**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO**

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IN THE MATTER OF ADVICE LETTER NO. 1857-ELECTRIC OF PUBLIC SERVICE COMPANY OF COLORADO TO REVISE ITS COLORADO PUC NO. 8-ELECTRIC TARIFF TO REVISE JURISDICTIONAL BASE RATE REVENUES, IMPLEMENT NEW BASE RATES FOR ALL ELECTRIC RATE SCHEDULES, AND MAKE OTHER PROPOSED TARIFF CHANGES EFFECTIVE AUGUST 2, 2021	**)**	**PROCEEDING NO. 21AL-______E**

DIRECT TESTIMONY AND ATTACHMENTS OF LAURIE J. WOLD

ON

BEHALF OF

PUBLIC SERVICE COMPANY OF COLORADO

July 2, 2021

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO**

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GLOSSARY OF ACRONYMS AND DEFINED TERMS

Acronym/Defined Term	**Meaning**
ADIT	Accumulated Deferred Income Taxes
AFUDC	Allowance for Funds Used During Construction
AGIS	Advanced Grid Intelligence and Security
AMI	Advanced Metering Infrastructure
AMR	Automatic Meter Reading
BOY/EOY	Beginning of year, end of year
CACJA	Clean Air-Clean Jobs Act
Calpine	Calpine Facilities
CPCN	Certificate of Public Convenience and Necessity
Comanche 1 and 2	Comanche 1, 2, and Related Early Retired Common Assets
Commission	Colorado Public Utilities Commission
CWIP	Construction Work in Progress
FAN	Field Area Network
FCC	Federal Communications Commission
FERC	Federal Energy Regulatory Commission
FERC AFUDC	AFUDC calculated in accordance with FERC requirements
FTY	Future Test Year
GAAP	Generally Accepted Accounting Principles

Acronym/Defined Term	**Meaning**
GRSA	General Rate Schedule Adjustment
GRSA-E	General Rate Schedule Adjustment-Energy
HTY	Historical Test Year
IRC	Internal Revenue Code
Manchief	Manchief generating station
MW	Megawatt
NOLs	Net Operating Losses
O&M	Operating and Maintenance
PLR	Private Letter Rulings
Public Service or Company	Public Service Company of Colorado
Retired Generating Units	Cameo 1 and 2, Arapahoe 1 through 4, Cherokee 1 through 3, coal-related assets at Cherokee 4, Valmont 5, and Zuni 1 and 2
Software	Intangible Plant
TCA	Transmission Cost Adjustment
USofA	Uniform System of Accounts
Valmont	Valmont 7 and 8 generating units
Xcel Energy	Xcel Energy Inc.
XES	Xcel Energy Services Inc.

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

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IN THE MATTER OF ADVICE LETTER NO. 1857-ELECTRIC OF PUBLIC SERVICE COMPANY OF COLORADO TO REVISE ITS COLORADO PUC NO. 8-ELECTRIC TARIFF TO REVISE JURISDICTIONAL BASE RATE REVENUES, IMPLEMENT NEW BASE RATES FOR ALL ELECTRIC RATE SCHEDULES, AND MAKE OTHER PROPOSED TARIFF CHANGES EFFECTIVE AUGUST 2, 2021	**) PROCEEDING NO. 21AL-______E**

<u>DIRECT TESTIMONY AND ATTACHMENTS OF LAURIE J. WOLD</u>

I. INTRODUCTION, QUALIFICATIONS, PURPOSE OF TESTIMONY, AND RECOMMENDATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Laurie J. Wold. My business address is 401 Nicollet Mall, Minneapolis, Minnesota 55401.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?

A. I am employed by Xcel Energy Services Inc. (“XES”) as a Senior Manager of Capital Asset Accounting. XES, which is a wholly owned subsidiary of Xcel Energy Inc. (“Xcel Energy”), provides an array of support services to Public Service Company of Colorado (“Public Service” or the “Company”) and the other utility operating company subsidiaries of Xcel Energy on a coordinated basis.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THE PROCEEDING?

A. I am testifying on behalf of Public Service.

Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES AND QUALIFICATIONS.

A. As Senior Manager of Capital Asset Accounting, I am responsible for various aspects of asset accounting, primarily dealing with book depreciation, tax depreciation, and deferred taxes for capital assets, as well as the related reporting and regulatory requirements for Xcel Energy and its subsidiaries. A description of my qualifications, duties, and responsibilities is set forth in my Statement of Qualifications at the conclusion of my Direct Testimony.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. My Direct Testimony addresses the following topics:

- I present plant-related balances as of August 31, 2019, which was the end of the test year approved by the Colorado Public Utilities Commission ("Commission") in Public Service's last Phase I Electric rate case (the "2019 Electric Phase I),[1] and I provide a roll-forward of those balances through December 31, 2022, which is the end of the Future Test Year ("FTY") in this rate case;
- I describe the acquisition adjustments for certain plant-related assets;
- I explain that some of the assets associated with the Advanced Grid Intelligence and Security ("AGIS") deployment are owned by Public Service but used by other Xcel Energy Operating Companies,[2] and I describe the method for allocating the costs of those and other shared assets;
- I apply the updated depreciation and amortization rates supported by Company witness Dane A. Watson to the net plant balances to calculate the Company's requested amount of depreciation expense;
- I support the creation of a regulatory asset to defer unrecovered costs associated with legacy meters; and
- I address WiMAX costs associated with AGIS deployment.

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[1] Proceeding No. 19AL-0268E, Decision No. C20-0096 at ¶ 68 (Mailed Feb. 11, 2020).

[2] The Xcel Energy Operating Companies are Northern States Power Company – Minnesota, Northern States Power Company – Wisconsin, Southwestern Public Service Company, and Public Service.

Q. ARE YOU SPONSORING ANY ATTACHMENTS AS PART OF YOUR DIRECT TESTIMONY?

A. Yes, I am sponsoring the following attachments:

- Attachment LJW-1, which contains plant-related roll-forwards for the period from September 1, 2019 through December 31, 2020 by functional class;

- Attachment LJW-2, which contains plant-related roll-forwards for calendar years 2021 and 2022 by functional class;

- Attachment LJW-3, which is a schedule linking data from my Attachment LJW-1 to Ms. Blair's Attachment DAB-1;

- Attachment LJW-4, which provides more detailed information about plant additions placed in service during the period from September 1, 2019 through December 31, 2020;

- Attachment LJW-5, which provides more detailed information about plant additions that have been or will be placed in service in 2021 and 2022;

- Attachment LJW-6, which contains the depreciation expense impact of the proposed depreciation and amortization rates on the Company's plant balances for the historical test year ("HTY") ending December 31, 2020 and the FTY ending December 31, 2022; and

- Attachment LJW-7, which provides updated balances for the Regulatory Assets and their amortization schedules.

Q. WHAT RECOMMENDATIONS ARE YOU MAKING IN YOUR DIRECT TESTIMONY?

A. I recommend the Commission:

- Approve the Company's net plant balances;
- Authorize the Company to recover the depreciation and amortization expense I calculate based on Mr. Watson's proposed depreciation rates and the Company's net plant balances; and
- Authorize the Company to defer into a regulatory asset the unrecovered legacy meter costs associated with the AGIS deployment.

II. NET PLANT AND PLANT-RELATED BALANCES

Q. WHAT TOPICS DO YOU DISCUSS IN THIS SECTION OF YOUR DIRECT TESTIMONY?

A. In this section of my Direct Testimony I address four topics. First, I describe the components of a net plant balance and explain how those components interact. As part of that discussion, I explain at a conceptual level how the net plant balance is affected by the accumulated depreciation reserve, construction work in progress ("CWIP"), and the Allowance for Funds Used During Construction ("AFUDC"), among other things.

Second, I describe the process the Company used to develop the net plant balances in this rate case. I begin with the net plant balances as of August 31, 2019, which was the end of the test year adopted by the Commission in the 2019 Electric Phase I base rate case, and I present a roll-forward of those balances through December 31, 2022, which is the end of the FTY proposed by the Company in this rate case. As part of that discussion, I introduce the Company witnesses who will support the capital additions reflected in the net plant balances, and I describe the acquisition adjustments the Company has made for certain assets.

Third, I describe the affiliate charges included in the net plant balances.

Finally, I describe the shared assets associated with the AGIS infrastructure, and I explain how a portion of the assets owned by Public Service is allocated to the other Xcel Energy Operating Companies.

A. <u>Development of Net Plant Balance</u>

Q. WHAT STANDARDS DOES PUBLIC SERVICE USE TO ESTABLISH ITS NET PLANT BALANCE?

A. To establish the net plant balance, the Company follows the applicable accounting rules established by Generally Accepted Accounting Principles ("GAAP"), the Uniform System of Accounts ("USofA") established by the Federal Energy Regulatory Commission ("FERC") for public utilities, and policies and guidelines established by the Company's Capital Asset Accounting department, such as the Capitalization Policy.

Q. WHAT ARE THE MAIN COMPONENTS OF THE NET PLANT BALANCE?

A. Generally speaking, the net plant balance represents the original cost of plant in service, offset by the accumulated reserve for depreciation. The net plant balance may also be affected by CWIP and AFUDC.

Q. PLEASE DEFINE WHAT YOU MEAN WHEN YOU REFER TO "PLANT IN SERVICE."

A. Plant in-service represents facilities that are used and useful in providing utility service, including facilities currently in service, capital projects completed but not classified, and property held for future use. Common utility plant represents the property used in the general operations of the business that affect more than one utility, such as assets used to carry out both electric and gas operations. Plant additions represent plant that will become used and useful during the month. Assets owned by Public Service but whose total cost is shared by all operating companies are shown as plant assets on Public Service's books. Public Service receives an expense credit to offset the annual cost of these assets, which reduces the overall revenue requirement.

Q. WHAT IS THE ACCUMULATED DEPRECIATION RESERVE?

A. The accumulated reserve for depreciation, which is also known as the depreciation reserve, is the accumulation of depreciation expense taken on assets that are in-service. The average monthly plant balance multiplied by the applicable depreciation accrual rate results in the depreciation expense, which is added to and consequently results in an increase in the depreciation reserve. The Company also factors a net salvage rate component into the depreciation rate to provide for the estimated cost of future removal less any gross salvage value. When an asset is retired, the depreciation reserve is reduced by the original cost of the asset based on the assumption the asset is fully expensed (i.e., fully depreciated) at that time. The depreciation reserve is decreased by actual removal expenditures as they are incurred and increased by any salvage proceeds received.

Q. YOU TESTIFIED EARLIER THAT CWIP CAN ALSO AFFECT THE NET PLANT BALANCE. WHAT IS CWIP?

A. CWIP is an account used to gather all the construction-related costs together as they are being incurred during the construction of the project or facility. The costs incurred to construct or install a fixed asset in the construction process are capital expenditures. The accumulation of the construction expenditures in CWIP continues until the asset becomes used and useful, which is typically when the asset is placed into service. The amount transferred from the accumulated CWIP balance to plant in-service is known as the capital addition or plant addition. Or stated otherwise, capital expenditures are recorded as CWIP until the time they are placed in service, at which time they become capital additions. Thus, the amount of capital expenditures in a given time period may be quite different from the amount of capital additions during the same time period.

Q. YOU ALSO STATED AFUDC CAN AFFECT THE NET PLANT BALANCE. PLEASE DESCRIBE WHAT AFUDC IS.

A. AFUDC is used to assign the assumed cost of financing construction to the asset that would normally be expensed on the income statement during construction. After the construction is completed and the asset is placed into service, the total cost of the asset, including the AFUDC, is systematically allocated back to the income statement in the form of depreciation expense over the life of the asset. Because the AFUDC is recorded as part of the asset cost, the construction financing costs move from the balance sheet to the income statement as a part of depreciation over the life of the asset. Public Service follows the FERC USofA in calculating the AFUDC rate and its application to construction projects. The AFUDC rate is a weighted-average cost of capital that first gives weight to short-term debt as a function of the CWIP balance and then factors in the costs of long-term debt and common equity.

Q. DOES THE CWIP BALANCE CHANGE FROM MONTH TO MONTH?

A. Yes. During the course of each month, the beginning CWIP balance is increased by CWIP expenditures incurred during the month and the AFUDC recorded for that month, and it is reduced by the CWIP balances associated with projects that are placed in service during the month. Table LJW-D-1 summarizes the monthly transactions for CWIP:

TABLE LJW-D-1:
Construction Work in Progress

	CWIP Beginning Balance
+	CWIP Expenditures
+	AFUDC
-	CWIP Closings (equal to Additions to Plant In-service)
=	**CWIP Ending Balance**

Q. DOES THE NET PLANT BALANCE ALSO CHANGE FROM MONTH TO MONTH?

A. Yes. During the course of each month, the beginning plant balance is increased to reflect plant additions and reduced to reflect plant retired from service. Table LJW-D-2 summarizes the monthly transactions for plant:

TABLE LJW-D-2:
Plant In-Service

	Plant Beginning Balance
+	Plant Additions (equal to CWIP Closings from Table 1)
-	Plant Retirements
=	**Plant Ending Balance**

Q. PLEASE PROVIDE A SUMMARY OF DEPRECIATION RESERVE ACTIVITY IN A MONTH.

A. During the course of each month, the beginning depreciation reserve is increased by depreciation expense and any salvage proceeds realized, and is reduced by the depreciation reserve attributable to retirements (equal to the gross plant cost of the retired assets) and removal costs. Table LJW-D-3 summarizes the monthly transactions for depreciation reserve:

TABLE LJW-D-3:
Accumulated Reserve for Depreciation

	Depreciation Reserve Beginning Balance
+	Depreciation Expense
-	Plant Retirements
+/-	Adjustments (i.e. Reserve Reallocations)
+	Salvage Value Realized
-	Plant Removal Expenditures
=	**Depreciation Reserve Ending Balance**

Q. ARE THERE ANY OTHER ELEMENTS OF COST THAT AFFECT THE NET PLANT BALANCE?

A. Yes. In prior proceedings, the Commission has allowed the Company to record "pre-funded AFUDC" to track the estimated cost of financing construction when the Company was authorized to recover those financing costs in current rates while the asset was under construction. Pre-funded AFUDC differs from regular AFUDC because it is recovered in rates as it accrues, rather than being recorded in the CWIP account like regular AFUDC and recovered over the life of the asset.

Q. IS PRE-FUNDED AFUDC TREATED LIKE REGULAR AFUDC WHEN THE ASSET GOES INTO SERVICE?

A. No. When construction of the asset is completed and it is placed in service, the pre-funded AFUDC, which is recorded as a regulatory liability, operates as an offset to rate base or a credit to the regular AFUDC that accumulates as part of the asset in rate base under the FERC requirements. That treatment ensures the customers in jurisdictions allowing CWIP in rate base get the appropriate credit, whereas regular AFUDC continues to accrue for the asset in those jurisdictions that do not allow for such treatment.

Q. HOW IS PRE-FUNDED AFUDC CALCULATED?

A. To maintain appropriate accounting across all jurisdictions, the Company uses the traditional method of calculating the AFUDC in accordance with the FERC requirements at the total Company level. But for those construction assets whose CWIP is included in rate base, the pre-funded AFUDC is recognized concurrently, which in effect reverses the jurisdictional portion of the regular AFUDC. This pre-funded AFUDC offset reduces the amount of AFUDC associated with the projects afforded this special ratemaking treatment, leaving only the portion that is allocated to wholesale jurisdictions.

Q. ARE REGULAR AFUDC AND PRE-FUNDED AFUDC COMMINGLED IN THE COMPANY'S ACCOUNTING RECORDS?

A. No. The pre-funded AFUDC and regular AFUDC are not commingled, but instead are tracked separately to ensure retail jurisdictional customers realize the benefit to which they are entitled. Regular AFUDC is recorded in CWIP to FERC Account 107. In contrast, pre-funded AFUDC is recorded in FERC Account 253, Other Deferred Credits, during the construction process as AFUDC is incurred. After the associated asset is placed into service, the pre-funded AFUDC balance is amortized over the same time period as the associated asset. Therefore, the pre-funded AFUDC amount recorded during construction unwinds over the useful life of the asset for which the amount was created during construction.

Q. DO ANY OF THE ASSETS IN PUBLIC SERVICE'S RATE BASE HAVE PRE-FUNDED AFUDC ASSOCIATED WITH THEM?

A. Yes. In the next subsection of my Direct Testimony, I will describe the Company assets that have pre-funded AFUDC associated with them.

Q. DO ANY OTHER TYPES OF AFUDC AFFECT THE NET PLANT BALANCES IN THIS RATE CASE?

A. Yes. When a utility is allowed to use its authorized return on rate base to calculate AFUDC, instead of using the AFUDC rate calculated in accordance with the FERC methodology ("FERC AFUDC"),[3] the difference is recorded as "excess AFUDC."

Q. HOW IS EXCESS AFUDC RECORDED FOR ACCOUNTING PURPOSES?

A. Under the FERC USofA, only the AFUDC calculated using the FERC-prescribed method can be recorded as CWIP. The AFUDC amounts in excess of the FERC AFUDC (i.e., the excess AFUDC amounts) are recorded in a regulatory asset account. After the project is completed and the asset is placed in service, the associated excess AFUDC regulatory asset is amortized over the useful life of the asset.

B. <u>Public Service's Net Plant Balances</u>

Q. WHAT TOPICS DO YOU DISCUSS IN THIS SUBSECTION OF YOUR DIRECT TESTIMONY?

A. I describe how I developed the net plant balances that I provided to Company witness Ms. Blair for her cost-of-service study. The cumulative net plant balances that I provided to Ms. Blair, however, are not necessarily identical to the amounts used in her cost-of-service study. She has made certain adjustments necessary to arrive at the appropriate rate base amount.

[3] The FERC methodology for calculating AFUDC is set forth in Section 17 of the Electric Plant Instructions that FERC has prescribed as part of the USofA.

Q. WHAT WAS THE STARTING POINT FOR YOUR DETERMINATION OF THE NET PLANT BALANCES IN THIS RATE CASE?

A. I started with the net plant balances as of August 31, 2019, which was the end of the test year approved by the Commission in the 2019 Electric Phase I. From that starting point, I developed the net plant balances as of the end of the 2022 by reflecting the following components for each month from September 1, 2019 through December 31, 2022:

- Capital additions, including the associated CWIP and AFUDC, as applicable;
- Plant retirements; and
- Changes in accumulated depreciation reserve balances.

The amounts for the period from September 1, 2019 through January 31, 2021 are actual amounts. The amounts for the period from February 1, 2021 through December 31, 2022 are forecasts.

Q. DID YOU MAKE ANY ACQUISITION ADJUSTMENTS TO THE PLANT BALANCES?

A. Yes. I made acquisition adjustments related to the Company's purchase of the Manchief generating station ("Manchief"),[4] the Valmont 7 and 8 generating units ("Valmont"),[5] and the Calpine Facilities ("Calpine").[6]

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[4] Manchief is a 301-megawatt ("MW") natural gas-fired facility located approximately 90 miles northeast of Denver, near Brush, Colorado.

[5] Valmont is an 82-MW natural gas-fired facility located in Boulder.

[6] The Calpine Facilities are the Rocky Mountain Energy Center and the Blue Spruce Energy Center.

Q. WHAT IS AN ACQUISITION ADJUSTMENT?

A. An acquisition adjustment represents the difference between the net book value of an asset and the purchase price for that asset.

Q. DOES PUBLIC SERVICE HAVE COMMISSION AUTHORITY TO RECORD AN ACQUISITION ADJUSTMENT FOR THE MANCHIEF AND VALMONT FACILITIES?

A. Yes. In Proceeding No. 19A-0409E, the Commission approved a settlement agreement in which the parties agreed the Commission should issue Certificates of Public Convenience and Necessity ("CPCN") for the Company to acquire Manchief and Valmont.[7] The parties further agreed the Company's cost recovery for Manchief and Valmont should include acquisition adjustments of $6.0 million for Manchief and $6.4 million for Valmont for accounting purposes.

Q. HAS THE COMPANY ACQUIRED VALMONT AND MANCHIEF?

A. Public Service acquired Valmont in July 2020, and it will acquire Manchief on or before June 1, 2022. The actual acquisition adjustment for Valmont, which was $7.3 million, was greater than the agreed-upon acquisition adjustment because the seller continued to depreciate the asset after the conclusion of the CPCN proceeding.

[7] Proceeding No. 19A-0409E, Decision No. R20-0108 (Mailed Feb. 18, 2020).

Q. HOW HAS THE COMPANY ACCOUNTED FOR THE ACQUISITION ADJUSTMENTS FOR VALMONT AND MANCHIEF?

A. For Valmont, the acquisition adjustment was recorded to FERC Account 114, Electric Plant Acquisition Adjustments. FERC Account 114 will be amortized ratably over an 18-year period from the acquisition date as approved by the Commission in Proceeding No. 19A-0409E. Because the decision also approved recovery of the acquisition adjustment, the journal entry for amortization is a debit to FERC Account 406, Amortization of Electric Plant Acquisition Adjustments, and a credit to FERC Account 115, Accumulated Provision for Amortization of Electric Plant Acquisition Adjustments. Manchief will follow the same process and be amortized over the appropriate life of the facility.

Q. HAS PUBLIC SERVICE RECORDED ANY OTHER ACQUISITION ADJUSTMENTS?

A. Yes. The Company recorded an acquisition adjustment for the Calpine Facilities acquired in 2012, as approved in Docket No. AC11-99-000. Consistent with FERC policy, the Company is amortizing the acquisition adjustments to FERC Account 406, Amortization of Electric Plant Acquisition Adjustments over the remaining useful life of the related assets. The accumulated amortization of the acquisition adjustments is recorded in FERC Account 115. All of these accounts are included in the cost of service study presented in this case.

Q. HAVE YOU PREPARED AN ATTACHMENT SHOWING THE DEVELOPMENT OF THE PLANT BALANCES INCLUDED IN THE COST OF SERVICE?

A. Yes. The information in my Attachment LJW-1 is extracted from the Company's accounting records as of year-end 2020 and contains roll-forwards showing the amounts recorded for capital additions, plant retirements, and changes in accumulated depreciation reserve balances during the period from September 1, 2019 through December 31, 2020.

As with any plant information, the balances for any given year are influenced by the activity in the preceding years. Therefore, the plant information is rolled forward month-by-month (known as a "monthly roll-forward") from the prior month's actuals. Attachment LJW-1 provides this roll-forward calculation for electric and common utility plant. It also includes the roll-forward of the CWIP and accumulated reserve for depreciation for the same time period.

Q. HAVE YOU PREPARED AN ATTACHMENT SHOWING ROLL-FORWARD INFORMATION FOR 2021 AND 2022?

A. Yes. That information appears in Attachment LJW-2, which presents forecasted monthly roll-forwards for electric and common utility plant by functional class. It also includes the roll-forward of the CWIP and accumulated reserve for depreciation for the same time period. Unlike Attachment LJW-1, the beginning plant balances for January 1, 2021 are zero. This allows the impact of the 2021 and 2022 plant additions to be isolated on plant and reserve balances.

Q. HOW IS THE ROLL-FORWARD INFORMATION PRESENTED?

A. All roll-forwards are shown by electric and common and at the applicable functional class (production, transmission, distribution, general plant, and intangibles). The direct testimonies of the business area witnesses listed later in my Direct Testimony further subdivide the CWIP roll-forward into Capital Groupings, which are the major category of work performed within a specific business area.

Q. HAS THE COMPANY PREPARED ANY DOCUMENTATION SHOWING HOW THE NET PLANT BALANCES TIE TO THE RATE BASE AMOUNTS IN MS. BLAIR'S COST OF SERVICE STUDY?

A. Yes. Attachment LJW-3 links the net plant data from Attachment LJW-1 to Ms. Blair's attachments. In particular, the 2020 ending balances from the roll-forwards serve as the basis for the balances used by Ms. Blair to determine the HTY rate base in Attachment DAB-1. Stated otherwise, Attachment LJW-3 serves as the link between the data presented in Attachment LJW-1 and Ms. Blair's attachment. In addition, Table LJW-D-4 shows the comparison between the plant assets shown in Attachment DAB-1 and the plant assets as of December 31, 2020 included in the FERC Form 1:

TABLE LJW-D-4
Plant Comparison to FERC Form 1

	Plant Balance 12/31/2020
Electric and Common Plant from DAB-1	17,480,042,817
Total FERC Form 1, Pages 200 & 201	18,424,023,149
Variance from FERC Form 1	943,980,332
Plant Not in Rate Case	
Electric Asset Retirement Cost	129,340,914
Common Asset Retirement Cost	369,412
Property Under Capital Leases	499,927,522
Common Assets Assigned to Gas/Thermal Utility	314,342,484
Total Variance Explained	943,980,333

Q. ARE YOU SUPPORTING THE CAPITAL ADDITIONS THAT THE COMPANY HAS PLACED IN SERVICE SINCE THE END OF AUGUST 2019?

A. Yes, I support the plant balances as reflected in Attachment LJW-4. Other Company witnesses provide more detailed Direct Testimony to support the reasonableness of the capital additions associated with their organizations within the Company. Table LJW-D-5 identifies those witnesses and the types of capital additions they support:

TABLE LJW-D-5
Capital Witness Listing

Adam R. Dietenberger	—	Shared Corporate Services (Buildings and General)
Sandra L. Johnson	—	Wildfire Management Plan
Betty L. Mirzayi	—	Distribution
Chad S. Nickell	—	AGIS Distribution
Connie L. Paoletti	—	Transmission
Michael O. Remington	—	Business Systems and AGIS Business Systems
Emmett R. Romine	—	Distributed Intelligence
Kyle L. Williams	—	Generation

Each of the business areas represented by these witnesses is responsible for the actual planning and decision-making regarding the capital expenditures and the in-service dates related to their construction, which together result in the capital additions. Also, Ms. Blair includes both the historical net plant balances and the forecasted capital balances in her cost of service study.

Q. ARE ACTUAL AND FORECASTED RETIREMENTS REFLECTED IN THE ACTUAL AND FORECASTED BALANCES IN YOUR ATTACHMENTS?

A. Yes. The impacts of the retirements are included in the plant-related roll-forwards.

Q. CAN RETIREMENTS IMPACT DEPRECIATION AND THUS INDIRECTLY IMPACT RATE BASE OVER TIME?

A. Yes, but it depends on the type of asset and depreciation method used for that asset as to whether there is a financial impact resulting from the retirement. A retirement reduces the plant balance and the accumulated depreciation by the same amount when the transaction is recognized, resulting in no impact to rate base from the transaction. However, there are assets where the depreciation is calculated from the original cost of the plant and not the net plant value. For those assets (depreciation on original cost), the retirement does change the calculation of the depreciation going forward and this change impacts the accumulated depreciation and, hence, rate base.

Q. IN THE PREVIOUS SUBSECTION OF YOUR DIRECT TESTIMONY, YOU DESCRIBED PRE-FUNDED AFUDC. DO ANY OF THE COMPANY'S ASSETS HAVE PRE-FUNDED AFUDC ASSOCIATED WITH THEM?

A. Yes. The Company has recorded pre-funded AFUDC associated with the following assets:

- Comanche 3;
- Cherokee 5, 6, and 7;
- The emissions controls on Pawnee 1, Hayden 1 and Hayden 2; and
- Certain transmission assets.

Q. PLEASE DESCRIBE THE BACKGROUND RELATED TO THE PRE-FUNDED AFUDC ASSOCIATED WITH COMANCHE 3.

A. In Decision No. C06-1379, the Commission approved the parties' agreement to include the December 31, 2006 ending CWIP balance for Comanche 3 and its related projects (pollution control projects at Comanche 1 and 2 and Comanche 3 transmission) in rate base and to earn a current return, thereby establishing the 2006 layer for accumulation of pre-funded AFUDC.[8] As a result of the treatment authorized by the Commission in Decision No. C06-1379, retail jurisdictional

[8] Proceeding No. 06S-234EG, Decision No. C06-1379 at 21 (Mailed Dec. 1, 2006).

customers are not responsible for paying for AFUDC on a portion of the CWIP balance associated with Comanche 3 during its construction phase. In Decision No. C09-1446, the Commission approved a second pre-funded layer for the Comanche 3 project based on the ending 2009 CWIP balance.[9] The Comanche 3 pre-funded AFUDC amounts are currently in the amortization phase. The amount recorded in the regulatory liability as of December 31, 2020 was $61.7 million. This amount is being amortized over the remaining service life assigned to Comanche 3, which currently is approximately 49 years.

Q. WHAT PRE-FUNDED AFUDC IS ASSOCIATED WITH THE CHEROKEE, PAWNEE, AND HAYDEN UNITS?

A. In Decision No. C15-0292, the Commission approved a new rider for the Company's Clean Air-Clean Jobs Act ("CACJA") eligible projects.[10] The CACJA-related projects include costs associated with the new Cherokee 2 X 1 combined cycle (Cherokee 5, 6, and 7) and the costs of the emissions controls on Pawnee 1, Hayden 1 and Hayden 2. The Company used pre-funded AFUDC for these CACJA-related projects on construction balances from January 1, 2015 until the projects were placed in service. As of December 31, 2020, the amount recorded in the regulatory liability was $19.8 million for the pre-funded AFUDC, which is being amortized over the remaining service life assigned to each generating unit.

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[9] Proceeding No. 09AL-299E, Decision No. C09-1446 at 16 (Mailed Dec. 24, 2009).
[10] Proceeding No. 14AL-0660E, Decision No. 15-0292 at 11-12 (Mailed Mar. 31, 2015).

Q. PLEASE DESCRIBE THE TRANSMISSION-RELATED PRE-FUNDED AFUDC.

A. Beginning in 2008, transmission projects in CWIP as of December 31, 2007 were included in the rate base calculation for purposes of the Transmission Cost Adjustment ("TCA"). Thus, as a result of the treatment authorized by the Commission in Decision No. C06-1379, retail customers do not have to provide for AFUDC on a portion of the CWIP balance associated with certain transmission projects included in the TCA.

Q. HOW IS PRE-FUNDED AFUDC TREATED IN THE COST OF SERVICE STUDY?

A. In the cost of service study, all retail jurisdictional pre-funded AFUDC has been directly assigned to the retail jurisdiction in accordance with the functional class of the associated asset for CWIP, depreciation reserve, plant in-service, and accumulated deferred income taxes in rate base. In addition, the pre-funded AFUDC, depreciation expense, and deferred tax expense are included in the income statement. Accumulated pre-funded AFUDC is a reduction to rate base after it has been allocated by jurisdiction, with the amortization of the pre-funded AFUDC balance being a reduction to depreciation expense after the total Company expense is assigned to the retail jurisdiction. Because these pre-funded AFUDC balances are already at a jurisdictional level, the offset must occur after the rate base and the income statement are allocated by jurisdiction.

Q. YOUR EARLIER DIRECT TESTIMONY ALSO DISCUSSED EXCESS AFUDC. WHEN DOES EXCESS AFUDC BECOME PART OF THE RATE BASE IN COLORADO?

A. When excess AFUDC exists, the excess AFUDC regulatory asset is included in rate base and the related income statement accounts are included in the revenue requirement calculation. In the cost of service study for the HTY, the regulatory asset is included in rate base because all the assets were in service before December 31, 2020. The amortization of the excess AFUDC regulatory asset also is included with the calculation of the revenue requirement.

Q. WHAT COMPANY ASSETS HAVE EXCESS AFUDC ASSOCIATED WITH THEM?

A. The projects with excess AFUDC are the Cherokee 5, 6, and 7 units and the pollution control equipment for Pawnee and Hayden. Excess AFUDC was accumulated in this manner for the CACJA-related projects on construction through December 31, 2014. The use of excess AFUDC was established in the Settlement Agreement in Proceeding No. 11AL-947E, as approved by the Commission in Decision No. C12-0494 on May 9, 2012.[11] As of December 31, 2020, the amount recorded in the regulatory asset was $10.1 million for the excess AFUDC, which is being amortized over the remaining service life assigned to each generating unit.

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[11] Proceeding No. 11AL-947E, Decision No. C12-0494 at 25 (Mailed May 9, 2012).

Q. DID YOU CALCULATE THE NET PLANT BALANCE THAT IS FORECASTED TO BE PLACED IN SERVICE IN 2022?

A. Yes. The total amount of incremental plant additions less plant retirements expected to be in service at December 31, 2022 is $941,971,081, as provided in Attachment LJW-2.

Q. HOW DID YOU DECIDE HOW MUCH OF THE CAPITAL FORECAST WILL BE IN SERVICE BY YEAR-END 2022?

A. I relied upon the Company forecast to identify the CWIP closings that will be placed in service by December 31, 2022. I also deducted the forecasted 2022 retirements to arrive at the monthly ending plant balances. The reserve balance was increased by the estimated 2022 depreciation expense, while retirements and removal costs decreased the balance to roll forward the reserve balance monthly by functional class.

Q. DID YOU MAKE ANY ADJUSTMENTS TO THE COMPANY'S ACCUMULATED DEFERRED INCOME TAX ("ADIT") BALANCES FOR 2022?

A. Yes. When a utility that is subject to normalization rules uses a future test year to determine its cost of service, Treasury Regulations require that the increase or decrease to the ADIT balance be prorated first before applying the 13-month averaging method.

Q. PLEASE EXPLAIN WHAT "NORMALIZATION" MEANS IN THE CONTEXT OF UTILITY ACCOUNTING.

A. Normalization refers to a method of accounting in which the tax benefits associated with depreciation of utility assets are spread over the same time period that the costs of those assets are recovered from customers. For example, if rates are set based on straight-line book depreciation, the federal income tax expense included in those rates must also be calculated as though the utility used straight-line book depreciation for tax purposes. The difference between the federal income tax expense calculated using accelerated depreciation and the federal income tax expense calculated using straight-line book depreciation is recorded as a deferred tax liability. The cumulative deferred tax liability balance is recorded as ADIT and serves as an offset to rate base. The regulations further define how the deferred tax balance for the federal portion of FERC Account 282 must be calculated for future test years. While the discussion is based on the federal rules for timing differences related to life differences, the ADIT includes other plant related timing differences. As described by Ms. Blair, the Commission has approved full tax normalization for all timing differences, and therefore Public Service interprets these rules to apply to all plant deferred taxes, including Net Operating Losses ("NOLs") since these were driven by accelerated tax depreciation.

Q. WHAT IS THE SOURCE OF THE TAX NORMALIZATION RULES?

A. Tax normalization rules come from various sources including the Internal Revenue Code ("IRC"), Treasury Regulations, and related guidance provided by the IRS, such as Private Letter Rulings ("PLR").

Specifically, Congress mandated normalization for public utilities in IRC § 168(i)(9)-(10), which provides that in order to use a normalization method of accounting with respect to public utility property:

> [T]he taxpayer must, in computing its tax expense for purposes of establishing its cost of service for ratemaking purposes and reflecting operating results in its regulated books of account, use a method of depreciation with respect to such property that is the same as, and a depreciation period for such property that is no shorter than, the method and period used to compute its depreciation expense for such purposes.[12]

The rule requiring a utility to calculate federal income tax expense on a normalized basis is Section 1.167(l)-1 of the Treasury Regulations.

Q. IS A REGULATORY COMMISSION REQUIRED BY LAW TO FOLLOW THE NORMALIZATION RULES FOR RATEMAKING PURPOSES?

A. No. Congress did not directly prohibit regulators from using other methods to set rates, but it did link the use of accelerated tax depreciation with the use of deferred taxes in rate making. A company is prohibited from claiming accelerated tax depreciation on its returns if a state utility commission requires all current tax benefits to be flowed through to customers. In other words, the IRS would require a company ordered to use flow through tax benefits in rate making to tax depreciate

[12] IRC § 168(i)(9)(A)(i).

their assets over a straight-line life (i.e. book depreciation) on its tax returns. Currently, the revenue requirement provides for this sharing of tax benefits equally with all customers using the asset throughout its life (over a straight-line basis), with the use of ADIT providing a large rate base reduction that is not available with flow through methods. For that reason, Public Service has calculated the income tax expense included in its cost of service using straight-line book depreciation for its assets and included ADIT as an offset to rate base. This calculation is supported in Company witness Ms. Blair's Direct Testimony.

Q. WHAT SECTION OF THE TAX NORMALIZATION RULES MANDATES THE USE OF THE PRORATION METHOD?

A. Section 1.167(l)-1(h)(6)(ii) of the Treasury Regulations mandates the use of a very specific proration procedure in measuring the amount of future test period ADIT. This regulation requires that if solely a historical period is used to determine the ADIT balance to be subtracted from rate base, then no proration is required. If, on the other hand, a future period is used to determine the rate base, the ADIT balance "is the amount of the reserve at the beginning of the period and a pro rata portion of the amount of any projected increase to be credited or decrease to be charged to the account during such period." Therefore, Public Service used the IRS proration for the ADIT in its FTY and did not use IRS proration for its HTY, since the HTY was based on a historical period.

Q. HOW ARE THE ANNUAL DEFERRED TAXES PRORATED?

A. Proration is required to ensure that the current year tax benefits of accelerated depreciation will not be flowed through to customers faster than they will be recognized by the utility. The IRS assumes that such benefits are received on the last day of the period over which the deferred amount is recognized. The pro rata portion of any change during a future period is determined by multiplying the change by a fraction, where:

- The numerator is the number of days remaining in the period at the time the change is to be accrued; and
- The denominator is the total number of days in the future period.

Because Public Service closes its books on the last day of each month, the proration calculation must also be done on a monthly basis. For instance, if a forecasted increase to Public Service's ADIT balance during a test year period was $1.2 million, the proration adjustment would reflect that that ADIT balance was accumulated incrementally over the course of the entire test year ($100,000 per month). However, the proration assumes that each monthly expense is recognized on the last day of the month. Assuming a 365-day year, January's expense would increase the ADIT by 335/365th (335 = 365 minus 30 days in January assuming January 31st is not included in the total days for January) or $91,781, instead of $100,000. Each subsequent month the numerator is decreased by the number of days in the month less one for the last day of the month. Table LJW-D-6 walks through each month's hypothetical example:

TABLE LJW-D-6
Proration of ADIT

Month	Year 2020 Monthly Change	Days to Prorate	Calendar Days in Future Test Period	Monthly Change Prorated Test Year	Cumulative Prorated Balance	Cumulative Balance (without Proration)
	(A)	(B)	(C)	(D=A*B/C)	(Sum Col. D)	(Sum Col. A)
Annual Increase	1,200,000					
Dec-21					0	0
Jan-22	100,000	335	365	91,781	91,781	100,000
Feb-22	100,000	307	365	84,110	175,890	200,000
Mar-22	100,000	276	365	75,616	251,507	300,000
Apr-22	100,000	246	365	67,397	318,904	400,000
May-22	100,000	215	365	58,904	377,808	500,000
Jun-22	100,000	185	365	50,685	428,493	600,000
Jul-22	100,000	154	365	42,192	470,685	700,000
Aug-22	100,000	123	365	33,699	504,384	800,000
Sep-22	100,000	93	365	25,479	529,863	900,000
Oct-22	100,000	62	365	16,986	546,849	1,000,000
Nov-22	100,000	32	365	8,767	555,616	1,100,000
Dec-22	100,000	1	365	274	555,890	1,200,000
Total	1,200,000				4,807,671	7,800,000

Accordingly, the tax benefit is flowed through to customers as it is accrued over time. For forecast purposes, the Company calculates an annual deferred tax expense and then divides by 12 to get the monthly deferred tax expense, resulting in an even monthly deferred tax expense throughout the year. As a result, the proration calculation can be converted mathematically as an annual factor. Using the example presented in Table LJW-D-6, the annual proration factor can be calculated as the Dec-22 Prorated Balance of $555,890 divided by the Dec-22 Balance without Proration of $1,200,000 for a factor of 46.3 percent.

Q. HOW DOES THE IRS PRORATION ALIGN WITH USING AN AVERAGE RATE BASE METHODOLOGY FOR A FUTURE TEST YEAR?

A. The answer depends on whether the Commission would allow the Company to forgo the use of the Commission's averaging method for its ADIT in rate base and to use instead the IRS proration method, which is in essence an averaging method.

This is what the Company recommends because if we could not substitute the proration method for the Commission's averaging method, then we would have to apply both methods. The Commission requires a 13-month average method for rate base items; however, for ADIT the Commission has allowed the Company to use a beginning of year, end of year ("BOY/EOY") average. Since the monthly deferred amounts are constant throughout the year, a 13-month average and a BOY/EOY average result in the same amount. To demonstrate the effects of proration, we have used the 13-month average method in the numbers below. The IRS recently provided in PLR 201717008 that its method may be used instead of the state utility commission defined method in calculating rate base. However, in prior PLRs, the IRS required its method to first be used and then the state utility commission's averaging method to be applied if the commission's averaging method must be used in ratemaking for ADIT.

Basically, both methods provide for the same overall intention of representing the current changes ratably over the year rather than allowing a full year effect into rate base (i.e. setting rates using end of year future balances). The 13-month average of the annual deferred taxes allows 50 percent of the change in deferred taxes to be added to the beginning balance when calculating the average ADIT that is in rate base. This can be seen in Table LJW-D-6 above, which calculates a 13-month average on the sum of the ending balances without proration, or $7.8 million, and dividing by 13 months to get $600,000 or 50 percent of the annual deferred taxes of $1.2 million. Using just proration for the averaging results in an annual change of $555,890 or 46.324 percent of the annual deferred taxes of $1.2 million,

If the Commission did not allow the Company to substitute the proration method for the 13-month average method, the Company would have to average twice. Applying proration first and then the 13-month average to the $1.2 million annual deferred taxes would reduce the annual deferred tax amount to $369,821, or 30.818 percent of the original amount. This is calculated by taking the $4,807,671 sum of prorated balances and dividing by 13 months. A comparison of the result of these averaging methods is shown in Table LJW-D- 7.

TABLE LJW-D- 7
Comparison of Averaging Methods

		% of ADIT
Change in ADIT	1,200,000	
Prorated Change in ADIT	555,890	46.324%
13-month Average of Change in ADIT	600,000	50.000%
13-month Average of Prorated Change in ADIT	369,821	30.818%

C. <u>Affiliate Charges in Capital Additions</u>

Q. PLEASE DESCRIBE THE AFFILIATE COSTS INCLUDED IN CAPITAL ADDITIONS

A. Affiliate costs included in capital additions are those costs charged either by XES or another Xcel Energy Operating Company to a Public Service-specific capital work order for construction of an asset owned and used solely by Public Service.

Q. HOW ARE THESE AFFILIATE COST COMPONENTS BILLED TO PUBLIC SERVICE?

A. The construction affiliate charges were assigned in two ways: (1) costs are charged directly to a Public Service work order; or (2) costs are charged directly to a work order that is further allocated to Public Service. Costs allocated to a Public Service work order relate only to certain software projects.

Q. HOW ARE COSTS ALLOCATED TO PUBLIC SERVICE SOFTWARE PROJECTS?

A. Software is an intangible asset and, as such, is the only asset that is broken down into each operating company owner's fractional share in the construction process. This is accomplished through a controlled and systematic process. For the majority of software projects, affiliate costs are allocated each month from a special allocating work order to each of the four Operating Companies, including Public Service. Charges recognized each month are allocated to the Operating Company's construction work order based on predetermined percentages. A similar process is followed to develop the forecasted plant additions. Allocation percentages are applied to the total forecasted software project costs to calculate the total software addition to include in the forecast for Public Service.

D. Treatment of Shared Assets

Q. PLEASE DESCRIBE HOW THE COMPANY TREATED ASSETS THAT ARE OWNED BY PUBLIC SERVICE BUT USED BY OTHER XCEL ENERGY OPERATING COMPANIES.

A. The shared asset is recorded on the books of the Xcel Energy operating company that owns the asset, Public Service in this case. Because the asset is owned by one of the operating companies, but used by, for example, XES employees performing work for other operating companies, the costs for that asset must be shared among the operating companies receiving services from the XES employees using that asset. The costs that Public Service incurs for these assets include book depreciation, tax depreciation, related deferred taxes, removal cost recovery, property taxes, and a return on investment or carrying costs.

Q. HOW ARE SHARED ASSET EXPENSES CHARGED OUT TO OTHER OPERATING COMPANIES?

A. A carrying cost is calculated on the shared asset costs, a portion of which is then charged to operations and maintenance ("O&M") expense on the books of other Xcel Energy subsidiaries that benefit from the asset. When this cost is charged out to the other companies, it is recorded as a shared asset credit that reduces O&M expenses for Public Service.

Q. CAN YOU DIFFERENTIATE BETWEEN ACCOUNTING FOR A SHARED ASSET AND ACCOUNTING FOR A COMMON ASSET?

A. Yes. I described the accounting for a shared asset above. In contrast, common intangible assets (like the Advanced Distribution Management System software, which is utilized by all four Xcel Energy operating companies) are broken down into each operating company owner's fractional share in the construction process. For the vast majority of software projects, affiliate costs are allocated each month from a special allocating work order to each of the four operating companies, including Public Service. Charges recognized each month are allocated to the operating company's construction work order based on predetermined percentages.

III. DEPRECIATION AND AMORTIZATION EXPENSE

Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR DIRECT TESTIMONY?

A. I present the depreciation and amortization expense that results from applying the depreciation rates supported by Company witness Mr. Watson to the plant balance for each FERC account.

Q. DID THE COMPANY CONDUCT A NEW DEPRECIATION STUDY FOR PURPOSES OF THIS BASE RATE CASE?

A. Yes. Public Service engaged Mr. Watson to prepare a depreciation study. That study is presented as Mr. Watson's Attachment DAW-1.

Q. DID THE COMPANY PROVIDE MR. WATSON WITH INPUTS AND ASSUMPTIONS FOR THE DEPRECIATION STUDY?

A. Yes. Those inputs and assumptions are listed in Mr. Watson's Direct Testimony. These criteria were consistent with the Company's prior depreciation studies and incorporated updates from the 2020 Decommissioning Cost Study, which included terminal retirement dates that align with the Company's last Commission-approved electric resource plan. Along with those inputs and assumptions, Mr. Watson performed his own analysis to develop proposed depreciation rates for Company assets.

Q. HOW DO THE DEPRECIATION RATES RECOMMENDED BY MR. WATSON AFFECT THE COMPANY'S DEPRECIATION EXPENSE FOR PURPOSES OF THIS RATE CASE?

A. When applied to 2022 plant balances, the rates recommended by Mr. Watson increase the Company's total annual depreciation expense by $53.6 million, as compared to what it would have been under the prior approved depreciation rates. Attachment LJW-6 is a detailed calculation of the annual depreciation expense impact. A summary of the calculation of the impact to depreciation expense resulting from applying recommended depreciation rates to the 2022 plant balances is also summarized in Table LJW-D-8:

TABLE LJW-D-8
Change in Depreciation Expense

Public Service Company of Colorado
Comparison of Approved vs Proposed Depreciation Accrual Rates
2022

Functional Class		Approved Depreciation Rates (Note 1)	Proposed Depreciation Rates	Difference
		(a)	(b)	(c) = (b) - (a)
Depreciation				
Electric				
Electric Intangible Plant		18,089,292	18,089,292	0
Electric Steam Production Plant		97,022,171	115,731,380	18,709,209
Electric Hydro Production Plant		7,705,827	12,966,829	5,261,002
Electric Other Production Plant	(5)	123,769,664	131,128,522	7,358,859
Electric Transmission Plant	(5)	57,143,237	62,495,559	5,352,322
Electric Distribution Plant		149,829,211	157,791,182	7,961,971
Electric Distribution Plant-252	(2)	(2,434,746)	(2,569,142)	(134,397)
Electric General Plant	(3)	30,825,095	37,834,066	7,008,971
Total Electric		481,949,751	533,467,689	51,517,938
Common				
Common Intangible Plant		54,011,978	54,011,978	0
Common General Plant	(3)	46,651,250	48,677,980	2,026,730
Total Common		100,663,228	102,689,958	2,026,730
Regulatory Assets Amortization				
Retired Generating Units	(4)	26,283,084	26,349,953	66,869
Craig Unit 1	(4)	377,148	377,143	0
Total Regulatory Assets		26,660,232	26,727,096	66,869
Total Depreciation and Regulatory Asset Amortization		609,273,211	662,884,743	53,611,537

Q. WHY IS PUBLIC SERVICE'S DEPRECIATION EXPENSE INCREASING?

A. The most significant change in depreciation expense is in Production, especially Steam Production assets. Multiple factors contributed to increased depreciation for the Production assets including:

- the realignment of the average remaining life depreciation rates with the current terminal retirement dates,
- plant balances,
- reserve position, and
- the incorporation of new decommissioning cost estimates for all Production assets.

In 2020, an updated decommissioning cost study on all of Public Service's generation facilities was performed by the consulting firm 1898 & Co., part of Burns and McDonnell Engineering Company ("Burns & McDonnell"), resulting in increased dismantling estimates of $52 million compared to the 2016 decommissioning study. The increase was primarily due to the additions of the Rush Creek and Cheyenne Ridge wind farms. This study is discussed in Company witness Mr. Kyle Williams's Direct Testimony and is presented in Attachment KLW-1.[13] Another factor that impacts depreciation expense is additional investment for Company assets since the existing depreciation rates were established. If the terminal retirement of a generating unit does not change between cases, any incremental investment added must be recovered over a shorter period. Additionally, the service lives of fleet vehicles, tools and other general plant, as

[13] The 2020 Zuni Decommissioning Cost Study was separate from the decommissioning study for other Company production facilities because of the requirement that the Company file a separate application for approval of the Zuni Decommissioning Plan. The Zuni Decommissioning Study is attached to Mr. Williams's Direct Testimony as Attachment KLW-14.

well as Distribution station equipment and street lighting, were decreased. Also, increased costs for removal in the Transmission plant led to higher net salvage rates, the details of which are discussed in Attachment DAW-1 to Mr. Watson's Direct Testimony.

Q. DO SOME OF THE COMPANY'S DEPRECIATION AND AMORTIZATION RATES APPLY TO UNITS THAT HAVE BEEN RETIRED?

A. Yes. The Company is currently amortizing various unrecovered costs of generating units that are no longer in service, which the Company refers to as the Retired Generating Units. As I explained earlier, the term "Retired Generating Units" encompasses Cameo 1 and 2, Arapahoe 1 through 4, Cherokee 1 through 3, Zuni 1 and 2, Valmont 5, and Cherokee 4. The Commission authorized recovery of the remaining unrecovered costs of those Retired Generating Units in several prior proceedings:

- The Commission approved the regulatory asset accounting for the Retired Generating Units in Proceeding No. 09AL-299E, and as part of the approval of the Company's CACJA Compliance Plan in Proceeding No. 10M-245E.

- The Commission approved the regulatory asset accounting for Cameo, Arapahoe, and Zuni in Decision No. C09-1446 in Proceeding No. 09AL-299E.

- The Commission approved the regulatory asset accounting for Cherokee and Valmont in Decision No. C10-1328 in Proceeding No. 10M-245E.

- The Commission approved the early retirement of Arapahoe 1 and 2 in Decision No. C02-1442 in Proceeding No. 98A-511E.[14]

Q. HAS THE COMPANY INCORPORATED AN UPDATE TO THE AMORTIZATION AMOUNTS FOR THE RETIRED GENERATING UNITS INTO THIS RATE CASE?

A. Yes. All of the Retired Generating Units have now been retired, and only removal work remains to be completed. The regulatory asset for the Retired Generating Units is composed of the remaining undepreciated plant costs reduced by the accumulated depreciation for removal (the amount recovered for removal over the life of the asset less the amount already spent for removal to date). The regulatory asset balance as of December 31, 2020 was $64.8 million, plus estimated removal cost in 2021 and beyond of $85.3 million, for a total recovery balance of $150.0 million. The amortization period included in the Settlement Agreement was seven years, resulting in an annual amortization of $26.4 million. An updated schedule of these regulatory assets is shown in Attachment LJW-7.

Q. HAS THE COMPANY INCORPORATED THE UPDATED ESTIMATE OF DECOMMISSIONING COSTS FROM THE 2020 ZUNI DECOMMISSIONING COST STUDY IN THIS CASE?

A. Yes. We have adjusted the Zuni amortization to incorporate the new estimate from the 2020 Zuni Decommissioning Cost Study. The $22.7 million project cost estimate was updated in Proceeding No. 20A-0268E based on a Zuni Station

[14] At the time of their retirement in 2002, the Arapahoe Unit 1 and Unit 2 assets were fully recovered as to their original cost, but not for their removal costs. Thus, those two units are included with the Retired Generating Units.

Decommissioning Cost Study performed by Burns & McDonnell, which is attached to Mr. Williams's Direct Testimony as Attachment KLW-14.

Q. HAS THE COMPANY ACCOUNTED FOR THE ZUNI LAND SALE TO THE DENVER HOUSING AUTHORITY ("DHA") THAT WAS APPROVED IN PROCEEDING NO. 21A-0174E?

A. No. While the Purchase and Sales Agreement with DHA has been fully executed, the proceeds from the sale have not yet been received. As explained in the above mentioned Zuni Land Sale proceeding, once the proceeds are received, the Company will set aside such proceeds, net of the costs to achieve the sale, and record them in a deferred account pending a later determination by the Commission as to the disposition of those proceeds in a future rate proceeding.

Q. HOW WILL THE SALE TO DHA IMPACT THE TOTAL DECOMMISSIONING COSTS TO BE INCURRED BY THE COMPANY FOR ZUNI?

A. As explained in the Zuni Land Sale proceeding, the sale to DHA is on an "as-is, where-is, with all faults" basis, and includes DHA's agreement to assume all risk and responsibility for demolishing, dismantling and removing the existing structures, investigating the environmental condition of the property and undertaking any necessary remediation, and restoring the site for DHA's specific purposes. Accordingly, the sale will certainly reduce the actual overall project cost that would otherwise have been incurred by the Company, currently estimated at $22.7 million, but we do not have any certainty by how much since none of the demolition work has commenced. The Company will clearly have less work to do under the decommissioning plan. Table A-1 from the Zuni Decommissioning Cost Study in Attachment KLW-14 to Mr. Williams's Direct Testimony provides a summary that breaks down the overall cost estimate by activity, facility and location. As shown, Burns & McDonnell estimated that $2,343,000, or about 12%, of the $19,218,000 of total direct costs (before project indirects and contingency) was attributable to the decommissioning work on the Zuni Tank Farm Property.

Q. WILL CUSTOMERS REALIZE THE COST SAVINGS ON DECOMMISSIONING COSTS AS A RESULT OF THE SALE?

A. Yes. Any cost savings will flow back to customers because they will only pay for the actual costs of decommissioning. Under the approved regulatory accounting, as actual decommissioning costs are incurred and recognized, the regulatory asset balance will reflect the difference between the estimated and actual decommissioning costs. Any remaining amortization expense necessary to resolve this balance will be proposed in future electric rate proceedings. Should the actuals be less than the estimated costs, then the amortization expense will be decreased. If actuals are greater than the current estimate, future amortization expense will be increased. At the end of the day, only the actual costs for decommissioning the Zuni will be recovered in rates.

Q. WHAT IS THE COMPANY PROPOSING WITH RESPECT TO THE SERVICE LIVES AND NET SALVAGE VALUE OF THE NEWLY ACQUIRED VALMONT AND MANCHIEF GENERATING UNITS?

A. The Company is proposing a service life for Valmont that assumes a retirement date of 2038 and a service life for Manchief that assumes a retirement date of 2040. The Company is also proposing a negative 9.92 percent salvage value for both facilities. Public Service agreed to those service lives and net salvage values as part of the settlement in Proceeding No. 20A-0409E, the CPCN proceeding in which the Company received approval to acquire Valmont and Manchief.

Q. IS PUBLIC SERVICE ASKING THE COMMISSION TO SET RATES IN THIS RATE CASE BASED ON THE DEPRECIATION AND AMORTIZATION RATES RECOMMENDED BY MR. WATSON?

A. Yes. The depreciation and amortization rates recommended by Mr. Watson are reasonable and should be approved by the Commission.

IV. RECOVERY OF AGIS-RELATED COSTS

A. Legacy Meters

Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR DIRECT TESTIMONY?

A. The purpose of this section of my Direct Testimony is to support Public Service's proposal to create a regulatory asset beginning in January 2025 to recover the undepreciated balance of legacy meters that will be replaced by Advanced Metering Infrastructure ("AMI") meters and to propose an amortization period for cost recovery on this regulatory asset.

Q. WHY IS PUBLIC SERVICE PROPOSING TO CREATE A REGULATORY ASSET TO RECOVER THESE COSTS?

A. Public Service usually recovers the cost of its meters through depreciation over the expected life of these assets. The replacement of customers' existing Automatic Meter Reading ("AMR") meters with AMI meters will result in many of these legacy meters being taken out of service before they are fully depreciated, meaning that Public Service needs an alternative way to recover the remaining cost of these legacy meters. One option would be to accelerate depreciation by shortening the lives of the remaining AMR meters at the time AMI meters replace them. However, to mitigate spikes in depreciation expense over the period in which the meters are replaced, the Company is recommending the Commission approve the creation of a regulatory asset beginning in January of 2025, once the meter deployment is complete, to be amortized over eight and a half years through June 30, 2033.

Q. HAS PUBLIC SERVICE ESTIMATED THE UNDEPRECIATED BALANCE REMAINING ON THE LEGACY METERS THAT WILL BE REPLACED WITH AMI METERS?

A. Yes, this balance is shown in Attachment LJW-4 and it is estimated at approximately $60 million.

Q. DOES PUBLIC SERVICE TRACK REMAINING DEPRECIATION FOR EACH LEGACY METER SEPARATELY?

A. No. Public Service accounts for meters under the group method of accounting as it is not practical to track these assets on an individual basis. Meters are grouped by vintage and therefore each individual meter is not specifically identified in Public Service's records. All vintages of these meters are depreciated as a group over their average service life using the depreciation rates approved by the Commission. The net book value is determined by subtracting accumulated depreciation associated with the assets from their original cost.

Q. CAN THE AVERAGE REMAINING LIFE OF THE LEGACY METERS BE ESTIMATED FROM THEIR NET BOOK VALUE?

A. Yes. For example, if we wanted to estimate the remaining life of the legacy meters as of today, we would take their current net book value and divide that by the annual depreciation expense associated with the meters. As referenced above, Public Service is proposing to create a regulatory asset to recover the undepreciated balance associated with the legacy meters as of December 31, 2024. To determine the average remaining life of the legacy meters as of that date, we forecasted the unrecovered net plant balance as of that date and divided that forecasted amount by the forecasted annual depreciation expense associated with the assets.

Q. HOW DID PUBLIC SERVICE DETERMINE THE FORECASTED UNRECOVERED PLANT BALANCE FOR THE LEGACY METERS?

The $60 million estimate referenced above reflects the forecasted unrecovered plant balance in our subledger at December 31, 2024. The forecast is based on the current net book value of these assets and any additional investment anticipated through that date, based on the currently approved depreciation rate associated with the assets.

Q. WHAT IS THE SIGNIFICANCE OF DECEMBER 31, 2024?

A. This date is when the AGIS meter deployment is intended to be completed, and the Company will definitively be able to determine the unrecovered balance associated with these assets at that time.

Q. ARE THERE ANY FACTORS THAT COULD CAUSE THIS ESTIMATE TO BE ADJUSTED IN THE FUTURE?

A. Yes. This amount may be subject to adjustment for a variety of reasons including but not limited to: the timing of the deployment schedule, any intervening changes in the Commission-approved depreciation rate associated with these meters, and any replacement legacy meters that need to be installed before AMI meter deployment has reached a customer.

Q. WHEN WILL THE COMPANY PROVIDE THE FINAL UNDEPRECIATED BALANCE FOR THESE ASSETS?

A. The Company plans to present the final unrecovered balance associated with the legacy meters in the first proceeding following the final AGIS meter deployment.

Q. OVER WHAT PERIOD OF TIME DOES PUBLIC SERVICE PROPOSE TO AMORTIZE THIS REGULATORY ASSET?

A. Public Service proposes to amortize the regulatory asset over eight and one-half years beginning January 1, 2025.

Q. WHY IS PUBLIC SERVICE PROPOSING THIS AMORTIZATION PERIOD?

A. We are proposing an appropriate balance between minimizing rate impacts and ensuring cost recovery for these assets. This amortization period was determined by taking the December 31, 2024 forecasted $60 million of unrecovered plant balance and dividing it by the forecasted December 31, 2024 depreciation expense. The resulting eight and one-half years will keep ongoing customer costs associated with these assets commensurate with current levels of costs until the legacy meters are fully recovered, and therefore provides a reasonable recovery period for both the Company and customers. This is illustrated in Table LJW-D-9.

TABLE LJW-D-9
Amortization Period

Amortization period	8.55	5	7
	If we continued to depreciate normally:	Amortize Reg Asset over 5 years	Amortize Reg Asset over 7 years
2025	7,003,809	11,974,632	8,553,308
2026	7,003,809	11,974,632	8,553,308
2027	7,003,809	11,974,632	8,553,308
2028	7,003,809	11,974,632	8,553,308
2029	7,003,809	11,974,632	8,553,308
2030	7,003,809		8,553,308
2031	7,003,809		8,553,308
2032	7,003,809		
2033	3,842,686		
2034			
	59,873,158	59,873,158	59,873,158

B. <u>WiMAX Costs</u>

Q. WHAT IS WiMAX?

A. WiMAX is an acronym for the Worldwide Interoperability for Microwave Access network, which the Company initially planned to use as the high-speed wireless network for the Field Area Network ("FAN"). However, as Company witness Mr. Remington explains in his Direct Testimony, Federal Communications Commission ("FCC") rule changes effective in 2020 necessitated a change in network technology. The FCC rule changes made the frequency used by WiMAX much more expensive to operate and caused vendors to stop supporting the WiMAX product, thus forcing the Company to look for alternative technology in lieu of WiMAX. In 2020, Xcel Energy moved to public cellular data technology to support continued connectivity of the FAN components.

Q. DID THE COMPANY PLACE IN SERVICE CAPITAL ASSOCIATED WITH THE WiMAX NETWORK?

A. Yes. The Company has placed approximately $42 million of capital associated with the WiMAX network in service, with approximately $17 million of that amount being included in rate base for the first time in this case.

Q. WHY IS IT APPROPRIATE THAT PUBLIC SERVICE RECOVER THESE WiMAX COSTS?

A. The determination to use WiMAX technology was made through a design decision process where various technologies were evaluated, and at the time of the determination WiMAX appeared to be the best technology available.

The evaluation began in 2012 with the development of a network strategy, with field device communication being one key element. Then, in 2013, Business Systems and communication engineering resources built and defined key requirements for the FAN. Business Systems researched various vendor partnerships that could provide the appropriate functionality for these key requirements and chose the WiMAX solution as the best fit at the time. All decisions at the time were considered prudent.

The decision and Company direction were continuously reassessed through 2019 as new information became available. The expectation was that the Company's vendor, AirSpan, would update equipment to new standards.

Eventually, the decision was made by AirSpan to not update the hardware. At this point all devices had been deployed and were functioning to support the deployed population of meters.

The AGIS FAN devices qualify as capital under Xcel Energy capital policy for communication equipment. Communication equipment is accounted for according to FERC as AR 15 (Accounting Release 15) property. Accounting for AR 15 property dictates that these assets do not need to be individually tracked by the company and will live out their Commission-approved lives on the accounting records. These assets are grouped together by vintage year and not addressed at a single asset level. This group methodology dictates both how the assets are depreciated and retired. All equipment was appropriately installed and in serviced for its intended purpose. AMI meter communications, the Distribution Automation devices communication, and customer batteries communication operated to enable automated meter reading for approximately two years.

The equipment was evaluated within the Company's standard categories for communication equipment and was categorized as such in FERC Account 397. This standard was reaffirmed and communicated in the testimony of Cathy Schwartz for the Company's 2016 depreciation study. Therefore, the costs incurred for the WiMAX network prior to the necessary technology change are reflected in the cost of service in this case.

V. CONCLUSION

Q. PLEASE SUMMARIZE THE RECOMMENDATIONS IN YOUR DIRECT TESTIMONY.

A. I recommend the Commission:

- Approve the Company's net plant balances;
- Authorize the Company to recover the depreciation and amortization expense I calculate based on Mr. Watson's proposed depreciation rates and the Company's net plant balances; and
- Authorize the Company to defer into a regulatory asset the unrecovered legacy meter costs associated with the AGIS deployment.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

Statement of Qualifications

Laurie J. Wold

I received a Bachelor of Arts in Business Administration, with a major in accounting, from Metropolitan University in 2011.

My current position with XES is Sr. Manager, Capital Asset Accounting. I am responsible for:

- Managing the capital investment cost recovery process, which includes the development of detailed actuarial analysis, regulatory filings with the various state and federal rate regulatory commissions, and expert testimony to support recovery levels in rate proceedings;
- Accounting for and reporting on the nuclear plant decommissioning funding process, which includes the development of detailed engineering cost studies combined with a complete financial and economic analysis to develop detailed regulatory filings to establish the ratepayer funding levels necessary to accumulate the total future decommissioning cost requirement;
- Assisting with the plant asset-related ratemaking process, which supports the rate filings for all of the Xcel Energy Operating Companies' retail and wholesale jurisdictions; and
- Overseeing capital asset reporting and information processing necessary to disseminate capital asset information as required by various regulatory authorities (the Federal Energy Regulatory Commission, the Securities and

Exchange Commission, and state commissions) as well as meeting all internal information requirements necessary to sustain efficient and effective business operations.

I first worked for XES as a contract Accountant starting in October 2011, until I took a permanent role in Transmission Finance in April 2012. I held various positions in Transmission Finance until 2017, since which I have been in my current position in Capital Asset Accounting.

Prior to joining XES, I was employed by USA Today as an Accounting Supervisor. Prior to USA Today, I was employed in various industries in a financial capacity.

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

* * * * *

IN THE MATTER OF ADVICE LETTER NO. 1857-ELECTRIC OF PUBLIC SERVICE COMPANY OF COLORADO TO REVISE ITS COLORADO PUC NO. 8-ELECTRIC TARIFF TO REVISE JURISDICTIONAL BASE RATE REVENUES, IMPLEMENT NEW BASE RATES FOR ALL ELECTRIC RATE SCHEDULES, AND MAKE OTHER PROPOSED TARIFF CHANGES EFFECTIVE AUGUST 2, 2021	**) PROCEEDING NO. 21AL-______E**

AFFIDAVIT OF LAURIE J. WOLD
ON BEHALF OF
PUBLIC SERVICE COMPANY OF COLORADO

I, Laurie J. Wold, being duly sworn, state that the Direct Testimony and attachments were prepared by me or under my supervision, control, and direction; that the Direct Testimony and attachments are true and correct to the best of my information, knowledge and belief; and that I would give the same testimony orally and would present the same attachments if asked under oath.

Dated in Minneapolis, Minnesota, this 22 day of June 2021.

Laurie J. Wold
Laurie J. Wold
Senior Manager, Capital Asset Accounting

Subscribed and sworn to before me this 22nd day of June, 2021.

JILL N YEAMAN
Notary Public
Minnesota
My Commission Expires January 31, 2026

Jill N. Yeaman
Notary Public

My Commission expires Jan. 31, 2026