,480	186,673	154,792	168,065	128,858	111,683	80,134 (A)		174,503	\$6,119,415	1.87%
16	NTS Loads outside BAA																
17	Navajo Tribal Utility Authority Out	5,881	5,803	4,137	3,860	4,286	4,811	4,524	4,852	5,196	3,784	5,355	5,860				
18	Naropache Electric Cooperative Inc	72,810	70,647	41,086	35,666	50,115	57,439	56,215	48,763	49,663	40,761	57,638	68,294				
19	Total NTS Loads outside BAA	78,691	76,550	45,223	38,956	54,383	62,250	60,739	50,555	54,859	44,535	62,993	74,174		57,101	\$2,002,396	0.61%
20	Point to Point Serving Load in BAA														\$—	0.00%	
21	N/A	—	—	—	—	—	—	—	—	—	—	—	—				
22	Total	—															
23	Point to Point Not Serving Load in BAA																
24	Broadview Energy KWH LLC	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000				
25	Broadview Energy JN LLC	167,000	167,000	167,000	167,000	167,000	167,000	167,000	167,000	167,000	167,000	167,000	167,000				
26	Brookfield Renewable	—	—	—	—	—	—	—	—	—	—	—	25,000 (E)				
27	Cinches Corner Wind	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000				
28	Durian Mesa Wind	51,000	51,000	51,000	51,000	51,000	51,000	51,000	51,000	51,000	51,000	51,000	51,000				
29	El Calle Wind, LLC	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000				
30	Electrical District 3	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000				
31	Electric Transmission Company	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000				
32	NOVO BioPower LLC	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000				
33	Public Service Company of New Mexico	145,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000				
34	Pattern New Mexico	—	—	—	—	—	—	—	—	—	—	—	—				
35	Salt River Project	127,000	127,000	127,000	127,000	127,000	127,000	127,000	127,000	127,000	127,000	127,000	127,000				
36	Southwest BioGas	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000				
37	Telocote Wind	132,999	132,000	132,000	132,000	132,000	132,000	132,000	132,000	132,000	132,000	132,000	132,000				
38	Tenaska Power	—	—	—	—	—	—	—	—	—	—	—	—				
39	Tucson Electric Power	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000				
40	Trico Electric Cooperative Inc.	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000				
41	Part II Capacity Total	1,588,000	1,589,000	1,589,000	1,589,000	1,589,000	1,789,000	1,789,000	1,789,000	1,789,000	1,789,000	1,789,000	1,814,000		1,789,000	\$62,738,254	19.13%
42	Total Adjusted Network Peak	6,164,509	6,215,892	5,704,951	6,262,608	7,775,283	9,177,053	9,750,149	9,335,412	9,144,895	7,471,803	5,854,308	6,688,330		9,351,827	\$327,947,796	100.00%
43	Average of Four Summer Months (Jun Sep)	9,351,827															
44	Average of Eight Non Summer Months	6,517,211															
45	Average of Twelve Months	7,462,083															
Grouped by FERC Statistical Classification																	
FNS	4,245,298	4,298,824	3,783,902	4,299,681	5,775,080	6,956,473	7,532,387	7,160,215	6,951,921	5,328,560	3,709,782	4,539,172		7,150,374	\$250,747,724	76.46%	
FNO	149,360	178,216	171,190	193,077	230,353	209,730	247,412	205,347	222,504	173,393	174,676	154,356	(C),(D) & (E)	231,603	\$8,121,511	2.48%	
LFP	1,589,000	1,589,000	1,589,000	1,589,000	1,769,000	1,769,000	1,769,000	1,769,000	1,786,000	1,786,000	1,786,000	1,814,000		1,789,000	\$62,738,254	19.13%	
OLF	180,850	180,850	180,850	180,850	180,850	180,850	180,850	180,850	180,850	180,850	180,850	180,850		180,850	\$6,342,008	1.93%	
Total Adjusted Network Peak	6,164,509	6,215,892	5,704,951	6,262,608	7,775,283	9,177,053	9,750,149	9,335,412	9,144,895	7,471,803	5,854,308	6,688,330					
(rounded for FERC Form 1 p.400)																	N
FNS	4,245	4,267	3,764	4,300	5,775	6,956	7,533	7,160	6,952	5,329	3,710	4,539					
FNO	149	179	171	193	230	251	247	205	223	173	175	154	(A), (B) & (C) (D) (E)				
LFP	1,589	1,589	1,589	1,589	1,769	1,769	1,769	1,769	1,786	1,786	1,786	1,814	(F)				
OLF	181	181	181	181	181	181	181	181	181	181	181	181	(G)				
Monthly Peak MW Total (sum of rounded to 1)	6,164	6,216	5,705	6,263	7,775	9,177	9,750	9,335	9,145	7,472	5,855	6,688	Ties to FERC Form 1 p.400 column (e)				
(D) Tenaska Power is a new LFP customer as of June 1, 2022																	
(E) Brookfield Renewable is a new LFP customer as of December 1, 2022																	

(A) The "Total NTS Loads in BAA" values (shown on line 15) are subtracted from Balancing Authority Load as part of the calculation to reflect the portion of load which is made up of APS Part IV customers.

(B) The "less PTP Loads in the BAA included below" values (shown on line 5) represent the total load amounts associated with customers in the "Point-to-Point Serving Load in BAA" section. The values in the "Point-to-Point Serving Load in BAA" section (shown on line 22) represent the long-term firm reservation contract amounts. During 2022 there were no Long-Term firm Point-to-Point (PTP) transmission customers that had load served in the APS BAA.

Arizona Public Service Company

Worksheet 2 - Retail Allocation

Line #	CLASS	2022				4CP		
		June	July	August	September			
		ADJ. PEAK CONTRIB (MW)	ADJ. PEAK CONTRIB (MW)	ADJ. PEAK CONTRIB (MW)	ADJ. PEAK CONTRIB (MW)			
1	RESIDENTIAL R-XS No Solar	594.1	634.4	580.9	566.9			
2	RESIDENTIAL R-BASIC No Solar	252.4	283.2	262.3	255.5			
3	RESIDENTIAL R-BASICL No Solar	102.6	116.0	110.0	109.5			
4	RESIDENTIAL R-TOU-E No Solar	1103.2	1194.7	1080.4	1033.3			
5	RESIDENTIAL R-2 No Solar	360.5	384.6	342.4	319.4			
6	RESIDENTIAL R-3 No Solar	1209.1	1314.1	1179.8	1130.7			
7	RESIDENTIAL R-TECH No Solar	0.1	0.2	0.1	0.1			
8	RESIDENTIAL E-12 Solar	89.1	98.0	97.9	96.8			
9	RESIDENTIAL ET Solar	179.6	194.5	190.4	185.2			
10	RESIDENTIAL ECT Solar	7.9	8.0	7.9	7.7			
11	RESIDENTIAL R-TOU-E Solar	125.0	142.4	153.2	156.7			
12	RESIDENTIAL R-2 Solar	29.0	31.5	32.1	31.2			
13	RESIDENTIAL R-3 Solar	20.2	21.8	22.6	22.9			
14	RESIDENTIAL R-TECH Solar	0.0	0.0	0.0	0.1			
15	TOTAL RESIDENTIAL (SUM LINES 1-13)	4072.8	4423.5	4060.2	3916.1	4,118.1		
16	GENERAL SERVICE <3MW							
17	E-20	8.8	9.5	8.7	8.1			
18	E-30	0.5	0.5	0.5	0.5			
19	E-32 (0-20kW)	309.2	338.0	333.9	328.8			
20	E-32 (0-20kW) Demand	6.1	6.4	6.5	6.4			
21	E-32 (21-100kW)	510.8	542.6	521.5	506.2			
22	E-32 (101-400kW)	559.4	611.9	607.6	587.6			
23	E-32 (401+ kW)	455.2	497.1	488.8	474.9			
24	E-32TOU (0-20kW)	2.9	2.8	2.7	2.7			
25	E-32TOU (21-100kW)	5.0	5.1	4.8	4.8			
26	E-32TOU (101-400kW)	16.8	17.0	16.1	16.1			
27	E-32TOU (401+ kW)	46.0	49.6	49.7	46.8			
28	E-67	0.7	0.6	0.7	0.7			
29	E-221	34.3	38.4	34.5	38.3			
30	E-221-8T	1.1	1.9	0.9	1.4			
31	GS Schools Medium	18.7	24.5	33.9	34.4			
32	GS Schools Large	9.5	11.4	13.0	13.6			
33	E-36 XL (< 3 MW)	0.0	0.0	0.0	0.0			
34	SPECIAL (< 3MW)	0.0	0.0	0.0	0.0			
35	MEXICO TAP (< 3 MW)	0.9	2.7	2.9	3.0			
	TOTAL GENERAL SERVICE <3MW (SUM 16-32)	1985.8	2159.9	2126.5	2074.2	2,086.6		
36	GENERAL SERVICE >3MW							
37	E-34	89.4	104.2	112.0	113.8			
38	E-35	327.5	325.2	345.7	339.9			
39	E-36 XL (> 3 MW)	5.1	0.0	0.0	0.0			
40	SPECIAL (> 3 MW)	3.6	3.5	7.2	7.4			
41	MEXICO TAP (> 3 MW)	0.0	0.0	0.0	0.0			
	TOTAL GENERAL SERVICE >3MW (SUM 34-38)	425.6	432.8	464.9	461.1	446.1		
42	STREETLIGHTS	0.0	0.0	0.0	0.0	0.0		
43	DUSK TO DAWN	0.0	0.0	0.0	0.0	0.0		
44	SRP FRINGE CUSTOMER LOAD	1.4	1.4	1.3	1.7	1.5		
45	LOSSES	470.8	515.3	507.3	498.8	498.1		
46	Total System Load	6956.4	7532.9	7160.2	6951.9	7,150.4		
	Total System Load Check Number					0.0		
45	TOTAL RESIDENTIAL (LINE 15)	4072.8	4423.5	4060.2	3916.1	4,118.1	\$155,259,554	61.92%
46	GENERAL SERVICE 3 MW & GREATER							
47	E-34	89.4	104.2	112.0	113.8			
48	E-35	327.5	325.2	345.7	339.9			
49	MEXICO TAP > 3 MW	0.0	0.0	0.0	0.0			
50	SPECIAL	3.6	3.5	7.2	7.4			
51	E-36	5.1	0.0	0.0	0.0			
52	TOTAL 3 MW & GREATER (LINE 39)	425.6	432.8	464.9	461.1	446.1	\$16,819,096	6.71%
53	GENERAL SERVICE LESS THAN 3 MW							
54	RETAIL TARIFFS	1985.0	2157.3	2123.6	2071.2			
55	MEXICO TAP < 3 MW	0.9	2.7	2.9	3.0			
56	TOTAL LESS THAN 3 MW (LINE 33)	1985.8	2159.9	2126.5	2074.2	2,086.6	\$78,669,073	31.37%
57	Total	6484.2	7016.2	6651.6	6451.4	6650.9	\$250,747,724	100.00%

Arizona Public Service Company

Worksheet 3 - Rate Design

TY 2022 OATT COSTS FOR RETAIL SERVICE^a

Billing Determinants	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
Residential (kWh)	1,008,590,577	867,952,830	838,125,899	849,917,963	999,686,279	1,404,663,515	1,907,738,059	1,834,662,813	1,798,534,181	1,323,816,478	897,128,879	921,999,623	14,652,817,099	
Gen Serv und 3MW NDM (kWh)	144,797,236	138,061,492	137,044,328	137,472,930	141,688,338	154,028,720	169,881,621	158,877,723	167,995,483	147,220,023	138,566,370	143,754,265	1,779,386,529	
Gen Serv und 3MW DM (billed kW)	2,215,372	2,127,335	2,250,020	2,264,124	2,382,272	2,647,839	2,905,021	2,852,637	2,827,291	2,647,749	2,341,136	2,271,161	29,731,957	
Gen Serv und 3MW DM (kWh)	731,379,482	666,346,903	701,764,330	745,147,859	799,014,912	936,841,939	1,086,233,386	1,042,034,771	1,071,611,764	905,364,174	769,056,777	735,705,489	10,190,501,786	
Gen Serv ovr 3MW (billed kW)	666,141	443,064	781,777	572,262	568,686	723,434	650,394	703,172	685,817	737,561	662,324	649,783	7,844,415	
Gen Serv ovr 3MW (kWh)	309,443,745	155,223,218	388,612,218	254,597,553	265,361,012	348,333,182	321,572,347	354,539,889	349,711,421	371,952,344	306,961,788	297,304,091	3,723,612,908	
Total kWh sales.	2,194,211,040	1,827,584,443	2,065,546,775	1,987,136,305	2,205,750,541	2,843,867,356	3,485,425,413	3,390,115,296	3,387,852,852	2,748,353,019	2,111,713,814	2,098,763,468	30,346,320,322	
NITS														
Residential (kWh)	\$ 0.010596	10,686,909	9,196,728	8,880,685	9,005,632	10,592,560	14,883,652	20,214,172	19,439,875	19,057,060	14,027,006	9,505,874	9,769,401	155,259,554
Gen Serv < 3MW Without Demand Meters - Includes All Customers 20 kW and less (kWh)	\$ 0.006572	951,643	907,374	900,689	903,506	931,211	1,012,315	1,116,504	1,044,184	1,104,108	967,566	910,692	944,789	11,694,581
Gen Serv < 3MW (kW)	\$ 2,2526	4,990,368	4,792,055	5,068,417	5,100,188	5,366,329	5,964,548	6,543,878	6,425,878	6,368,783	5,964,345	5,273,666	5,116,039	66,974,493
Gen Serv > 3MW (kW)	\$ 2,1441	1,428,263	949,967	1,676,197	1,226,979	1,219,311	1,551,104	1,394,500	1,507,661	1,470,450	1,581,394	1,420,079	1,393,190	16,819,096
Total OATT Cost by Month:	\$ 18,057,184	\$ 15,846,124	\$ 16,525,988	\$ 16,236,305	\$ 18,109,411	\$ 23,411,619	\$ 29,269,054	\$ 28,417,597	\$ 28,000,401	\$ 22,540,311	\$ 17,110,311	\$ 17,223,419	\$ 250,747,724	
Total OATT Costs by Class														
Residential	\$ 10,686,909	\$ 9,196,728	\$ 8,880,685	\$ 9,005,632	\$ 10,592,560	\$ 14,883,652	\$ 20,214,172	\$ 19,439,875	\$ 19,057,060	\$ 14,027,006	\$ 9,505,874	\$ 9,769,401	\$ 155,259,554	
Gen Serv< 3MW	\$ 5,942,011	\$ 5,699,430	\$ 5,969,106	\$ 6,003,694	\$ 6,297,540	\$ 6,976,862	\$ 7,660,382	\$ 7,470,061	\$ 7,472,891	\$ 6,931,911	\$ 6,184,358	\$ 6,060,828	\$ 78,669,073	
Gen Serv> 3MW	\$ 1,428,263	\$ 949,967	\$ 1,676,197	\$ 1,226,979	\$ 1,219,311	\$ 1,551,104	\$ 1,394,500	\$ 1,507,661	\$ 1,470,450	\$ 1,581,394	\$ 1,420,079	\$ 1,393,190	\$ 16,819,096	
Total	\$ 18,057,184	\$ 15,846,124	\$ 16,525,988	\$ 16,236,305	\$ 18,109,411	\$ 23,411,619	\$ 29,269,054	\$ 28,417,597	\$ 28,000,401	\$ 22,540,311	\$ 17,110,311	\$ 17,223,419	\$ 250,747,724	
Cost per kWh														
Residential	\$ 0.01060	\$ 0.01060	\$ 0.01060	\$ 0.01060	\$ 0.01060	\$ 0.01060	\$ 0.01060	\$ 0.01060	\$ 0.01060	\$ 0.01060	\$ 0.01060	\$ 0.01060	\$ 0.01060	
Gen Serv< 3MW	\$ 0.00678	\$ 0.00709	\$ 0.00712	\$ 0.00680	\$ 0.00669	\$ 0.00640	\$ 0.00610	\$ 0.00622	\$ 0.00603	\$ 0.00659	\$ 0.00681	\$ 0.00689	\$ 0.00657	
Gen Serv> 3MW	\$ 0.00462	\$ 0.00612	\$ 0.00431	\$ 0.00482	\$ 0.00459	\$ 0.00445	\$ 0.00434	\$ 0.00425	\$ 0.00420	\$ 0.00425	\$ 0.00463	\$ 0.00469	\$ 0.00452	
Total	\$ 0.00823	\$ 0.00867	\$ 0.00800	\$ 0.00817	\$ 0.00821	\$ 0.00823	\$ 0.00840	\$ 0.00838	\$ 0.00826	\$ 0.00820	\$ 0.00810	\$ 0.00821	\$ 0.00826	
Test Year Total OATT Expense per kWh													\$ 0.00826	
2021													\$ 0.00811	
% Change													1.89%	

Arizona Public Service Company

Worksheet 4 - Revenue Credits

Account 454 - Rent from Electric Property

Description	Amount	\$ Included on Attachment 3
Attachment Fees for Joint Pole Use	1,370,847	
Land and miscellaneous	102,563	
Other	221,926	94,305
Total	1,695,334	94,305
Total 12ME Account 454 (p.300,19.b.)	1,695,334	
Difference (must be zero)	(0)	

Account 456 - Other Electric Revenues

Description	Amount	\$ Included on Attachment 3
PCS project	2,692,939	1,239,673
Facility Charges	41,040	
Fuel oil loading	1,215,209	
Yucca Management Fee	699,639	
Participant Station Power Revenue	177,496	
Print Shop Billing	29,919	
Gila River Admin Fee	91,667	91,667
Salt River Project	68,080	68,080
Mead-Phoenix O&M	15,725	15,725
Call Center Referrals	5,500	
Holiday Inn District	51,900	
Surveyor and Appraiser Discount	(2,396,322)	
Bid fee proceeds	860,000	
Solar O&M Agreements	247,057	
Other	52,599	
Total	3,912,238	1,415,145
Total Account 456 (p300,21.b.)	3,912,238	
Difference (must be zero)	(0)	

Account 456.1 - Revenues from Transmission of Electricity of Others

Summary of Transmission for Others by Statistical Classification and Counterparty during 2022

Obtained from FERC Form 1 p 328-330 (Transmission for Others)

Revenues from Directly Assigned Transmission Facility Charges

Calculated Revenue Credit

Statistical Classification on Payment by Counterparty	Sum of Demand Charges	Sum of Energy Charges	Sum of Other Charges	Sum of Total Revenues	Stat. Class.	\$ Included in Divisor (Y or N)	On Worksheet 1	
							\$ included on Attachment 3	Network Trans Peak Report Line #
FNO To al	\$89,92	\$ 500	\$190,1	\$93,628	FNO Y		\$ 6,162	10
	\$275,862	\$ 106	\$6,182	\$356,30	FNO Y			11
	\$236,018	\$ 281	\$59,7 9	\$355,0 8	FNO Y		\$ 50,7 9	12 & 17
	\$195,726	\$—	\$15,531	\$195,273	FNO Y		\$ (3,53)	18
	\$320,700	\$209	\$17,31	\$3,752	FNO Y		\$ (7,30)	13
	\$10,206	\$71,537	\$8,307,372	\$17,779	FNO Y			
	\$8,207,248	\$129,605	\$6,400,383	\$15,027,235			\$ 6,361,274	1
LFP To al	\$5,837,6	\$—	\$16,136	\$5,831,510	LFP Y		\$ (6,135)	25
	\$5, 902	\$—	\$ 5, 75	\$ 5, 591	LFP Y		\$ (28)	2
	\$—	\$—	\$ 51	\$—			\$ 91	
	\$10, 556	\$—	\$10,029	\$10, 556	LFP Y		\$ (2,320)	29
	\$3,156,763	\$—	\$12,339	\$3,13, 27	LFP Y		\$ (2,336)	30
	\$ 87, 9	\$—	\$10,62	\$ 86,879	LFP Y		\$ (962)	32
	\$5,052,9	\$—	\$12, 851	\$15,650, 59	LFP Y		\$ (2, 85)	33
	\$ 25,682	\$—	\$12, 7	\$ 25,682	LFP Y		\$ (2)	35
	\$1,04,626	\$—	\$12, 86	\$1,04,626	LFP Y		\$ (36)	38
	\$60,696	\$—	\$12, 85	\$60,696	LFP Y		\$ (42)	0
	\$3,833,821	\$—	\$13,12	\$3,833,509	LFP Y		\$ (312)	39
	\$6,989, 03	\$—	\$17,09, 1	\$6,972,309	LFP Y		\$ (17,09)	31
	\$ 599,99	\$—	\$ 989	\$ 60,693	LFP Y		\$.989	37
	\$ 181,7, 7	\$—	\$ 583	\$ 182,330	LFP Y		\$ 583	27
	\$9,603	\$—	\$ 989	\$ 9,603	LFP Y		\$ —	26
	\$1,777,365	\$—	\$ 8, 2	\$ 1,62,207	LFP Y		\$ 6, 2	28
	\$1,9, 6,657	\$—	\$—	\$1,9, 6,657	LFP Y		\$ —	3
	\$3, 8, 8	\$825	\$18,722	\$18,722	LFP Y		\$ 16,722	36
	\$59,395,248	\$825	\$26,055	\$59,422,130				
NF To al	\$1,11	\$11	\$1,11					
	\$60,113	\$—	\$70,400				\$ 70,100	
	\$117	\$—	\$17,358				\$ 17,358	
	\$10,987	\$—	\$56,585				\$ 56,585	
	\$2,901	\$—	\$23,23				\$ 33,138	
	\$175	\$—	\$2,155				\$ 2,333	
	\$3,00	\$—	\$—				\$ 337	
	\$31,333	\$—	\$13,507				\$ 31,507	
	\$30,055	\$—	\$11,338				\$ 9,338	
	\$11,61	\$—	\$1,322				\$ 1,322	
	\$1,01	\$—	\$1,322				\$ 1,322	
	\$18,800	\$—	\$187,78				\$ 187,78	
	\$15, 1	\$—	\$15, 1				\$ 15, 1	
	\$1, 29	\$—	\$7,335				\$ 7,335	
	\$16,271	\$—	\$6,627				\$ (6,627)	
	\$11,9, 6	\$—	\$68,267				\$ 68,267	
	\$1176	\$—	\$63,193				\$ 63,193	
	\$1	\$—	\$ 572				\$ 572	
	\$10,985	\$—	\$16,931				\$ 21,931	
	\$7,218	\$—	\$21,17, 1				\$ 31,1, 1	
	\$1267	\$—	\$16,599				\$ 16,599	
	\$2,52, 1	\$—	\$77,609				\$ 77,609	
	\$355	\$—	\$352,016				\$ 352,016	
	\$12	\$—	\$ 211				\$ 211	
	\$12, 18	\$—	\$50,494				\$ 50,494	
	\$1, 60,992	\$—	\$1, 60,992				\$ 1, 60,992	
	\$7,701	\$—	\$7,636				\$ 7,636	

Yuma Cogeneration Associates	\$12,017	\$—	\$—	\$12,017	NF	N	\$	12,017
TEC Energy	\$—	\$—	\$—	\$—	\$—	\$—	\$	\$—
Public Service Company of Colorado	\$6,259	\$—	\$—	\$6,259	NF	N	\$	6,259
Tecolote Wind LLC	\$38,623	\$—	\$3,022	\$1,265	NF	N	\$	1,265
Clinch Rivers Wind Farm LLC	\$—	\$—	\$—	\$—	\$—	\$—	\$	\$—
Broadleaf Renewable Trading and Marketing LP	\$—	\$—	\$—	\$—	\$—	\$—	\$	\$—
EDF Trading North America, LLC	\$1,652	\$—	\$—	\$—	\$—	\$—	\$	\$—
EDF Trading North America, LLC	\$1,155	\$—	\$—	\$—	\$—	\$—	\$	\$—
Los Angeles Gas Who Buys Marketing	\$—	\$—	\$—	\$—	\$—	\$—	\$	\$—
Mercutia Energy Amerca LLC	\$28,768	\$—	\$—	\$—	\$—	\$—	\$	\$—
The Energy Authority Inc.	\$—	\$—	\$—	\$—	\$—	\$—	\$	\$—
Duran Mesa Wind LLC	\$500,797	\$—	\$—	\$1,889	\$22,666	NF	\$	22,666
Dynasty Power Inc	\$—	\$—	\$—	\$—	\$—	\$—	\$	\$—
Red Cloud Wind Farm	\$105,701	\$—	\$—	\$1,321	\$16,292	NF	\$	16,292
	\$3,191	\$—	\$—	\$—	\$—	\$—	\$	\$—
		\$—	\$—	\$—	\$—	\$—	\$	\$—
UNIFER GLOBAL COMMODITIES NORTH AMERICA LLC	\$165,700	\$—	\$1911	\$165,598	NF	N	\$	165,598
CP Energy Marketing	\$1,500	\$—	\$1121	\$1,9	NF	N	\$	1,9
DTE Energy Trading Inc	\$—	\$—	\$—	\$—	NF	N	\$	\$—
Black Hills Co orado Electric	\$—	\$—	\$—	\$—	\$—	\$—	\$	\$—
Black Hills Power Inc	\$—	\$—	\$—	\$—	\$—	\$—	\$	\$—
BP Energy Company	\$—	\$—	\$—	\$—	\$—	\$—	\$	\$—
ConocoPhillips Inc	\$11,916	\$—	\$—	\$—	\$—	\$—	\$	\$—
Vivo Inc	\$665	\$—	\$—	\$—	\$—	\$—	\$	\$—
Avisia Corporation	\$—	\$—	\$—	\$—	\$—	\$—	\$	\$—
City of Glendale	\$—	\$—	\$—	\$—	\$—	\$—	\$	\$—
Cargill Power Markets, LLC	\$—	\$—	\$—	\$—	\$—	\$—	\$	\$—
NV Energy	\$—	\$—	\$—	\$—	\$—	\$—	\$	\$—
NF To al	\$ 086,002	\$—	\$119,658	\$ 205,659	OLF	Y	\$	—
OLF Arizona Public Service Company	\$—	\$—	\$—	\$—	OLF	Y	\$	\$—
Pacificor	\$—	\$—	\$—	\$—	OLF	Y	\$	\$—
Public Service Company of New Mexico	\$1,15,030	\$—	\$—	\$1,15,030	OLF	Y	\$	—
Yuma Cogeneration Associates	\$1,777,99	\$—	\$—	\$1,777,99	OLF	Y	\$	—
OLF To al	\$3,192,529	\$—	\$3,192,529	\$3,192,529	Y	—	\$	—
OS Imperial Irrigation District	\$—	\$—	\$—	\$—	\$—	\$—	\$	\$—
Lake Ariz Main Field	\$177,8	\$10008	\$—	\$177,76	OS	N	\$	177,76
Marine Corps Air Station	\$77,652	\$—	\$—	\$77,652	OS	N	\$	77,652
Navajo Trans Ional Energy Company, LLC	\$—	\$559,77	\$—	\$590,876	OS	N	\$	590,876
NOVO BioPower LLC	\$—	\$—	\$31,10	\$2,716	OS	N	\$	2,716
Salt River Project (Schedule 2)	\$13,681	\$—	\$—	\$13,681	OS	N	\$	13,681
Salt River Project (Schedule 3)	\$—	\$—	\$—	\$—	OS	N	\$	—
Unit B Irrigation and Drainage District	\$—	\$—	\$—	\$—	OS	N	\$	—
Yuma Mesa Irrigation and Drainage District	\$—	\$—	\$—	\$—	OS	N	\$	—
OS To al	\$269,821	\$560,802	\$1,022,801	\$1,833,424	OS	N	\$	52,997
SFP Arizona Electric Power Cooperative, Inc	\$8,35	\$—	\$—	\$8,35	SFP	N	\$	8,35
Arizona Public Service Company	\$—	\$—	\$—	\$—	SFP	N	\$	—
Avantair Renewable, LLC	\$10,900	\$—	\$—	\$10,900	SFP	N	\$	10,900
Broadleaf Energy JN LLC	\$72,658	\$—	\$—	\$—	SFP	N	\$	—
Broadview Energy KV LLC	\$0,039	\$—	\$—	\$—	SFP	N	\$	—
El Cabo Wind	\$—	\$—	\$—	\$—	SFP	N	\$	—
El Paso Electric Company	\$—	\$—	\$—	\$—	SFP	N	\$	—
El Paso Natural Gas Company, LLC	\$—	\$—	\$—	\$—	SFP	N	\$	—
Guzman Power Markets LLC	\$301,598	\$—	\$—	\$—	SFP	N	\$	—
Guzman Renewable Energy Partners	\$12,668	\$—	\$—	\$—	SFP	N	\$	—
Imperial Irrigation District Marketing	\$1,1,991	\$—	\$—	\$—	SFP	N	\$	—
Macquarie Energy LLC	\$1,9,171	\$—	\$—	\$—	SFP	N	\$	—
Max Energy Solutions, Inc	\$26,526	\$—	\$—	\$—	SFP	N	\$	—
Monica Stansly	\$—	\$—	\$—	\$—	SFP	N	\$	—
Nevada Power Company	\$6,8,930	\$—	\$—	\$—	SFP	N	\$	—
PacifiCorp	\$523,821	\$—	\$—	\$—	SFP	N	\$	—
Powered	\$86,300	\$—	\$—	\$—	SFP	N	\$	—
Public Service Company of New Mexico	\$297,850	\$—	\$—	\$—	SFP	N	\$	—
Rancho Electric Marketing	\$—	\$—	\$—	\$—	SFP	N	\$	—
Salt River Project	\$9,1,160	\$—	\$—	\$—	SFP	N	\$	—
Shell Energy North America LP	\$1,093,108	\$—	\$—	\$1,093,108	SFP	N	\$	1,093,108
TransAlta Power Services Co	\$1,357,600	\$—	\$—	\$1,357,600	SFP	N	\$	1,357,600
TransAlta Energy Marketing U.S. Inc.	\$81,9,9	\$—	\$—	\$81,9,9	SFP	N	\$	81,9,9
Tricel Electric Cooperatives	\$37,323	\$—	\$—	\$37,323	SFP	N	\$	37,323
Tri-State Generation and Transmission Assoc, Inc.	\$—	\$—	\$—	\$—	SFP	N	\$	—
Tucson Electric Power Company	\$27,697	\$—	\$—	\$—	SFP	N	\$	—
Western Area Power Administration (DSW)	\$ 0,752	\$—	\$—	\$—	SFP	N	\$	—
Yuma Cogeneration Associates	\$—	\$—	\$—	\$—	SFP	N	\$	—
Grady Wind Energy Center, LLC	\$153,558	\$—	\$—	\$—	SFP	N	\$	—
TEC Energy	\$—	\$—	\$—	\$—	SFP	N	\$	—
Tecolote Wind LLC	\$1,15,98	\$—	\$—	\$—	SFP	N	\$	—
Clinch Rivers Wind Farm LLC	\$ 9,758	\$—	\$—	\$—	SFP	N	\$	—
Broadleaf Renewable Trading and Marketing LP	\$1,265,7,2	\$—	\$—	\$—	SFP	N	\$	—
EDF Trading North America, LLC	\$—	\$—	\$—	\$—	SFP	N	\$	—
Los Angeles Gas Who Buys Marketing	\$—	\$—	\$—	\$—	SFP	N	\$	—
Meridian Energy Marketing LLC	\$92,907	\$—	\$—	\$—	SFP	N	\$	—
Southern California Edison Company	\$—	\$—	\$—	\$—	SFP	N	\$	—
The Energy Authority Inc.	\$88,55	\$—	\$—	\$—	SFP	N	\$	—
Duran Mesa Wind LLC	\$69,123	\$—	\$—	\$—	SFP	N	\$	—
Dynasty Power Inc	\$665,975	\$—	\$—	\$—	SFP	N	\$	—
Red Cloud Wind Farm	\$—	\$—	\$—	\$—	SFP	N	\$	—
	\$—	\$—	\$—	\$—	SFP	N	\$	—
UNIFER GLOBAL COMMODITIES NORTH AMERICA LLC	\$ 07,631	\$—	\$—	\$—	SFP	N	\$	—
CP Energy Marketing	\$25,096	\$—	\$—	\$—	SFP	N	\$	—
DTE Energy Trading Inc	\$ 25,220	\$—	\$—	\$—	SFP	N	\$	—
ConocoPhillips Inc	\$—	\$—	\$—	\$—	SFP	N	\$	—
Heller New Mexico Wind LLC	\$—	\$—	\$—	\$—	SFP	N	\$	—
TGP Development	\$—	\$—	\$—	\$—	SFP	N	\$	—
Vivo Inc	\$310	\$—	\$—	\$—	SFP	N	\$	—
Avisia Corporation	\$2,638	\$—	\$—	\$—	SFP	N	\$	—
City of Glendale	\$—	\$—	\$—	\$—	SFP	N	\$	—
SEP To al	\$30,856,988	\$—	\$552,240	\$31,409,236	AD	N/A	\$	—
AD Other	\$—	\$—	\$—	\$—	AD	N/A	\$	\$—
AD To al	\$—	\$—	\$—	\$—	AD	N/A	\$	\$—
Grand To al	\$—	\$—	\$—	\$—	AD	N/A	\$	\$—
	106,007,836	\$—	891,232	\$—	8,211,146	\$—	115,110,213	
								total \$43,984,760

Exclude Non-LPP PTP
Scheduling from Ancillary Services and
Services reported on Ferc Form 1
Page 398
total Revenue Credits \$ 43,765,905

Arizona Public Service Company

Worksheet 5 - Prepaid Items

Component (5)	BOY	EOY	AVG	100% Non-Transmission Related (1)	100% Transmission Related (2)	Gross Plant Related (3)	Labor Related (4)
Prepaid Insurance	5,890,650	3,323,362	4,607,006			3,323,362	
Prepaid Postage-Permits/Meters	—	—	—			0	
Income tax receivable	10,755,546	1,102,463	5,929,004			1,102,463	
Miscellaneous Prepads	76,848	110,965	93,907			110,965	
Total Plant Related	16,723,044	4,536,790	10,629,917			4,536,790	
Prepaid postage	314,444	215,287	264,866			215,287	
HR miscellaneous	706,728	2,098,661	1,402,695			2,098,661	
Vehicle licenses	543,665	543,956	543,811			543,956	
Prepaid travel	—	—	—			0	
Prepaid Software Maintenance Contracts	23,506,513	26,293,087	24,899,800			26,293,087	
Total Labor Related	25,071,350	29,150,992	27,111,171			29,150,992	
Power Marketing Prepads	778,608	313,632	546,120	313,632			
Regulatory Commission Expense-ACC	3,499,309	2,727,774	3,113,541	2,727,774			
Regulatory Commission Expense-RUCO	361,623	309,120	335,372	309,120			
Navajo Plant Lease	128,725	278,427	203,576	278,427			
Foothills lease	—	—	—	—			
Schools and governments	14,618	3,654	9,136	3,654			
Four Corners prepaid (APS share)	—	—	—	—			
Luke Solar lease	—	—	—	—			
City of Phoenix solar	—	—	—	—			
Chino	114,015	114,015	114,015	114,015			
Misc Fossil prepaid	80,000	639,711	359,855	639,711			
Legends Entertainment Dist	1,500	—	750	—			
Four Corners property insurance	92,814	140,192	116,503	140,192			
Cholla property insurance	207,882	176,100	191,991	176,100			
PV prepaid m&s	3	3	3	3			
PV prepaid invoices	661,976	689,603	675,789	689,603			
Ocotillo Progress Payment	(475,785)	1,997,451	760,833	1,997,451			
Misc business license	647	—	324	—			
Misc prepaid invoice	14,523,371	4,017,882	9,270,626	4,017,882			
DSM incentives	300,000	300,000	300,000	300,000			
ACC Document Fees	—	—	—	—			
West Phoenix & Ocotillo prepads	77,406	77,406	77,406	77,406			
SROG Water Payment	219,716	219,716	219,716	219,716			
Prepaid EEI Dues	1,126,241	1,162,868	1,144,555	1,162,868			
Total Non-Transmission Related	21,712,669	13,167,552	17,440,110	13,167,552			
500 kv capacitor bank	—	—	—	0			
Transmission right of way	2,739,055	2,950,557	2,844,806	2,950,557			
Wheeling Prepaid Expense	—	—	—	—			
Total Transmission Related	2,739,055	2,950,557	2,844,806	2,950,557			
Grand Total	66,246,118	49,805,891	58,026,004	13,167,552	2,950,557	4,536,790	29,150,992

ARIZONA PUBLIC SERVICE COMPANY

Worksheet 6 - Depreciation Rates

TRANSMISSION DEPRECIATION COMPOSITE RATE AS OF 12 31 2022										
[A]	[B]	[A] * [B]	[C]	[D]	[C] * [D]	[E]	[F]	[G]	[H]	[I]
company_id	func_class_id	depr_group_id	Jurisdiction Or Classification	COR Rate	Depreciation Rate	Total Rate	end_balance	EOY 2022	Rate_Bal.	Comp. Rate
Arizona Public Service	Transmission Plant - Electric	00 35203 Struc & Imprv. ACC Jur Gen:	ACC	0.00%	2.66%	2.66%	\$4,521,140.40	120,262.33		
Arizona Public Service	Transmission Plant - Electric	00 35203 FC U4-5 SCE Struc & Imprv:	ACC	0.00%	2.66%	2.66%	\$56,059.86	1,491.19		
Arizona Public Service	Transmission Plant - Electric	00 35300 W Phoenix CC4 Substa Eq	ACC	0.09%	1.92%	2.01%	\$1,909,227.19	38,375.47		
Arizona Public Service	Transmission Plant - Electric	00 35300 W Phoenix CC5 Substa Eq	ACC	0.09%	1.92%	2.01%	\$3,508,177.14	70,514.36		
Arizona Public Service	Transmission Plant - Electric	00 35301 Redhawk Substation Eq	ACC	0.09%	1.92%	2.01%	\$0.00			
Arizona Public Service	Transmission Plant - Electric	00 35302 Saguaro 3 Substation Eq	ACC	0.09%	1.92%	2.01%	\$1,508,531.00	30,321.47		
Arizona Public Service	Transmission Plant - Electric	00 35302 Substation Eq, ACC Jur Gen	ACC	0.09%	1.92%	2.01%	\$115,953,800.55	2,330,671.39		
Arizona Public Service	Transmission Plant - Electric	00 35304 Sundance Sub Eq, ACC Jur	ACC	0.09%	1.92%	2.01%	\$4,876,890.96	98,025.51		
Arizona Public Service	Transmission Plant - Electric	00 35305 FC U4-5 SCESubstation Eq	ACC	0.09%	1.92%	2.01%	\$9,195,641.53	184,832.39		
Arizona Public Service	Transmission Plant - Electric	00 35402 Towers & Fdn, ACC Jur Gen	ACC	0.00%	1.80%	1.80%	\$1,329,316.00	23,927.69		
Arizona Public Service	Transmission Plant - Electric	00 35501 Redhawk Wood/Oth Pol & Fix	ACC	0.37%	1.86%	2.23%	\$1,361,358.00	30,358.28		
Arizona Public Service	Transmission Plant - Electric	00 35504 Poles & Fix, ACC Jur Gen	ACC	0.37%	1.86%	2.23%	\$529.92	11.82		
Arizona Public Service	Transmission Plant - Electric	00 35602 OH Cond & Dev, ACC Jur Gen	ACC	0.33%	1.76%	2.09%	\$567,926.00	11,869.65		
Arizona Public Service	Transmission Plant - Electric	00 35603 Redhawk OH Cond & Devices	ACC	0.33%	1.76%	2.09%	\$1,361,358.00	28,452.38		
Arizona Public Service	Transmission Plant - Electric	00 35695 CIAC Vintage 1995	CIAC	0.00%	0.00%	0.00%	\$9,500,000.00)			
Arizona Public Service	Transmission Plant - Electric	00 35697 CIAC Vintage 1997	CIAC	0.00%	0.00%	0.00%	\$9,500,000.00)			
Arizona Public Service	Transmission Plant - Electric	00 35000 Land	Land	0.00%	0.00%	0.00%	\$163,257,651.71			
Arizona Public Service	Transmission Plant - Electric	00 35001 Land SCE 500KV System	Land	0.00%	0.00%	0.00%	\$394,280.00			
Arizona Public Service	Transmission Plant - Electric	00 35003 Lim Term Land, 3 yr Amort	Land	0.00%	0.00%	0.00%	\$20,294.27			
Arizona Public Service	Transmission Plant - Electric	00 35004 Lim Term Land, 4 yr Amort	Land	0.00%	0.00%	0.00%	\$1,832,280.05			
Arizona Public Service	Transmission Plant - Electric	00 35005 Lim Term Land, 5 yr Amort	Land	0.00%	0.00%	0.00%	\$4,819,356.38			
Arizona Public Service	Transmission Plant - Electric	00 35015 Lim Term Land, 15 yr Amort	Land	0.00%	0.00%	0.00%	\$7,537,551.75			
Arizona Public Service	Transmission Plant - Electric	00 35020 Lim Term Land, 20 yr Amort	Land	0.00%	0.00%	0.00%	\$1,228,450.86			
Arizona Public Service	Transmission Plant - Electric	00 35030 Lim Term Land, 30 yr Amort	Land	0.00%	0.00%	0.00%	\$2,265,558.30			
Arizona Public Service	Transmission Plant - Electric	00 35002 Lim Term Land, 2 yr Amort	Land	0.00%	0.00%	0.00%	\$2,169,900.28			
Arizona Public Service	Transmission Plant - Electric	00 35008 Lim Term Land, 8 yr Amort	Land	0.00%	0.00%	0.00%	\$2,294,856.98			
Arizona Public Service	Transmission Plant - Electric	00 35006 Lim Term Land, 6 yr Amort	Land	0.00%	0.00%	0.00%	\$5,505,573.80			
Arizona Public Service	Transmission Plant - Electric	00 35009 Lim Term Land, 9 yr Amort	Land	0.00%	0.00%	0.00%	\$1,484,566.66			
Arizona Public Service	Transmission Plant - Electric	00 35010 Lim Term Land, 10 yr Amort	Land	0.00%	0.00%	0.00%	\$30,393,438.91			
Arizona Public Service	Transmission Plant - Electric	00 35025 Lim Term Land, 25 yr Amort	Land	0.00%	0.00%	0.00%	\$11,765,586.10			
Arizona Public Service	Transmission Plant - Electric	00 35027 Lim Term Land, 27 yr Amort	Land	0.00%	0.00%	0.00%	\$238,354.94			
Arizona Public Service	Transmission Plant - Electric	00 35040 Lim Term Land, 40 yr Amort	Land	0.00%	0.00%	0.00%	\$861,424.48			
Arizona Public Service	Transmission Plant - Electric	00 35045 Lim Term Land, 45 yr Amort	Land	0.00%	0.00%	0.00%	\$255,423.40			
Arizona Public Service	Transmission Plant - Electric	00 35050 Lim Term Land, 50 yr Amort	Land	0.00%	0.00%	0.00%	\$8,050,947.89			
Arizona Public Service	Transmission Plant - Electric	00 35060 Lim Term Land, 60 yr Amort	Land	0.00%	0.00%	0.00%	\$206,146.00			
Arizona Public Service	Transmission Plant - Electric	00 35075 Lim Term Land, 75 yr Amort	Land	0.00%	0.00%	0.00%	\$734,161.28			
Arizona Public Service	Transmission Plant - Electric	00 35031 Lim Term Land SCE System	SCE	0.00%	3.25%	3.25%	\$1,927,230.37	62,634.99		
Arizona Public Service	Transmission Plant - Electric	00 35033 Lim Term Land SCE 3 Amort	SCE	0.00%	0.00%	0.00%	\$0.00			
Arizona Public Service	Transmission Plant - Electric	00 35042 Lim Term Land SCE, 25 Amort	SCE	0.00%	0.00%	0.00%	\$3,746,491.03			
Arizona Public Service	Transmission Plant - Electric	00 35201 Struc & Improv SCE Syst	SCE	0.00%	3.25%	3.25%	\$409,688.51	13,314.88		
Arizona Public Service	Transmission Plant - Electric	00 35301 Substation Eq, SCE System	SCE	0.00%	3.25%	3.25%	\$30,507,384.30	991,489.34		
Arizona Public Service	Transmission Plant - Electric	00 35401 Towers & Fdn, SCE System	SCE	0.00%	3.25%	3.25%	\$14,925,462.48	485,077.53		
Arizona Public Service	Transmission Plant - Electric	00 35503 Poles & Fix SCE System	SCE	0.00%	3.25%	3.25%	\$930,308.00	30,235.01		
Arizona Public Service	Transmission Plant - Electric	00 35601 OH Cond & Dev, SCE System	SCE	0.00%	3.25%	3.25%	\$24,772,504.35	805,108.39		
			FERC Jurisdiction EOY 2022 Balance				3,132,418.667			
							3,582,103.476	62,250,312	1.99% Annual	0.16561% Monthly

Worksheet 6 Totals:

FF1 Page 204 207 Transmission Ending Balance

ARIZONA PUBLIC SERVICE COMPANY

*Worksheet 7 - Land Held for Future Use*Land Held for Future Use Detail
As of 12/31/2022

FORM 1

Page #	Line	Column	Description	Transmission	Non-Transmission	Total
214	2	(d)	Roanoke Substation	\$ —	\$ 282,772	\$ 282,772
214	3	(d)	Paradise Substation		\$ 401,193	\$ 401,193
214	4	(d)	Punkin Center Substation		\$ 320,827	\$ 320,827
214	5	(d)	Buckeye to Elianto line	\$ 653,352		\$ 653,352
214	6	(d)	Citrus Substation		\$ 427,534	\$ 427,534
214	7	(d)	Yavapai to Wellfield	\$ 271,540		\$ 271,540
214	8	(d)	Sundance to Pinal Central	\$ 1,328,057		\$ 1,328,057
214	9	(d)	Virgina (Willo) Substation		\$ 5,762,037	\$ 5,762,037
214	10	(d)	Other General Parcels		\$ 111,576	\$ 111,576
214	11	(d)	Other Transmission Parcels	\$ 92,023		\$ 92,023
214	12	(d)	Other Distribution Parcels		\$ 556,004	\$ 556,004
Total				\$ 2,344,972	\$ 7,861,943	\$ 10,206,915

ARIZONA PUBLIC SERVICE COMPANY

Worksheet 8 - Property Taxes

	Page 263 Column (I) Line #	2022 \$ 219,625,896	2021 \$ 233,994,435	2022 values Included in Formula
Total Property tax expense (FERC Form 1 page 263)				
Nevada	9.3	85,040	87,195	\$ 85,040
California	9.2	20,108	25,531	20,108
New Mexico	9.4	19,637,621	19,573,280	987,527 (A)
Total Transmission		19,742,769	19,686,006	1,092,675
AZ Transmission		39,346,662	40,168,862	39,346,662
AZ Production Plant		48,598,451	53,817,533	
AZ Distribution		91,888,427	98,410,529	
AZ General & Intangible		18,408,630	19,961,581	
AZ Renewable		1,503,482	1,828,914	
AZ Nonutility		137,475	121,011	102,074 (B)
Total Arizona	9.1	199,883,127	214,308,429	39,448,736
Total		219,625,896	233,994,435	
(A) New Mexico Transmission				
New Mexico Total Taxes	9.4	19,637,621	19,573,280	
Total NM Utility Plant (NM Form CAB-E2, Line 39)		1,174,870,148	1,207,289,506	
Total NM Transmission Plant (NM Form CAB-E2, Line 33)		59,081,318	59,903,794	
Percentage Related to Transmission		5.03%	4.96%	
NM Property tax attributable to transmission		\$ 987,527	\$ 971,195	
(B) Non-Utility Transmission				
Non-Utility Property-total		444,294	391,299	
Non-Utility Property Total				
FERC Form 1 Page 214 - Total AZ Future-Use		10,206,915	10,206,915	
FERC Form 1 Page 214 - Transmission only AZ Future-Use		2,344,972	2,344,972	
Percentage Related to Transmission		22.97 %	22.97 %	
Non-Utility Property attributable to Transmission		102,074	89,898	
Total Property Tax to be included in Formula Rate				\$ 40,541,411

ARIZONA PUBLIC SERVICE COMPANY

Worksheet 9 - Notes and Supplemental Information

Formula Rate Section/Line Adjustment To Rate Base		FERC Form 1 Page # or Instruction	Notes
Transmission O&M Reserves			
38 Total Balance Transmission Related Account 242 Reserves		Attachment 5	A
A Land Rights - transmission facilities land rights that have been accrued for but have not yet been paid.			
Cash Working Capital			
47 Operation & Maintenance Expense	(Line 75)		
48 Zero Cash Working Capital	Zero		B
49 Total Cash Working Capital Allocated to Transmission	(Line 47 * 48)		
B As contained in Article 2.4 of the Offer of Settlement and Settlement Agreement, Docket No. ER07-1142-000, "Cash Working Capital allowance shall be zero (0) in rate base for the Formula Rate".			
O&M			
Allocated General Expenses			
58 Total A&G	p323.197.b		C.1
59 Less PBOP Adjustment	Attachment 5		C
60 Less Property Insurance Account 924	p323.185b		
61 Less Regulatory Commission Exp Account 928	p323.189b		
62 Less General Advertising Exp Account 930.1	p323.191b		
63 Less EPRI Dues	p352-353		D
General Expenses	(Line 58) - Sum (59 to 63)		
64 Wage & Salary Allocation Factor	(Line 5)		
65 General Expenses Allocated to Transmission	(Line 64 * 65)		
C Attachment H, Line 59 - PBOP Adjustment references Attachment 5. Attachment 5, Row 157 references page 323.187 (b) of the FERC Form No. 1 which reflects the total Account 926 - Employee Pensions and Benefits amount for the current year. This total includes amounts related to Pension as well as Post-Employment Benefits Other than Pension (PBOP) (displayed in the current year row, Form 1 column in Attachment 5, Row 157). The current year PBOP amount (displayed in the current year row, PBOP column in Attachment 5, Row 157) is derived from information provided by our actuaries, Willis Towers Watson. The difference between the current year PBOP amount and the 2016 base PBOP amount is utilized in Attachment H, Line 59 as an adjustment to the total Administrative and General expenses presented on Attachment H, Line 58.			
C.1 In March 2017, a new accounting standard was issued that modifies how plan sponsors present net periodic pension cost and net periodic postretirement benefit cost (net benefit costs) on their SEC financial statements. The presentation changes require net benefit costs to be disaggregated on the SEC income statement by the various components that comprise these costs. The FERC accounting was unaffected as net benefit costs continue to be charged to account 926 "employee pensions and benefits". Furthermore, the new standard allows only the service cost component to be eligible for capitalization. The change in capitalization requirements was applied prospectively. The new guidance was effective for us on January 1, 2018.			
C.2 We adopted this new accounting standard on January 1, 2018. The adoption of this guidance changes our net benefit costs eligible for capitalization; however, it does not change the presentation of net benefit costs on our regulatory income statements. For regulatory purposes we have elected to follow GAAP treatment and will no longer capitalize non-service cost components. The changes impacting capitalization have been adopted prospectively. As such, upon adoption, we are no longer capitalizing a portion of the non-service cost components of net benefit costs.			
D In 2018 the non-service credit components are a reduction to total benefit costs. Excluding non-service credits from eligible capitalization costs resulted in the capitalization of an additional \$15 million of net benefit costs, with a corresponding increase to pretax income for the year.			
D Attachment H, Line 63 - EPRI Dues references pages 352 - 353 of the FERC Form No. 1. Since the purpose of Attachment H, Line 63 is to adjust EPRI dues from the Total Administrative and General expenses presented on Attachment H, Line 58, only the portion of EPRI dues charged to Administrative and General Expenses (account 920) on FERC Form No. 1 page 352 - 353 is included.			
Composite Income Taxes			
ITC Adjustment			
118 Amortized Investment Tax Credit	p266.8f		E
119 T/(1-T)	(Line 117)		
120 Net Plant Allocation Factor	(Line 14)		
121 ITC Adjustment Allocated to Transmission	(Line 118 * (1 + 119) * 120)		
E Attachment H, Line 118 - Amortized Investment Tax Credit references page 266.8 (f) of the FERC Form No. 1, yet contains an amount of zero. Because APS files its Federal income taxes as an "Option 1" company, accumulated Investment Tax Credits are treated as a rate base reduction and are amortized below operating income in FERC Account 420. Please refer to Note I on Attachment H for further information.			

REVENUE REQUIREMENT

Net Plant Carrying Charge Calculation per 100 Basis Point increase in ROE		
152	Net Revenue Requirement Less Return and Taxes	(Line 146 - 135 - 136)
153	Increased Return and Taxes	Attachment 4
154	Net Revenue Requirement per 100 Basis Point increase in ROE	(Line 152 + 153)
155	ITC Adjustment Allocated to Transmission	(Line 15 - 23)
156	Net Plant Carrying Charge per 100 Basis Point increase in ROE	(Line 154 / 155)
157	Net Plant Carrying Charge per 100 Basis Point in ROE without Depreciation	(Line 154 - 76) / 155

F

Attachment H, Line 153 - Increased Return and Taxes and the referenced Attachment 4 - Calculation of 100 Basis Point Increase in ROE are components of the Formula Rate that were accepted and approved in the Offer of Settlement and Settlement Agreement, Docket No. ER07-1142-000. As explained in the testimony of Alan C. Heintz, filed in conjunction with the establishment of APS's Formula Rate in the referenced docket, "Attachment 4 is, in effect, a 'work paper'. Its only purpose is to calculate the 'baseline' or 'standard' fixed charge rate per 100 basis points increment in Return on Equity (ROE). Attachment 4 is not used to calculate the revenue requirement and it does not specify the level of incentive ROE added that applies to any Commission - authorized incentive project." Essentially, while Attachment H, Line 153 and Attachment 4 are components of the Formula Rate itself, these lines/attachments/amounts are not currently utilized by the Company in the calculation of the Formula Rate (i.e., revenue requirement calculation).

REVENUE REQUIREMENT

158	Net Revenue Requirement	(Line 146)
159	True-up amount	Attachment 6
160	Plus any increased ROE calculated on Attachment 7	Attachment 7
161	Facility Credits under Section 30.9 of the APS OATT	Attachment 5
162	Net Adjusted Revenue Requirement	(Line 158 - 159 + 161)

G

Attachment H, Line 161-Facility Credits under Section 9 of the APS OATT, references Attachment 5. Beginning in 2017, APS is reporting Facility Credits requiring a new section in Attachment 5. Facility Credits were added to Attachment 6 step 11 to account for any true up adjustments related to Facility Credits.