BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

*** * * * ***

IN THE MATTER OF THE APPLICATION	**)**	
OF PUBLIC SERVICE COMPANY OF	**)**	
COLORADO FOR APPROVAL OF ITS	**)**	**PROCEEDING NO. 21A-____E**
2021 ELECTRIC RESOURCE PLAN AND	**)**	
CLEAN ENERGY PLAN	**)**	

DIRECT TESTIMONY AND ATTACHMENTS OF SCOTT A. WATSON

ON

BEHALF OF

PUBLIC SERVICE COMPANY OF COLORADO

March 31, 2021

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

*** * * * ***

IN THE MATTER OF THE APPLICATION	**)**	
OF PUBLIC SERVICE COMPANY OF	**)**	
COLORADO FOR APPROVAL OF ITS	**)**	**PROCEEDING NO. 21A-____E**
2021 ELECTRIC RESOURCE PLAN AND	**)**	
CLEAN ENERGY PLAN	**)**	

DIRECT TESTIMONY AND ATTACHMENTS OF SCOTT A. WATSON

TABLE OF CONTENTS

SECTION **PAGE**

LIST OF ATTACHMENTS

Attachment SAW-1	Moody's Investors Service, "Utility cost recovery through securitization is credit positive," July 18, 2018
Attachment SAW-2	Issuance Advice Letter for Duke Energy Florida
Attachment SAW-3	Craig 2 Asset Recovery Method Analysis
Attachment SAW-4	Hayden 1 Asset Recovery Method Analysis
Attachment SAW-5	Hayden 2 Asset Recovery Method Analysis
Attachment SAW-6	Comanche 3 Asset Recovery Method Analysis
Attachment SAW-7	Pawnee Asset Recovery Method Analysis

GLOSSARY OF ACRONYMS AND DEFINED TERMS

Acronym/Defined Term	Meaning
ADIT	Accumulated Deferred Income Taxes
CACJA	Clean Air Clean Jobs Act
CFO pre-W/C	Cash from Operations Pre-Working Capital Changes
CO-EI Bonds	Colorado Energy Impact Bonds
CO-EI Charge	Colorado Energy Impact Charge
CO-EI Property	Colorado Energy Impact Property
Commission	Colorado Public Utilities Commission
FERC	Federal Energy Regulatory Commission
Moody's	Moody's Investors Service
NBV	Net Book Value
Public Service, or the Company	Public Service Company of Colorado
PVRR	Present Value of Revenue Requirements
SPE	Special Purpose Entity
TCJA	Tax Cuts and Jobs Act
WACC	Weighted Average Costs of Capital
Xcel Energy	Xcel Energy Inc.
XES	Xcel Energy Services Inc.

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

*** * * * ***

IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR APPROVAL OF ITS 2021 ELECTRIC RESOURCE PLAN AND CLEAN ENERGY PLAN	**)** **)** **)** **)** **)**	**PROCEEDING NO. 21A-____E**

DIRECT TESTIMONY AND ATTACHMENTS OF SCOTT A. WATSON

I. INTRODUCTION, QUALIFICATIONS, AND PURPOSE OF TESTIMONY

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Scott A. Watson. My business address is 1800 Larimer Street, Suite 1100, Denver, Colorado 80202.

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

A. I am employed by Xcel Energy Services Inc. ("XES") in a Rotational Position, in the Revenue Requirements department. XES is a wholly-owned subsidiary of Xcel Energy Inc. ("Xcel Energy"), and 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. In my current Rotational Position, I am responsible for special projects related to cost recovery, detailed forecasting, and long-term planning in the Revenue Requirements department. My work involves projects in each of Xcel Energy's operating companies, including Public Service. A description of my qualifications, duties, and responsibilities is set forth after the conclusion of my testimony in my Statement of Qualifications.

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my Direct Testimony is to address three asset recovery methods that the Company has evaluated to recover the remaining net book value ("NBV") plus expected future decommissioning costs of Company-owned coal generation assets that the Company is proposing to retire early or convert from coal to gas. Those three asset recovery methods are: (1) accelerated depreciation; (2) the regulatory asset approach; and (3) securitization. As explained by Company witness Ms. Alice K. Jackson, Public Service proposes to accelerate the retirement of: Hayden Units 1 and 2 from 2030 and 2036 to 2028 and 2027, respectively; Craig Unit 2 from 2039 to 2028; and Comanche Unit 3 from 2070 to 2040.

In Section II of my Direct Testimony, I provide an overview of each of the three asset recovery methods and discuss the costs and benefits associated with each method. I also describe the modeling methodology and assumptions used to evaluate each of the three asset recovery methods. In Section III, I describe

the Company's proposed regulatory asset method to recover the remaining net book value of the proposed accelerated retirement of Hayden 1 and 2 and Craig Unit 2. I provide the remaining NBV and expected future decommissioning costs of each of these units, provide a comparison of the present value of revenue requirements ("PVRR") under each of the three asset recovery methods evaluated, and explain why the Company is proposing the regulatory asset method for these assets.

In Section IV, I describe the Company's proposed asset recovery approach for the accelerated retirement of Comanche 3 and the accelerated retirement of coal-related assets to facilitate the conversion of Pawnee to natural gas and present the NBV and expected future decommissioning costs for each of these assets. Specifically, I discuss the Company's proposal to use securitization for Comanche 3, which would be brought forward in a future financing order application. As part of this discussion, I present the estimated bond size and discuss the proposed bond issuance timing relative to the proposed 2040 Comanche 3 retirement date. Last, I discuss the Company's proposed regulatory asset method for recovering the coal-related portions of the Pawnee plant upon its conversion to gas. I provide a comparison of the PVRR under each of the three asset recovery methods evaluated and explain why the regulatory asset method is preferable to securitization for the proposed fuel conversion of Pawnee.

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

A. Yes, I am sponsoring Attachment SAW-1, which is a true and correct copy of a report by Moody's Investors Service ("Moody's") entitled "Utility cost recovery through securitization is credit positive," dated July 18, 2018. I am also sponsoring Attachment SAW-2, which is an Issuance Advice Letter from the Florida Public Service Commission for Duke Energy Florida, LLC related to securitization. Finally, I am sponsoring Attachments SAW-3 through SAW-7, which are the analyses of the three asset recovery methods for the Company's proposed coal actions. Attachments SAW-3 through SAW-7 were prepared by me or under my direct supervision.

II. OVERVIEW OF ASSET RECOVERY METHODS

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

A. The purpose of this section of my Direct Testimony is to describe the three asset recovery methods the Company has evaluated to recover the remaining NBV plus expected future decommissioning costs of Company-owned coal generation assets that the Company is proposing to retire early or convert to gas. I provide an overview of each recovery method before detailing our preferred approach for each generator and situation. These recovery methods are: (1) accelerated depreciation; (2) creation of a regulatory asset; and (3) securitization.

Q. DO YOU HAVE ANY OPENING COMMENTS BEFORE GOING INTO YOUR ASSESSMENT OF THE RESPECTIVE ASSET RECOVERY METHODS?

A. Yes. This is not the first time that different asset recovery methods have been evaluated before this Commission. Company witness Ms. Jackson provides more detail around the history of the energy transition in Colorado, but the Company has accelerated the retirement of numerous coal plants over the past decade-plus as it has reduced emissions and taken coal offline. In doing so, the Company has analyzed asset recovery methods to balance and smooth rate impacts to customers from the transition.

The regulatory asset approach, where depreciation rates remain consistent with the previous presumed retirement date, and the remaining plant NBV at retirement is captured in a regulatory asset and recovered over a

Commission-approved period following plant retirement, has been approved by the Commission for several early coal retirements. The regulatory asset approach has consistently been used by the Commission for balanced and reasonable asset recovery. Public Service has numerous regulatory assets approved by the Commission for which it receives a return at the Company's Weighted Average Cost of Capital ("WACC") and are amortized over an extended period of time (e.g., seven years) that go beyond the retirement date of the asset, as shown in Table SAW-D-1 below.

Table SAW-D-1: Existing Regulatory Assets Related to Prior Coal Retirements

Generating Unit	Proceeding Number for Early Retirement Date	Proceeding Number for WACC Return on Regulatory Asset	Basis for Early Retirement
Comanche 1 and 2	16A-0396E/ 17A-0797E	17A-0797E	Colorado Energy Plan
Arapahoe 1 and 2	98A-511E	09AL-299E	1998 Air Quality Improvement Rider
Cameo 1 and 2	09AL-299E	09AL-299E	2007 ERP
Arapahoe 3 and 4	10M-245E	09AL-299E	2007 ERP/CACJA
Cherokee 1,2,3	10M-245E	10M-245E	CACJA
Valmont 5	10M-245E	10M-245E	CACJA

Accordingly, Colorado has traditionally followed the regulatory asset approach to provide asset recovery for accelerated retirements. It is a well-established approach for addressing asset recovery in a manner that balances

and smooths rate impacts, and I again recommend its use for the majority of our proposed accelerated retirements in this proceeding.

As part of my analysis, however, I analyzed both the accelerated depreciation and regulatory asset approaches. In addition, since the last time we analyzed asset recovery approaches in detail as part of the Colorado Energy Plan in Proceeding No. 17A-0797E, the General Assembly has provided for a new tool, securitization, that utilities may use in their sole discretion to recover the costs associated with early retired generation assets. I therefore analyze securitization and the circumstances under which it may be an appropriate approach for asset recovery.

A. Accelerated Depreciation

Q. PLEASE GENERALLY DESCRIBE THE ACCELERATED DEPRECIATION COST RECOVERY APPROACH.

A. Accelerated depreciation involves increasing Commission-approved depreciation expense and related customer rates to the level that allows for the asset to be depreciated to zero by the early retirement date.

Q. WHAT ARE THE COSTS AND BENEFITS ASSOCIATED WITH THE ACCELERATED DEPRECIATION APPROACH?

A. The benefits of accelerated depreciation include:

- ***No post-retirement generational impact and lower cumulative revenue requirements***. Because accelerated depreciation results in the asset being fully depreciated by the early retirement date, there are no revenue requirements after retirement and, therefore, no intergenerational equity issues created by customers paying for an asset post-retirement. In addition, the increased depreciation expense results in a shorter

recovery period and a smaller average rate base prior to retirement, which results in lower total revenue requirement collected from customers. As a result of a shortened asset life, excess ADIT (the reduction in deferred tax liabilities resulting from income tax rate reductions, to be credited to customers over the related asset's life), is also fully credited to customers over the shorter period.

- ***Credit ratio impact on Public Service***. The increased depreciation expense and related revenue increase provides Public Service with increased cash flow to finance ongoing capital expenditures, operating expenses, and interest costs. The higher depreciation expense is also a non-cash expense that is added to CFO pre-W/C to debt ratio.

The costs of accelerated depreciation include:

- ***Higher initial annual revenue requirements.*** The higher initial revenue requirement is due to the increased revenue related to the higher depreciation expense, which results in increased cost impact to customers. The alternative methods do not require this initial revenue requirement increase.

B. <u>Regulatory Asset</u>

Q. PLEASE GENERALLY DESCRIBE THE REGULATORY ASSET COST RECOVERY APPROACH.

A. As discussed earlier, when the regulatory asset approach is utilized, depreciation rates and resulting amounts provided for in customer rates remain consistent with the plant asset's previous presumed retirement date, and the remaining NBV at the actual retirement date is captured in a regulatory asset. This regulatory asset then amortizes to zero over a Commission-approved period after the retirement date.

Q. WHAT ARE THE COSTS AND BENEFITS ASSOCIATED WITH THE REGULATORY ASSET APPROACH?

A. The benefits of the regulatory asset recovery method include:

- ***Credit ratio impact on Public Service***. Although the cash flow is not as favorable to financial metrics as the accelerated depreciation method, the regulatory asset method avoids the incremental debt that Moody's attributes to securitization (addressed in more detail below).

- ***Lower initial revenue requirements compared to accelerated depreciation*.** The regulatory asset method avoids higher annual depreciation expense and related impacts to customer bills in the initial years.

The costs of regulatory asset recovery include:

- ***Potential for a higher PVRR compared to securitization.*** The higher PVRR is related to the Company earning its WACC on the asset balance compared the low interest cost for a securitization.

- ***Post retirement generational impact.*** After retirement, the remaining regulatory asset is amortized over a Commission-approved period, which results in post-retirement revenue requirements and intergenerational equity issues.

C. Securitization

Q. WHAT IS SECURITIZATION?

A. A simple explanation of securitization is that it is a refinancing tool used to issue secured special purpose bonds at a low interest cost, with the proceeds used to recover costs for a specific and eligible purpose. The bond investors, or bondholders, are then compensated by a separate charge collected from utility customers that services principal and interest payments on those bonds.

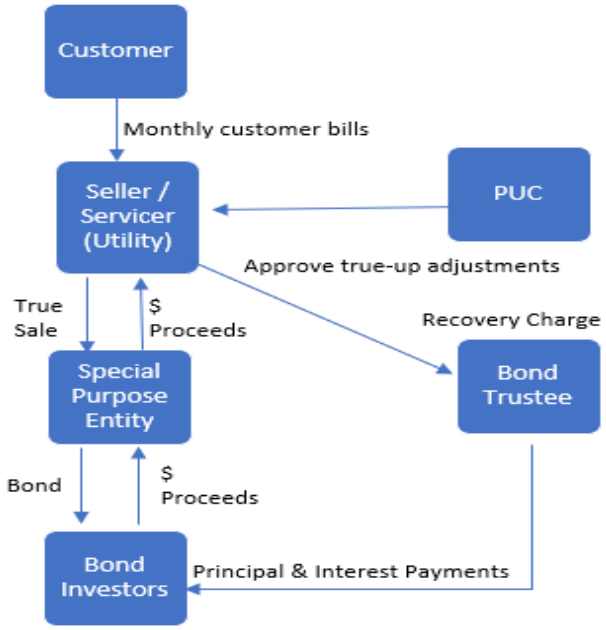
I go into a fair amount of detail in this section of my testimony regarding the mechanics of the voluntary securitization tool because it is complicated and has both costs and benefits. In my view, having a full picture of the tool's complexities is necessary to fully evaluate whether or not it is an appropriate asset recovery tool and under what circumstances its use is appropriate. A

securitization involves the creation of a special purpose entity ("SPE") protected from bankruptcy that issues bonds backed solely by a right to collect a separate and nonbypassable charge from utility customers as provided by enabling legislation and a financing order. The right to collect the nonbypassable charge is transferred to the SPE via a sale from the utility. This nonbypassable charge is typically equal to a levelized payment of the principal and interest, and also includes amounts to cover the costs of the bond issuance, servicing, and other required reporting and administration. The nonbypassable charge also includes a true-up mechanism which adjusts the payments, at least annually, to correct for any over-collections or under-collections of the full bond costs. This ensures that the bond's obligations to bond investors are met regardless of a change in expectations, such as changes in utility customer bad debt experience, commodity usage levels, etc. Because legislation authorizing securitization mandates recovery through a nonbypassable charge based upon a regulatory commission's irrevocable financing order, the bonds are non-recourse[1] and can obtain the highest investment grade rating from the rating agencies.

Figure SAW-D-1 below presents an illustrative securitization.

[1] Non-recourse debt is a type of loan secured by collateral, which is usually property. If the borrower defaults, the issuer can seize the collateral but cannot seek out the borrower for any further repayment, even if the collateral does not cover the full value of the defaulted amount.

Figure SAW-D-1: Securitization Transaction Structure



Q. HOW IS SECURITIZATION APPLIED IN THE CONTEXT OF ELECTRIC UTILITY GENERATION ASSETS?

A. If Public Service utilized a securitization to recover early retired assets, similar to the regulatory asset method, depreciation rates would remain consistent with the plant asset's previous presumed retirement date, and the remaining net book value at the actual retirement date would be captured in a regulatory asset. The utility would then use the bond proceeds to recover the costs captured in the regulatory asset.

Q. WHY IS SECURITIZATION A FINANCIAL TOOL BEING CONSIDERED BY UTILITIES AND REGULATORS?

A. Securitization provides a utility with an upfront cash recovery of the retired asset. For utility customers, securitizations also have a required revenue stream based on the financing costs of highly-rated bonds, which replace the asset's previous revenue requirement based on a utility's weighted average cost of capital, which typically lowers the cost impact on customers. Securitization has been used for various purposes including early generation retirements, storm restoration, stranded assets, and reorganizations. Table SAW-D-2 provides a list of utility securitization transactions from 2010-2019. This table provides examples of other instances where securitization has been utilized by utilities and for what purpose; however, it also reinforces that securitizations are relatively uncommon across the utility industry.

Table SAW-D-2: History of Utility Securitization Transactions 2010-2019 ($ millions)

Date	Issuer	State	Size	Maturity	Purpose
9/18/2019	AEP Texas Restoration Funding LLC	TX	$235	8/1/2029	Storm cost recovery
5/1/2018	PSNH Funding LLC	NH	$636	2/1/2033	Divestiture of generating assets
6/15/2016	Duke Energy Florida Project Finance LLC	FL	$1,294	9/1/2036	Retirement of Crystal River Unit 3
7/14/2015	Entergy New Orleans Storm Recovery LLC	LA	$99	6/1/2024	Storm cost recovery
11/4/2014	Green Energy Market Securitization Bonds	HI	$150	1/1/2029	Finance clean energy infrastructure
7/29/2014	Louisiana Community Dev Authority (EGSL)	LA	$71	8/1/2026	Storm cost recovery
7/29/2014	Louisiana Community Dev Authority (ELL)	LA	$244	8/1/2026	Storm cost recovery
7/14/2014	Consumers 2014 Securitization Funding LLC	MI	$378	5/1/2028	Stranded cost recovery
12/12/2013	Utility Debt Securitization Authority	NY	$482	12/15/2023	Stranded cost recovery
11/6/2013	Appalachian Consumer Rate Relief LLC	WV	$380	8/1/2028	Stranded cost recovery
7/23/2013	Ohio Phase-in-Recovery Funding LLC	OH	$267	7/1/2019	Stranded cost recovery
6/12/2013	FirstEnergy Ohio PIRB Special Purpose Trust	OH	$445	1/15/2034	Stranded cost recovery
3/8/2012	AEP Texas Central Transition Funding III LLC	TX	$800	12/1/2024	Cost recovery for deregulation
1/11/2012	CenterPoint Energy Trans Bond Co IV LLC	TX	$1,695	10/15/2024	Cost recovery for deregulation
9/15/2011	Entergy Louisiana Investment Recovery LLC	LA	$207	6/1/2021	Stranded cost recovery
8/11/2010	Entergy Arkansas Restoration Funding LLC	AR	$124	5/1/2020	Storm cost recovery
7/22/2010	Louisiana Community Dev Authority (ELL)	LA	$469	8/1/2022	Storm cost recovery
7/22/2010	Louisiana Community Dev Authority (EGSL)	LA	$244	8/1/2022	Storm cost recovery

Q. HAS THE GENERAL ASSEMBLY ENABLED THE POTENTIAL USE OF THE SECURITIZATION FINANCING TOOL FOR UTILITIES PROPOSING TO RETIRE GENERATION ASSETS?

A. Yes. The Colorado Energy Impact Bond Act was included in Senate Bill 19-236, which was passed by the General Assembly and signed into law in May 2019. It authorizes an investor-owned utility, in its sole discretion, to apply to the Commission for a financing order to issue Colorado Energy Impact Bonds ("CO-

EI Bonds") that are no greater than 32 years in maturity. The application, if approved, would provide the ability to collect Colorado Energy Impact Charges ("CO-EI Charge") and create Colorado Energy Impact Property ("CO-EI Property") related to a Commission-approved retirement of an electric generating facility in Colorado. The CO-EI Charge represents an amount authorized by the Commission to provide a source of revenue solely for recovery of the CO-EI Bond costs. CO EI-Property represents the rights and interests of an electric utility under a financing order for the right to impose, bill, collect and receive the CO-EI Charges and to obtain periodic adjustments to such CO-EI Charges as provided in the financing order. The legislation states that an approved financing order is irrevocable, and the Commission may not reduce, impair, postpone, or terminate CO-EI Charges approved in a financing order nor impair CO-EI Property. The legislation also states that the Commission shall not consider the CO-EI Bonds to be debt of the electric utility other than for tax purposes nor consider the CO-EI Charges to be revenue of the electric utility.

The Commission may issue a financing order if it finds that the issuance of CO-EI Bonds and the imposition and collection of CO-EI Charges will provide substantial, tangible, and quantifiable net present value savings or other benefits to customers that are greater than the benefits that would have been achieved absent the issuance of CO-EI Bonds.

Q. HOW WOULD SECURITIZATION AFFECT WHOLESALE CUSTOMERS?

A. The Company's Federal Energy Regulatory Commission ("FERC")-regulated wholesale customers would not participate in the financing order. The Company's retail customers would incur one hundred percent of the nonbypassable charge. Upon the Commission approving a financing order, the Company would then seek to recover costs from wholesale customers through a FERC filing to adjust our FERC production formula rates. Any revenue related to the securitized asset that the Company collects from FERC-regulated wholesale customers would be credited to customers in the cost of service during rate cases.

Q. WHAT ARE THE BENEFITS ASSOCIATED WITH SECURITIZATION?

A. The benefits of securitization would generally include:

- ***Lower initial annual revenue requirements and potentially a lower present value of revenue requirements compared to alternatives.*** Once an asset is approved to retire early, recovery of the remaining NBV using highly-rated bonds will result in a lower revenue requirement in the initial years and potentially a lower present value of revenue requirements compared to alternatives. This is due to the revenue requirement, or CO EI-Charge, matching the principal, interest, and other administrative costs of the bonds. The bond interest rate is lower than the utility's WACC, which is the rate used for the revenue requirement in the alternative methods.

- ***Opportunity for capital investment.*** In a securitized asset retirement, the remaining NBV plus expected future decommissioning costs are recovered up front via the bond proceeds. The utility can then identify new investment opportunities in clean and reliable assets. As explained by Company witness Ms. Brooke A. Trammell, the ability to do so is an important consideration in ensuring that the use of securitization does not financially harm the utility and its customers.

Q. WHAT ARE THE COSTS ASSOCIATED WITH SECURITIZATION?

A. The costs of securitization include:

- ***Post retirement generational impact.*** After retirement, the securitized amount is recovered from customers over a period of time equal to the term of the bonds, which results in intergenerational equity issues. The securitization can also have high nominal costs, illustrated in more detail in my analysis below, that can exacerbate these intergenerational equity issues even more.

- ***Credit ratio impact on Public Service and related incremental cost***. As demonstrated in the Moody's report provided as Attachment SAW-1, securitized debt is viewed as on-credit debt. It goes on to say, "[d]epending on the size of the securitization debt as a proportion of total debt, the impact on a utility's financial metrics can vary. If the securitization is a significant component of total debt then a utility's ratio of cash from operations pre-working capital changes ("CFO pre-W/C") to debt could be severely negatively affected." Moody's also describes how the securitization is credit positive in later years, "[s]ince securitization debt amortizes mortgage-style, including it makes financial ratios look worse in early years when most of the revenue collected goes to pay interest, and better in later years, when most of the revenue collected goes to pay principal." As discussed by Ms. Trammell, it is important that the Company continue in sound financial condition, especially with commitments to meet the State of Colorado's clean energy targets. In order to offset a negative impact to CFO pre-W/C to debt, the Company could infuse additional equity and use the proceeds to reduce debt to maintain its target ratio. If so, the Company's regulated equity ratio would increase and would translate to higher revenue requirements for all other electric utility assets.

- ***Tax Impacts.*** When a retired plant has a remaining accumulated deferred income tax ("ADIT") liability balance, a securitization requires a cash outlay for the removal of that liability. For ratemaking, the liability reflects ADIT returned to customers through a reduction to rate base. Therefore, the cash proceeds from the securitized bond issuance must first be used for this tax obligation before the remaining cash amount can be redeployed. A securitization also affects the crediting of excess ADIT. When the retired plant has an excess ADIT balance that was created from the Tax Cuts and Jobs Act ("TCJA"), a securitization would require that balance to be credited to customers over the life of the securitized bond. For example, if the bond has a maturity of 20 years, then the excess ADIT balance would credit to customers over the 20 years after the plant

retirement. This crediting period of 20 years is longer than the alternative methods, which are likely no longer than 10 years after retirement.

- ***Up-front bond issuance fees and ongoing annual financing costs are higher than traditional utility debt.*** The up-front issuance costs for securitization bonds include fixed costs. While the costs can vary significantly, an estimate is $5 million generally for legal fees, advisory fees, trustee fees, and accounting fees. In addition, the rating agency fees and underwriter's fees are estimated at about 75 basis points, or 0.75 percent, of the bond amount. The ongoing fees are estimated at $700,000 annually and mostly include servicing fees, accounting fees, administrative fees, and rating agency surveillance fees. I want to emphasize that these up-front and ongoing costs are rough estimates and will ultimately depend on the timing and nature of the securitization if one is ultimately pursued by the Company and approved by the Commission. These estimates—while rough—do illustrate the high fixed up-front and ongoing costs, and reinforces that securitization is an expensive tool, particularly for smaller issuance sizes.

D. Modeling Methodology and Assumptions

Q. WHAT MODELING METHODOLOGY WAS USED FOR THE ANALYSIS OF THE THREE RECOVERY METHODS?

A. The modeling methodology is a comparison of the capital-related revenue requirements of the retired assets. Capital-related revenue requirements include the return of and return on the net rate base of the asset, grossed-up for income taxes. I have also included estimates for the cost of associated decommissioning in my analysis based on current cost of removal rate levels in the existing regulatory depreciation expense. As discussed by Ms. Trammell, decommissioning costs would be reviewed and approved by the Commission in separate, follow-on applications after the Commission determines the early retirement dates for coal units. Any other asset related costs, such as variable Operations and Maintenance, insurance, and property taxes, were not included

in this modeling analysis. Company witness Mr. James F. Hill includes those other costs in his Direct Testimony, which are used to evaluate the results of early retirement and other portfolio analysis. Additionally, I have not included the costs of associated worker or community assistance to impacted communities in my analysis. These costs are included in the generic modeling but are not final costs at this time, as explained by Company witnesses Ms. Holly L. Stanton and Ms. Hollie J. Velasquez Horvath. Therefore, not including these costs compares the various recovery methods based on the capital-related revenue requirements. If these costs were included, it would increase the size of the securitization.

The estimated revenue requirement for the securitization approach equates to the levelized principal and interest payments on the bond plus the ongoing annual costs of administration, and it is based on current data that can change over time. The bond size is equivalent to the NBV at the year of the bond issuance, plus the expected future decommissioning costs, plus the bond issuance costs.

Q. WHAT ASSUMPTIONS WERE USED FOR MODELING SECURITIZATION AS PART OF THIS PHASE I FILING?

A. The key assumptions for securitization include the bond size, the bond maturity, the interest or coupon rate of the bond, the issuance costs, and the ongoing administrative costs. The bond size depends on the asset's NBV in the issuance year. Although I show a securitization option for every plant retirement scenario,

securitization is often used with larger cost recovery considerations. I do not include any amounts for worker and community assistance in the bond amount, although the inclusion of such amounts is permissible under the legislation and may be a part of any future financing order application if it can complement our broader workforce transition and community assistance efforts in our host communities. Bond sizes of at least $300 million are index eligible, which are considered more liquid and often have higher investor demand and better pricing leverage, i.e., lower coupon rates. In addition, the fixed portion of the up-front issuance costs make smaller sized bonds more expensive.

Q. WHAT BOND MATURITY WAS ASSUMED FOR SECURITIZATION?

A. The bond maturity was modeled at 20 years. This is the maximum maturity that has been utilized in United States utility securitization transactions from 2010-2019 as outlined in Table SAW-D-2. The 20-year assumption is lower than the 32-year maximum allowed in the Colorado Energy Impact Bond Act due to the consistent market utilization of 20 years or less. A 20-year maturity has lower monthly payments for customers compared to shorter maturities, which could lead to a lower PVRR depending on the differences in the coupon rates between longer and shorter maturities. Most of the larger-sized securitizations are issued in tranches to appeal to various investors, with each tranche assigned a different maturity, coupon rate, and amortization schedule. These tranches were not accounted for in our modeling because the monthly customer charges typically match the payment schedule for the longest maturity.

Q. WHAT INTEREST RATE WAS ASSUMED FOR SECURITIZATION?

A. The bond interest rate, also known as the coupon rate, was modeled at 3.0 percent. This can vary based on market conditions but is within the range of 2.23 percent and 3.66 percent for weighted average coupon rates of recent utility securitizations provided by financial commentators. The assumed coupon rate also corresponds with the 20-year bond maturity assumption, since the coupon rate typically increases as the maturity increases. The ultimate interest pricing depends on the market characteristics at the time of issuance, which can vary significantly at the time of issuance depending on overall economic conditions. The bond issuance costs and the ongoing fees were modeled as mentioned earlier in my Direct Testimony with issuance costs at $5 million fixed plus 0.75 percent of the bond amount and ongoing fees of $700,000 annually. For reference, the Issuance Advice Letter for Duke Energy Florida's $1.294 billion securitization, provided as Attachment SAW-2, estimates up-front bond issuance costs of $15.953 million and estimates annual ongoing financing costs of $1.108 million.

Q. WHAT MODELING ASSUMPTIONS WERE USED FOR MODELING THE REGULATORY ASSET METHOD AS PART OF THIS PHASE I FILING?

A. The key assumption for the regulatory asset method is the amortization period. The amortization period is modeled as the ten years after plant retirement for all assumed regulatory assets. While this amortization period is used for consistency, the Company is open to modifying the amortization period where it

can potentially provide for savings to customers, e.g., with plants that are only having their retirement accelerated by a few years.

Q. WHAT MODELING ASSUMPTIONS WERE USED FOR THE MODELING OF THE ACCELERATED DEPRECIATION METHOD AS PART OF THIS PHASE I FILING?

A. The key assumption for the accelerated depreciation method is the commencement date for the new, Commission-approved, regulatory depreciation expense. The modeling assumes new accelerated depreciation rates would be effective January 1, 2024.

III. CRAIG 2 AND HAYDEN 1 & 2 ASSET RECOVERY

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

A. The purpose of this section of my Direct Testimony is to describe the Company's proposed asset recovery approach for the early retirement of Craig Unit 2 and Hayden Units 1 and 2.

Q. WHY ARE YOU ADDRESSING HAYDEN AND CRAIG TOGETHER?

A. I am addressing these two proposed accelerated retirements together because they have been pre-announced after extensive negotiations with the Company's partners in the respective generating facilities, as discussed by Ms. Jackson. They also have shorter remaining book lives and associated remaining book values, and therefore I found it appropriate to group them together for this analysis.

Q. WHAT ARE THE ESTIMATES OF NBV AND EXPECTED FUTURE DECOMMISSIONING COSTS ON THE EXPECTED RETIREMENT DATES FOR CRAIG AND HAYDEN?

A. Table SAW-D-3 provides the estimates for remaining NBV and expected future decommissioning costs that must be recovered for the planned accelerated retirements.

Table SAW-D-3

($ millions)	Original Retirement Date	Early Retire Date	NBV & Future Decommissioning
Craig Unit 2	2039	2028	$27.4M
Hayden Unit 1	2030	2028	$22.2M
Hayden Unit 2	2036	2027	$55.4M

Q. WHAT IS THE PROPOSED METHOD TO RECOVER THE REMAINING NBV AND EXPECTED FUTURE DECOMMISSIONING COSTS FOR CRAIG AND HAYDEN?

A. The Company proposes a regulatory asset method for Craig Unit 2 and Hayden Units 1 and 2. As shown in Table SAW-D-4 below, these plants have no material differences in PVRR between regulatory asset and accelerated depreciation. The combined revenue requirements of the plants using the regulatory asset method is closely in line with the revenue requirement levels at their original retirement dates. The combined revenue requirements of the plants using the accelerated deprecation method average $20 million higher in 2024-2027 as compared to the regulatory asset method.

Although the NBV amounts are significantly lower than typical securitizations, I also analyzed the securitization method for these plants. The securitization PVRR was higher than the regulatory asset or accelerated depreciation approaches for Hayden Unit 1 and Craig Unit 2. The securitization PVRR was not materially different than the regulatory asset or accelerated

depreciation approaches for Hayden Unit 2. As I mentioned above, the legislation states that securitization should provide substantial net present value savings that are greater than the benefits achieved absent the issuance of the CO-EI Bonds. Due to the lack of substantial benefits, due to the small NBV sizes, and due to the high nominal and intergenerational costs, the Company does not propose securitization for Craig Unit 2 and Hayden Units 1 and 2. Table SAW-D-4 provides a summary of the PVRR and the total nominal revenue requirements starting in 2023.

Table SAW-D-4

PVRR $millions	Regulatory Asset	Accelerated Depreciation	Securitization
Craig Unit 2	$49	$49	$52
Hayden Unit 1	$87	$87	$91
Hayden Unit 2	$95	$95	$94

2023-2048 Total Nominal Revenues $millions	Regulatory Asset	Accelerated Depreciation	Securitization
Craig Unit 2	$65	$51	$87
Hayden Unit 1	$95	$84	$116
Hayden Unit 2	$122	$96	$144

IV. COMANCHE 3 AND PAWNEE ASSET RECOVERY

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

A. The purpose of this section of my Direct Testimony is to describe the Company's proposed asset recovery methodology for the accelerated retirement of Comanche Unit 3 and the retirement of coal-related assets to facilitate the early Pawnee conversion to gas.

Q. WHY ARE YOU ADDRESSING COMANCHE 3 AND THE PAWNEE EARLY FUEL CONVERSION TOGETHER?

A. I am addressing these together because these two actions make up the most financially significant components of the Company's preferred coal actions with regard to the remaining coal fleet. More specifically, and as explained by Ms. Jackson, the Company proposes to accelerate the retirement of Comanche 3 to 2040 from 2070 and convert Pawnee from coal to natural gas in 2027.

Q. WHAT ARE THE ESTIMATES OF NBV AND EXPECTED FUTURE DECOMMISSIONING COSTS ON THE EXPECTED RETIREMENT DATES FOR PAWNEE AND COMANCHE 3?

A. Table SAW-D-5 provides the estimated remaining NBV and estimated future decommissioning costs for the Comanche 3 accelerated retirement and the retired portion of the early Pawnee conversion. These estimates will change based on actual capital expenditure patterns and other plant specific adjustments that could occur. The retired portion of Pawnee is estimated at 37.1 percent of

the plant's remaining NBV at the end of 2027 and represents the asset components that will retire upon conversion to natural gas. The 37.1 percent is estimated based of the retired components of the Pawnee total assets per the Company's Generation Operations department. The Pawnee asset components that will continue upon conversion are not considered for this recovery analysis.

Table SAW-D-5

($millions)	Original Retirement Date	Early Retirement Date	NBV & Future Decommissioning
Pawnee – Retired Portion	2041	2027	$179.1
Comanche Unit 3	2070	2039	$567.4

Q. WHAT IS THE PROPOSED METHOD TO RECOVER THE REMAINING NBV AND EXPECTED FUTURE DECOMMISSIONING COSTS FOR COMANCHE 3?

A. The Company proposes to securitize the remaining NBV and future decommissioning costs associated with its proposal to early retire Comanche 3. As discussed by Ms. Trammell, the details of the securitization authorization would be brought forward as part of a future financing order application if the Commission agrees that: (1) Comanche 3 should retire in 2040; and (2) the Company should bring forward a future financing order application to effectuate the securitization. Ms. Trammell also discusses the timing of the financing application.

Under the Company's preferred approach to securitization, the proposed bond issuance date would match the retirement date at end of year 2039, which

equates to an estimated bond size of $577 million including NBV, expected future decommissioning costs, and up-front issuance costs. The $577 million bond size exceeds the index eligibility threshold established by the U.S. Investment Grade Corporate Bond Index[2] and it also compares favorably to the $323 million median bond size of the 2010-2019 utility securitization transactions outlined in Table SAW-D-2. As I discussed previously, I have not included the cost of worker or community assistance in my analysis. Company witness Ms. Velasquez Horvath discusses the iterative community assistance plan for the Pueblo area in her Direct Testimony. Therefore, it is premature to include any estimate of that amount at this time; however, we are not foreclosing that a dollar amount could be included in the financing order application.

Q. HOW DOES A COMANCHE 3 SECURITIZATION COMPARE TO OTHER POTENTIAL COST RECOVERY OPTIONS?

A. The estimated PVRR for securitization is $908 million compared to $941 million for accelerated depreciation and $947 million for the regulatory asset method based on current estimates and modeling assumptions, which may change. The cumulative nominal revenue requirements starting in 2023 total $1.88 billion for securitization compared to $1.36 billion for accelerated depreciation and $1.85 billion for the regulatory asset method. Although accelerated depreciation has significantly lower total revenue requirements compared to alternatives, the annual revenue requirements are $30 million more than alternatives in the initial

2 *See* https://www.theice.com/publicdocs/data/ICECIG-factsheet.pdf.

years with an average of $15 million more than alternatives for all years prior to retirement. Table SAW-D-6 provides a summary of the PVRR and the total nominal revenue requirements starting in 2023.

Table SAW-D-6

Comanche 3 $millions	Regulatory Asset	Accelerated Depreciation	Securitization
PVRR	$947	$941	$908
2023-2059 Total Nominal Revenue Requirements	$1,846	$1,364	$1,882

Q. WHAT IS THE PROPOSED METHOD TO RECOVER THE RETIRED PORTION OF PAWNEE UPON CONVERSION TO GAS GENERATION?

A. The Company proposes the regulatory asset method for Pawnee. Although the estimated NBV of $179 million is lower than the $323 million median bond size of the 2010-2019 transactions and lower than the $300 million index-eligibility threshold, I also analyzed the securitization method. The estimated PVRR for the regulatory asset method is $244 million compared to $242 million for accelerated depreciation and $222 million for securitization. Although securitization has a lower estimated PVRR, the post-retirement revenue requirements total $264 million compared to $238 million of post-retirement revenue requirements for the regulatory asset approach. The revenue requirements for securitization extend six years beyond the retirement date of the

continuing gas generation plant. The regulatory asset revenue requirements, on the other hand, end four years prior to the retirement date of the continuing gas generation plant. Table SAW-D-7 provides a summary of the PVRR and the total nominal revenue requirements starting in 2023 for Pawnee.

Table SAW-D-7

Pawnee – Retired $millions	Regulatory Asset	Accelerated Depreciation	Securitization
PVRR	$244	$242	$222
2023-2059 Total Nominal Revenue Requirements	$343	$261	$367

Q. HAS THE COMMISSION PREVIOUSLY APPROVED USE OF A REGULATORY ASSET APPROACH IN THE CONTEXT OF A COAL-TO-GAS CONVERSION?

A. Yes. The Commission previously approved regulatory asset recovery for the retired portion of the Cherokee 4 conversion to gas generation in the Company's Clean Air Clean Jobs Act ("CACJA") plan. Moreover, the regulatory asset approach is the most commonly used approach by this Commission, and it is a good fit here for the proposed action at Pawnee.

Q. ARE THERE ANY OTHER CONSIDERATIONS YOU WOULD BRING TO THE COMMISSION'S ATTENTION IN SUPPORT OF WHY A REGULATORY ASSET APPROACH IS PREFERABLE TO SECURITIZATION FOR THE PROPOSED PAWNEE CONVERSION?

A. Yes. First, the retired portion of Pawnee is estimated to have $13 million of excess ADIT at the end of 2027, which equates to $17 million of revenue credits available to credit over the faster ten-year regulatory asset period (grossed up for income taxes). This excess ADIT impact is not yet included in the PVRR or revenue requirement calculations. In addition, I analyzed the Moody's credit ratio impact of a potential Pawnee 2027 securitization. The analysis estimates an average unfavorable 0.20 percent decrease to the CFO pre-W/C to debt ratio from 2027-2040 with an average unfavorable 0.33 percent impact in the first five years. This impact would reduce the Company's financial condition during these key clean energy target years and would add to the impact of a Comanche 3 securitization in 2039.

V. CONCLUSION

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS

A. I recommend approval of the regulatory asset recovery method for Craig Unit 2, Hayden 1, Hayden 2, and the retired portion of Pawnee. For Comanche 3, the Company requests approval for early retirement of Comanche 3 in 2040, and agreement from the Commission that the Company should bring forward a future financing order application to effectuate the securitization.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

Statement of Qualifications

Scott A. Watson

Scott A. Watson is currently in a Rotational Position for Xcel Energy Services Inc. working on special projects related to cost recovery, detailed forecasting, and long-term planning in the Revenue Requirements department. Mr. Watson has worked in the finance area of Xcel Energy for twenty years including ten years in a leadership position. He most recently held the position of Director of Operating Company Finance responsible for forecasting the full financial statements of Xcel Energy, including the holding company, the operating companies, and the subsidiaries.

Mr. Watson previously served as Director of Transmission Finance responsible for forecasting and analyzing over $1 billion of annual capital expenditures and over $100 million of annual operating and maintenance expenses for the Transmission business area and creating budget documentation required for rate case support. Mr. Watson has held additional positions at Xcel Energy within the Treasury and Risk departments.

Mr. Watson holds a Master of Business Administration degree and a Bachelor of Business Administration degree, both from Western Michigan University.