BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF PUBLIC SERVICE COMPANY OF NEW MEXICO'S CONSOLIDATED APPLICATION FOR APPROVALS FOR THE ABANDONMENT, FINANCING, AND RESOURCE REPLACEMENT FOR SAN JUAN GENERATING STATION PURSUANT TO THE ENERGY TRANSITION ACT	)))))))	**19-_____-UT**

DIRECT TESTIMONY

OF

HENRY E. MONROY

July 1, 2019

NMPRC CASE NO. 19____-UT
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HENRY E. MONROY

WITNESS FOR
PUBLIC SERVICE COMPANY OF NEW MEXICO

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AFFIDAVIT

DIRECT TESTIMONY
OF HENRY E. MONROY
NMPRC CASE NO. 19-_____-UT

I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.

A. My name is Henry E. Monroy. I am the Controller, Utility Operations for PNM Resources, Inc. ("PNMR") and am employed by PNMR Services Company ("PNMR Services"). My testimony is submitted on behalf of Public Service Company of New Mexico ("PNM"), a public utility subsidiary of PNMR. My address is 414 Silver Avenue, SW, Albuquerque, New Mexico 87102.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My testimony provides customer impacts, revenue requirements and ratemaking proposals for the abandonment, replacement and securitized financing for the San Juan coal plant. I conclude there will be savings for customers if the San Juan coal plant is retired. I detail the energy transition costs, including abandonment costs for the San Juan coal plant, to be paid from securitized financing. I calculate the severance and job training expenses for the impacted PNM, PNMR and coal mine employees, which are made possible through securitized financing. With authorization of a regulatory asset, severance and training will be available prior to plant shutdown and in advance of issuing the securitized bonds. PNM also proposes using a regulatory asset to provide state agencies with some of the Energy Transition Act Section 16 funds in advance, so that they can begin programs for impacted tribal and local communities before the plant shutdown.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL QUALIFICATIONS.

A. My educational background and relevant employment experience are summarized in PNM Exhibit HEM-1 attached to my testimony. PNM Exhibit HEM-1 also includes a list of cases before the New Mexico Public Regulation Commission ("NMPRC" or the "Commission") where I have provided testimony.

Q. HOW IS YOUR TESTIMONY ORGANIZED?

A. Part II of my testimony shows the effect of approving the Consolidated Application on PNM's retail revenue requirement. This includes PNM's estimated 2023 fuel and non-fuel revenue requirement that reflect the customer impacts of the shutdown of the coal plant, recovery of the costs of abandonment, replacement resources under PNM's recommended Scenario 1, and impact to fuel costs as the result of the new resource mix.

Part III of my testimony details the energy transition costs pursuant to the Energy Transition Act that are proposed to be securitized. These securitized costs include: upfront financing costs; abandonment costs, including undepreciated investment in the San Juan coal plant coal mine reclamation and plant decommissioning costs not previously collected from customer's, severance and job training for PNM, PNMR and coal mine employees affected by the closure of the coal plant; other costs required to comply with changes in law; and required payments to the Energy Transition Indian Affairs Fund ("Indian Affairs Fund"),

the Energy Transition Economic Development Assistance Fund ("Economic Development Fund") and the Energy Transition Displaced Worker Assistance Fund ("Worker Assistance Fund") pursuant to Section 16 of the Energy Transition Act.

Part IV of my testimony supports the accounting entries required for the proposed securitization financing under the Energy Transition Act.

Part V of my testimony addresses the ratemaking process required to reconcile and collect or refund any difference between the energy transition costs financed by the energy transition bonds and the actual final energy transition costs. I also propose a ratemaking method to account for the reduction of PNM's cost of service related to the amount of undepreciated investments recovered by the energy transition charge at the time that charge becomes effective.

Part VI of my testimony shows how the cost of service recovered from ratepayers is affected by the one-time and ongoing costs related to the abandonment of the San Juan coal plant that are not included in the Company's requested securitization.

Part VII of my testimony summarizes the recognition of certain costs and benefits through regulatory assets and liabilities that are included in the determination of revenue requirements and requested for approval from the Commission.

Parts VIII and IX of my testimony present revenue requirements specific to the continued operation of the San Juan coal plant compared with the proposed replacement power resources reflected in PNM's recommended Scenario 1. This comparison demonstrates a substantial quantifiable net benefit to customers resulting from approval of PNM's Consolidated Application.

Part X of my testimony provides comparable revenue requirements for PNM's Scenarios 2, 3 and 4, as described by PNM Witness Fallgren.

II. CUSTOMER IMPACTS OF CONSOLIDATED APPLICATION

Q. HAS PNM CALCULATED THE IMPACT TO 2023 REVENUE REQUIREMENTS FOR CUSTOMERS AS THE RESULT OF THE EARLY RETIREMENT OF THE SAN JUAN COAL PLANT?

A. Yes. PNM has estimated that the impacts to the 2023 revenue requirement is a benefit to customers of $83 million as the result of the abandonment of the San Juan coal plant. PNM Table HEM–1 provides a summary of the impacts to the 2023 revenue requirements. PNM Witness Settlage provides customer bill impacts based on the impacts to the 2023 revenue requirements.

	PNM Table HEM-1 Summary of Impacts to 2023 Revenue Requirements *$ in millions*	
1	(94)	Savings from San Juan coal plant - Continue Operations
2	23	Energy Transition Charge - Securitization
3	(11)	Other Costs Not Included in Energy Transition Charge
4	47	New Owned Resources - Non-Fuel Included in Scenario 1
5	(49)	Fuel Savings Net, Due to Change in Resources
6	(83)	Total

Q. HAS PNM IDENTIFIED CUSTOMER BENEFITS FROM FINANCING THE ABANDONMENT OF THE SAN JUAN COAL PLANT USING SECURITIZATION COMPARED TO TRADITIONAL RATE RECOVERY?

A. Yes. Financing the abandonment of the San Juan coal plant using securitization saves customers an estimated additional $22 million in 2023. These savings are generated by achieving a favorable credit rating under securitization to finance the undepreciated investment, which is lower than PNM's traditional weighted average cost of capital. Without securitization, the savings to customers of $83 million would have been lowered by $22 million and would only have been $61 million. Please see PNM Exhibit HEM–2.

Q. HOW DID PNM ESTIMATE THE SAVINGS FROM CLOSURE OF THE SAN JUAN COAL PLANT?

A. PNM projected the 2023 non-fuel revenue requirements associated with the continued operations of the coal plant. PNM utilized 2023 as this is the first full

year after the proposed abandonment of the coal plant in June 2022. See Section VIII for further discussion of the revenue requirements related to the San Juan coal plant's continued operations.

Q. HAVE CUSTOMERS ALREADY STARTED TO REALIZE SOME OF THE ESTIMATED SAVINGS AS THE RESULT OF PNM'S PROPOSED ABANDONMENT OF THE SAN JUAN COAL PLANT IN 2022?

A. Yes. Since 2015, PNM and the other owners of the coal plant have anticipated the possibility that San Juan Units 1 and 4 could be retired in 2022, when the issue of a possible early retirement was first raised. Accordingly, the owners adjusted the capital spend program and the level of operating costs in anticipation of a possible early retirement. This resulted in significantly lower capital expenditures and operating costs compared to a scenario where the San Juan coal plant continues to operate beyond 2022. PNM reflected those expected cost savings in its cost of service studies that were used to develop the base rates in its last rate case, Case No. 16-00276-UT, resulting in lower rates for customers. As shown in PNM Table HEM-1, the total savings that customers will realize from the early closure of the San Juan coal plant is estimated at $94 million which includes savings that have already been passed on to customers.

Q. PLEASE SUMMARIZE THE REVENUE REQUIREMENTS THAT WILL RESULT FROM THE ABANDONMENT OF THE SAN JUAN COAL PLANT.

A. After the San Juan coal plant is shut down and replaced, PNM will revise its revenue requirement to remove the current San Juan coal plant revenue requirement and begin to recover: 1) the Energy Transition Charge to reflect recovery of the ongoing financing costs associated with the energy transition bonds issued to finance the energy transition costs resulting from the abandonment of the San Juan coal plant (as discussed in Section III of my testimony); 2) items related to the abandonment of the San Juan coal plant that are not recovered through the Energy Transition Charge and are reflected in base rates (as discussed in Section VI of my testimony); and 3) the replacement resources as identified in Scenario 1 (as discussed in Section IX of my testimony).

Q. HAS PNM ACCOUNTED FOR THE CHANGES IN FUEL COSTS AS THE RESULT OF ELIMINATING THE SAN JUAN COAL PLANT COAL SUPPLY COSTS AND USING THE PROPOSED RESOURCES INCLUDED IN SCENARIO 1?

A. Yes. PNM has estimated the customer impact as it relates to fuel costs as the result of the abandonment of the coal plant and the addition of the resources included in Scenario 1. This calculation compares the estimated fuel costs in 2023 under the San Juan coal plant continued operations portfolio to the fuel costs in 2023 based on the Scenario 1 portfolio, including the costs associated with Purchase Power Agreements ("PPAs"). For further discussion on the development of fuel costs for each scenario, please see the direct testimony of PNM Witness Wintermantel.

III. IDENTIFICATION OF ENERGY TRANSITION COSTS TO BE FINANCED THROUGH THE ISSUANCE OF SECURITIZED BONDS

Q. PLEASE EXPLAIN WHAT YOU WILL BE COVERING IN THIS SECTION.

A. In this section of my testimony, I discuss the development of the energy transition costs, which are used as an input for the Energy Transition Charge to be collected from customers. The development of the rate design and collection of the Energy Transition Charge is discussed by PNM Witness Settlage.

Q. PLEASE SUMMARIZE THE ENERGY TRANSITION COSTS THAT ARE TO BE FINANCED THROUGH THE SECURITIZED BOND ISSUANCE.

A. The estimated energy transition costs that PNM projects to finance through the securitized bond issuance include: (1) upfront financing costs, which include financing costs as described by PNM Witness Eden, and costs in obtaining an order approving abandonment of the San Juan coal plant; (2) abandonment costs, which include (a) the undepreciated investment of San Juan Units 1 and 4 at June 30, 2022 (excluding balanced draft technology for San Juan Units 1 and 4, and any investments associated with 132 MW, and 65 MW of San Juan Unit 4), (b) coal mine reclamation and plant decommissioning costs that have yet to be collected from customers, and (c) job training and severance expenses for PNM, PNMR Services, and San Juan Coal Company ("SJCC") coal mine employees affected by the closure of San Juan coal plant; (3) other costs, if any, required to comply with changes in law as provided in Section 2(H)(3) of the Energy

Transition Act; and (4) required payments to the Indian Affairs Fund, the Economic Development Fund and the Workers Assistance Fund, which are described by PNM Witnesses Darnell and Eden. PNM Table HEM-2 provides a summary of these energy transition costs that will be financed with the energy transition bonds.

PNM Table HEM-2
Summary of Upfront Energy Transition Costs to be Financed

		$ in millions
1	8.7	Upfront Financing Costs - Section 2(H)(1) of the ETA
2	283.0	Undepreciated Investment in San Juan coal plant Units 1 and 4 - Section 2(H)(2)(c)(d)
3	9.4	Coal Mine Reclamation Costs - Section 2(H)(2)(a)
4	19.2	Plant Decommissioning Costs - Section 2(H)(2)(a)
5	11.1	Job Training and Severance Costs for PNMR and PNM Employees - Section 2(H)(2)(b)
6	8.9	Job Training and Severance Costs for Westmoreland Coal Mine Employees - Section 2(H)(2)(b)
7	-	Other Costs Required to Comply with Law Changes After 1/1/19 - Section 2(H)(3)
8	1.8	Payments Made to Indian Affairs Fund - Section 2(H)(4)
9	5.9	Payments Made to Economic Development Fund - Section 2(H)(4)
10	12.1	Payments Made to Workers Assistance Fund - Section 2(H)(4)
11	360.1	Total Upfront Energy Transition Costs

A. Upfront Financing Costs

Q. PLEASE SUMMARIZE THE UPFRONT FINANCING COSTS THAT ARE INCLUDED IN THE ENERGY TRANSITION COSTS.

A. The estimated upfront financing costs that will be financed through the securitized bond issuance are described in the testimony of PNM Witness Eden and are set forth in PNM Exhibit EAE-2. In addition to the financing costs discussed by PNM Witness Eden, PNM has also estimated the costs necessary to obtain an order approving the abandonment of the San Juan coal plant. See PNM Table

HEM-3 below for detail of financing costs included in the upfront energy transition costs.

PNM Table HEM-3 Summary of Upfront Financing Costs *$ in millions*		
1	6.0	Upfront Financing Costs
2	2.7	Estimated Costs to Obtain Abandonment Order - Section 2(K)(4)
3	8.7	Total Upfront Financing Costs Per PNM Exhibit EAE-2

Q. ARE THE COSTS TO OBTAIN AN ORDER APPROVING THE ABANDONMENT OF THE SAN JUAN COAL PLANT CONSIDERED "FINANCING COSTS" ALLOWED BY THE ETA?

A. Yes. PNM included these costs pursuant to the definition of financing costs within the Energy Transition Act. Section 2(K)(4) of the Energy Transition Act states: "any costs, fees and expenses related to issuing, supporting, repaying, servicing, and refunding energy transition bonds, the application for a financing order, including related state board of finance expenses, or obtaining an order approving abandonment of a qualifying generating facility" are properly included as part of the recoverable financing costs.

Q. PLEASE SUMMARIZE THE COSTS ESTIMATED IN OBTAINING AN ORDER APPROVING ABANDONMENT OF THE SAN JUAN COAL PLANT.

A. PNM estimates $2.7 million will be incurred to obtain an order approving abandonment of the San Juan coal plant. These costs include external legal counsel, outside consultants who are providing testimony in this proceeding, and administrative costs for witness training, postage, publications, and other costs incurred associated with this proceeding. These costs are summarized in PNM Table HEM-4 below. Please see PNM Exhibit HEM-3 for details of these costs.

PNM Table HEM-4
Estimated Costs to Obtain Abandonment Order

	$ in millions	
1	0.5	Expert Outside Consultants, Witness Testimony
2	1.7	External Legal Counsel
3	0.5	Other Administrative Costs
4	2.7	Total

Q. ARE THERE OTHER POTENTIAL COSTS RELATED TO PNM OBTAINING AN ABANDONMENT ORDER THAT COULD INCREASE THE ESTIMATE IN PNM TABLE HEM-4?

A. Yes. For example, if the Commission requires PNM to purchase software and other licenses used in its resource planning modeling for Staff and intervenors, it will add to PNM's costs in this proceeding. PNM's current estimate for the potential cost of such licensing is approximately $1.1 million which is not included in PNM Table HEM-4 above. Other requirements imposed could also raise the cost of obtaining the abandonment order which would in turn be included for recovery.

Q. HOW WILL PNM RECORD THE UPFRONT FINANCING COSTS?

A. PNM is requesting to establish a regulatory asset for the upfront financing costs incurred ahead of the proceeds received from the energy transition bonds. PNM is not requesting carrying charges on this regulatory asset, as these costs reflect costs incurred to achieve the securitization and abandonment orders, similar to rate case expense that deferred without carrying charges

B. Undepreciated Investment

Q. HOW DID PNM DETERMINE THE ESTIMATED UNDEPRECIATED INVESTMENT THAT IS INCLUDED IN ENERGY TRANSITION COSTS?

A. PNM started with the net book value of San Juan Units 1 and 4, including common plant as of December 31, 2018[1]. PNM excluded the values associated with 65 MW of San Juan Unit 4 as these investments have been excluded from PNM's Retail jurisdiction pursuant to the Modified Stipulation in NMPRC Case No. 13-00390-UT. PNM also excluded the net book value associated with the San Juan Switchyard. PNM does not anticipate retiring the San Juan Switchyard upon the retirement of the coal plant as it will still be used and useful in providing electric service to customers. Finally, PNM excluded any amounts associated

[1] For GAAP financial reporting purposes, as of 12/31/2018, PNM was required to immediately record a regulatory disallowance resulting from the Modified Stipulation in Case No. 13-00390-UT for the projected undepreciated investment at 6/30/2022 associated with 132 MW of SJGS Unit 4. For regulatory accounting purposes, PNM has ignored this disallowance because PNM will continue to include this asset and related operating expenses in rates until the plant is expected to retire June of 2022.

with the investment of Balanced Draft Technology as the result of the Supreme Court ruling in NMPRC Case No. 15-00261-UT.

PNM forecasted the capital expenditures from January 1, 2019, through June 30, 2022, which increased the net book value. PNM also projected the increase in accumulated depreciation to reflect the ongoing depreciation of the existing assets through June 30, 2022. PNM excluded the June 30, 2022 Asset Retirement Cost ("ARC") asset balance included in net book value, as these dollars are to be collected as plant decommissioning costs that I discuss later in my testimony. Finally, PNM removed the net book value associated with 132 MW of San Juan Unit 4 pursuant to the Modified Stipulation in Case No. 13-00390-UT. See PNM Table HEM–5 below for the reconciliation of the net book value as of December 31, 2018 projected through June 30, 2022.

PNM Table HEM-5
Reconciliation of San Juan Coal Plant Net Book Value
$ in millions

1	348	Balance at 12/31/18 (Excluding 65MW, Switchyard and Balanced Draft Technology)
2	8	Capital Clearings - January 1, 2019 - June 30, 2022
3	(59)	Increase to Accumulated Depreciation Reserve - January 1, 2019 - June 30, 2022
4	297	Projected Balance at 6/30/22
5	(5)	Removal of Undepreciated ARC at 6/30/22
6	(10)	Removal of Net Book Value of 132 MW Unit 4 at 6/30/22
7	283	Total Undepreciated Investment at June 30, 2022

Q. HOW WILL PNM RECORD THE UNDEPRECIATED INVESTMENT IN THE SAN JUAN COAL PLANT AT THE TIME OF ABANDONMENT?

A. PNM is requesting to establish a regulatory asset equal to the undepreciated investment of the San Juan coal plant at the date of abandonment as described above. PNM is not requesting carrying charges on this regulatory asset, as these costs will be recovered through the proceeds of the energy transition bonds.

C. Coal Mine Reclamation Costs

Q. WHAT IS THE BASIS FOR THE ESTIMATED COAL MINE RECLAMATION EXPENSE THAT PNM WILL SEEK RECOVERY FOR UPON EARLY RETIREMENT OF THE SAN JUAN COAL PLANT?

A. PNM is seeking recovery of :(1) underground coal mine reclamation costs; and 2) costs associated with keeping the surface mine pits open to backfill with coal ash ("ash period costs"). Backfilling with coal ash reduces reclamation costs associated with more costly backfill materials and for disposal of the coal ash in landfills. PNM currently recovers underground mine reclamation costs and ash period costs from customers through accretion expense, which uses a plant and coal mine termination date of 2053. PNM is not seeking recovery of surface mine reclamation costs because prior Commission decisions have capped recovery from customers for these costs. In order to understand PNM's proposed recovery of the underground mine reclamation cost associated with the early shutdown of

the San Juan coal plant it is necessary to discuss PNM's accounting methodology applicable to coal mine reclamation.

Q. PLEASE DESCRIBE THE APPLICABLE ACCOUNTING GUIDANCE AND PNM'S APPLICATION OF THE GUIDANCE REGARDING COAL MINE RECLAMATION.

A. PNM accounts for its coal mine reclamation obligation in accordance with Statement of Financial Accounting Concept No. 7 ("CON7"), which applies to the use of cash flows information and present value in accounting measurements. In accordance with CON7, PNM calculates its share of the estimated cash flows required to reclaim the underground mine and then escalates the cash flows. The escalated cash flows are then discounted using a risk-free incremental borrowing rate to determine the present value of the reclamation liability and the appropriate annual accretion expense.

Q. HOW DID PNM DETERMINE THE COST ASSOCIATED WITH ACCELERATING THE DATE FOR UNDERGROUND COAL MINE RECLAMATION FROM 2053 TO 2022?

A. PNM obtained estimated cash flows from two separate reclamation studies performed by Golder Associates in 2018, one which applied a plant and coal mine closure in 2053 (the "2053 Study") and one which applied a plant and coal mine closure in 2022 (the "2022 Study"). Prior to December 31, 2018, PNM's coal mine reclamation liability on its books and records reflected cash flow

assumptions based on the 2053 Study equaling $14.6 million. On December 31, 2018, PNM determined that a 2022 shutdown was probable and therefore adjusted its reclamation liability to apply the cash flow assumption in the 2022 Study, with a present value of $23.2 million. The increase in the reclamation liability of $8.6 million represents the costs associated with the earlier date for underground coal mine reclamation. Likewise, PNM adjusted its ash period cost liability as of December 31, 2018. Prior to the adjustment PNM's ash period cost liability (based on the 2053 Study) on its books and records equaled $4.0 million. Under the 2022 Study, PNM's ash period cost liability increased $0.8 million to $4.8 million. PNM Table HEM-6 provides a summary of the change in the underground coal mine reclamation liability. Please see PNM Exhibit HEM-4 for cash flows provided in the 2053 Study (pages 1 of 4 and 2 of 4) and in the 2022 Study (pages 3 of 4 and 4 of 4). Also see PNM Exhibit HEM-5 for key assumptions used to measure the present value of the cash flows in both the 2053 Study and the 2022 Study.

PNM Table HEM-6
Coal Mine Reclamation Liability (excluding surface mine) at 12/31/18
$ in thousands

		Underground	Ash Period Costs	Total	
1	Reclamation Liability - 2053 Study	14,603	3,991	18,594	A
2	Reclamation Liability - 2022 Study	23,208	4,760	27,968	B
3	Increase in Reclamation Liability	8,605	769	9,374	C=B-A

Q. PLEASE DISCUSS WHY THE RECLAMATION LIABILITY INCREASED AS A RESULT OF THE 2022 SHUTDOWN.

A. The underlying cost assumptions and scope of reclamation work are substantially similar in both the 2022 Study and 2053 Study regarding the underground mine. The increase in the underground mine reclamation liability is the result of the accelerated timing of the cash flows and the time value of money. The 2053 Study applied the bulk of the cash to be spent on reclamation after shutdown between 2053 and 2057, which when discounted back to the present value is significantly lower than the present value of cash flows in the 2022 Study, which applies the bulk of the cash to be spent on reclamation after shutdown between 2023 and 2028. As I discuss above, PNM is currently recovering underground reclamation costs through accretion expense, which would have allowed PNM to recover the costs necessary to perform reclamation work in the future over a longer period of time. However, given the accelerated payments in the 2022 Study, PNM will need to recover the costs over a shorter period.

Q. OF THE TOTAL UNDERGROUND COAL MINE RECLAMATION COST, WHAT HAS PNM ALREADY COLLECTED AND WHAT DOES PNM PROJECT TO COLLECT FROM CUSTOMERS?

A. Customers have paid for the amounts reflected in the underground coal mine reclamation liability (excluding the surface mine), or $18.6 million plus an additional $0.7 million in payments for underground mine reclamation. The reclamation liability decreases when PNM makes payments to the mine for

reclamation work. Therefore, customers have paid $19.3 million ($18.6 million + $0.7 million). The balance in the reclamation liability of $18.6 million represents amounts collected from customers not yet spent for reclamation work. Based on the 2022 Study, PNM would have needed to collect $28.0 million for future underground reclamation costs at the end of 2018.

Q. IS PNM SEEKING TO RECOVER THE INCREASE IN THE COAL MINE RECLAMATION LIABILITY AS THE RESULT OF ACCELERATING THE COAL MINE RECLAMATION?

A. Yes. PNM is requesting recovery for a regulatory asset for the additional $9.4 million ($28.0 million less $18.6 million), which represents coal mine reclamation costs (excluding surface mine) not yet collected from customers. PNM is not requesting carrying charges on this regulatory asset as these expenses are non-cash.

Q. HOW WILL PNM RECOVER ACCRETION EXPENSE RELATED TO UNDERGROUND COAL MINE RECLAMATION COSTS UNTIL THE SAN JUAN COAL PLANT IS ABANDONED?

A. PNM will continue to include accretion expense associated with the underground coal mine reclamation, including ash period costs, as part of its cost of service studies. Upon abandonment, PNM will no longer include future accretion expense in rates.

Q. WILL PNM SEEK RECOVERY OF FUTURE COAL MINE RECLAMATION ACCRETION EXPENSE AFTER ABANDONMENT, SINCE PNM HAS NOT COLLECTED THAT EXPENSE FROM CUSTOMERS?

A. PNM has established a coal mine reclamation trust to set aside money for future reclamation work. PNM estimates that earnings from the trust would offset future accretion expense; therefore, PNM does not anticipate a need to collect any future costs associated with underground coal mine reclamation after the San Juan coal plant is abandoned in 2022. However, if final coal mine reclamation costs are higher or earnings from the trust are not sufficient to cover future expense, which would result in additional funding requirements, PNM will seek future recovery of these additional funding requirements of the trust. If final coal mine reclamation costs are lower or earnings from the trust exceed future accretion costs, then PNM similarly will provide for refunds of these amounts back to customers. The proposed ratemaking for differences in the estimated compared to final costs are covered in Section V of my testimony.

Q. ALTHOUGH NOT BEING REQUESTED FOR ADDITIONAL RECOVERY, CAN YOU PROVIDE A SUMMARY OF ESTIMATED TOTAL SURFACE COAL MINE RECLAMATION COST INCURRED TO DATE?

A. In PNM Table HEM-7 below I show PNM's currently recovered surface mine reclamation costs and amounts remaining to be recovered through August 2020,

which the Commission has capped. In addition, I show the total cash payments PNM has made to date and payments made in excess of the cap ordered by the Commission. Any future surface mine reclamation payments are borne by PNM and are not included in customer rates.

	PNM Table HEM-7 Surface Mine Recovery *$ in thousands*		
1	Recovery through 6/30/19	82,964	A
2	Remaining recovery (July 2019 - August 2020)	6,113	B
3	Capped Recovery	89,077	C=A+B
4	Reclamation cash payments through May 2019	110,413	D
5	Amount in Excess of cap through May 2019	21,336	D-C

D. Plant Decommissioning Costs

Q. WHAT IS THE BASIS FOR RECOVERING PLANT DECOMMISSIONING COSTS INCLUDED IN THE SECURITIZATION FINANCING?

A. PNM is seeking recovery of those plant decommissioning costs associated with the early shutdown of the San Juan coal plant in 2022, which have not yet been collected from customers through existing depreciation and accretion expense. In order to understand PNM's proposed recovery of the plant decommissioning cost associated with the early shutdown in 2022 it is necessary to discuss PNM's accounting methodology and recovery applicable to plant decommissioning.

Q. PLEASE DESCRIBE THE APPLICABLE ACCOUNTING GUIDANCE AND PNM'S APPLICATION OF THE GUIDANCE REGARDING PLANT DECOMMISSIONING.

A. PNM accounts for the plant decommissioning as an Asset Retirement Obligation ("ARO") in accordance with GAAP, Accounting Standards Codification ("ASC") 410-20. AROs are legal obligations to retire a tangible long lived asset in the future, based on cost estimates for the retirement of the asset and the settlement of the obligation. Typically, these cost estimates are provided as cash flows in current dollars, which are escalated to the settlement date of the retirement obligation using an appropriate escalation rate. The escalated cash flow estimates are then discounted using the current credit adjusted risk free rate to determine the present value of the legal obligation to retire the tangible long lived asset. A corresponding Asset Retirement Cost asset is capitalized by adjusting the carrying amount of the related tangible long-lived asset by the same amount as the ARO liability. The ARC asset is depreciated on a straight-line basis over the life of the retirement obligation. Accretion expense is recorded to recognize the time value of money, with an offset recorded as an increase to the ARO liability. Accretion expense is calculated by multiplying the present value of the ARO liability by the credit adjusted risk free rate originally used to discount the escalated cash flow estimates to their present value.

If the facts and circumstances of an existing ARO change or the Company receives a new cost estimate for its AROs, both the ARO liability and the ARC are adjusted by recording a new ARO layer in the same manner as described above.

Q. WHAT DOES PNM CURRENTLY RECOVER FROM CUSTOMERS FOR SAN JUAN PLANT DECOMMISSIONING?

A. PNM currently recovers plant decommissioning costs through accretion expense based on a cost study performed in 2014 by Black & Veatch[2] and a plant closure date of 2053. PNM also recovers depreciation expense on the ARC asset.

Q. HAS PNM UPDATED ITS SAN JUAN PLANT DECOMMISSIONING ESTIMATES TO REFLECT AN EARLY RETIREMENT IN 2022?

A. Yes. PNM obtained new cost estimates in 2019 based on a study performed by Burns & McDonnell and supported by PNM Witness Fallgren. As discussed by PNM Witness Fallgren, estimated costs of initial decommissioning activities have increased from previous determinations. Upon final agreement of the owners on decommissioning activities, the owners of the San Juan coal plant are required to fund their share of decommissioning into a trust, prior to closure in 2022.

Q. CAN YOU PLEASE SUMMARIZE THE IMPACT OF THE INCREASE OF THE NEW BURNS & MCDONNELL STUDY AFTER APPLICATION OF ASC 410-20?

A. Yes. PNM's current ARO liability was $9.0 million as of April 30, 2019, and the undepreciated ARC asset balance totaled $5.1 million. The present value of

[2] PNM contracted with Bohannan Huston to update its pond closure cost estimates in 2017 to include changes in the San Juan Pond Closure Plan dated June 2015 in accordance with Discharge Permit DP-1327. PNM reflected these updates on its books and records in 2017. References to PNM's books and records incorporating the cost estimates under the 2014 Black & Veatch Study include the update to pond closure cost estimates provided by Bohannan Huston in 2017.

PNM's share of the future cash flows in the new Burns & McDonnell cost estimate equaled $21.8 million. Therefore, PNM is required to increase the ARO liability by $12.8 million ($21.8 million - $9.0 million). In addition, the ARC asset would increase by $12.8 million to $17.9 million ($12.8 million + $5.1 million). Between May 2019 and the 2022 shutdown the ARO liability would accrete up to $25.1 million and the ARC would depreciate down to $15.2 million. Accretion expense more than doubles ($1.7 million increase) as a result of the 2022 shutdown. Under the 2014 Black & Veatch Study and assumed closure in 2053, accretion expense equaled $1.6 million between May 2019 through shutdown, which is assumed to be recovered in rates. Accretion expense over the same period will increase to $3.3 million with the new cost estimate provided by Burns & McDonnell. In addition, depreciation expense on the ARC asset increases $2.3 million from May 2019 through shutdown as a result of the new plant decommissioning study from $0.4 million currently assumed to be recovered in rates to $2.7 million over the same period.

Q. WHAT PLANT DECOMMISSIONING COSTS ARE PNM PROPOSING TO RECOVER AS A RESULT OF THE EARLY RETIREMENT OF THE SAN JUAN COAL PLANT?

A. PNM is proposing to recover $19.2 million in plant decommissioning costs through securitization financing, determined as follows:

- Recovery of the undepreciated ARC asset, recorded in plant-in-service estimated to be $15.2 million at June 30, 2022.

- Recovery of $4.0 million in the incremental accretion ($1.7 million increase) and depreciation expense ($2.3 million increase) resulting from the early retirement. PNM is requesting to establish a regulatory asset for the incremental accretion and depreciation expense to be incurred as the result of the new plant decommissioning study from May 2019 through the abandonment of the San Juan coal plant and for the undepreciated ARC asset. PNM is not requesting carrying charges on this regulatory asset, as these expenses represent non-cash expenses.

Please see PNM Exhibit HEM-6 for a schedule of future accretion and depreciation expense related to plant decommissioning costs.

Q. HOW WILL PNM RECOVER ACCRETION EXPENSE AND DEPRECIATION EXPENSE RELATED TO PLANT DECOMMISSIONING COSTS UNTIL THE SAN JUAN COAL PLANT IS ABANDONED?

A. PNM will continue to include accretion expense and depreciation expense associated with the plant decommissioning costs based on amounts currently included in rates (based on the study prior to early abandonment). As PNM has requested a regulatory asset for the incremental accretion and depreciation expense related to the new study, PNM will not include these amounts in its cost of service studies while the San Juan coal plant is still in operation and being recovered in base rates. Upon abandonment, PNM will no longer include future accretion expense or depreciation expense related to the ARC asset in rates.

Q. UNDER WHAT CIRCUMSTANCES WOULD PNM SEEK RECOVERY OF FUTURE PLANT DECOMMISSIONING EXPENSE AFTER ABANDONMENT, IF PNM HAS NOT ALREADY COLLECTED THAT EXPENSE FROM CUSTOMERS?

A. PNM will establish a plant decommissioning trust to set aside money for future plant decommissioning work. PNM estimates that earnings from the trust would offset future accretion expense; therefore, PNM does not anticipate a need to collect any future accretion expense associated with plant decommissioning costs after the San Juan coal plant is abandoned in 2022. However, if final plant decommissioning costs are higher or earnings from the trust are not sufficient to cover future expense, which would result in additional funding requirements, PNM will seek recovery of these additional funding requirements to the trust. If final plant decommissioning costs are lower or earnings from the trust exceed future costs, then PNM will refund these amounts to customers. The proposed ratemaking for differences in the estimated cost compared to final costs are covered in Section V of my testimony.

E. Job Training and Severance Costs

Q. PLEASE SUMMARIZE THE JOB TRAINING AND SEVERANCE COSTS REQUESTED IN THE ENERGY TRANSITION COSTS.

A. PNM is requesting recovery of $20 million for severance costs and job training expenses for employees affected by the abandonment of the San Juan coal plant

pursuant to Section 2(H)(2)(b) of the Energy Transition Act. PNM has quantified a total of $20.6 million of costs expected to be incurred. PNM is requesting recovery of $20 million as provided by the Energy Transition Act. See PNM Table HEM-8 below for a summary of job training and severance costs requested.

PNM Table HEM-8
Summary of Job Training and Severance Cost
$ in millions

1	10.4	PNM/PNMR Severance
2	1.3	PNM Job Training
3	7.4	Coal Mine Employees Severance
4	1.5	Coal Mine Employees Job Training
5	20.6	Total Training and Severance Cost
6	20.0	Cap Pursuant to Energy Transition Act
7	0.6	Amount Over Cap (Not Requested for Recovery)

Q. WHAT IS THE BASIS FOR THE ESTIMATED PNM AND PNMR SERVICES EMPLOYEE SEVERANCE EXPENSES THAT PNM WILL SEEK RECOVERY OF UPON EARLY RETIREMENT OF THE SAN JUAN COAL PLANT?

A. PNM has estimated $10.4 million in severance costs for employees that are expected to be impacted as the result of the early shutdown of the San Juan coal plant. The severance cost estimates are based on PNM's current severance pay plan for union and non-union employees. The severance costs include the severance pay, associated payroll taxes, and six months of medical and dental coverage and life insurance premiums. PNM currently estimates 168 employees at the San Juan coal plant and 12 employees of PNMR Services that support the

San Juan coal plant will be eligible for severance benefits. See PNM Exhibit HEM-7.

Q. WHAT ARE THE JOB TRAINING EXPENSES FOR PNM EMPLOYEES AFFECTED BY THE ABANDONMENT OF THE SAN JUAN COAL PLANT?

A. PNM estimates $1.3 million for job training costs for employees affected by the abandonment of the San Juan coal plant. PNM expects to incur these costs beginning in 2019 through the time of abandonment of the San Juan coal plant. PNM estimated these costs assuming $8,000 per employee.

Q. HOW WILL PNM RECORD THE PAYMENTS MADE FOR SEVERANCE AND JOB TRAINING COSTS FOR PNM AND PNMR SERVICES EMPLOYEES?

A. With Commission approval, PNM intends to fund job training costs in advance of the abandonment. PNM is requesting to establish a regulatory asset in an amount equal to the payments made for job training costs prior to the issuance and receipt of the proceeds from the energy transition bonds. PNM is requesting to recover carrying charges on these advance payments, at PNM's currently approved weighted average cost of capital ("WACC"). See Section VI of my testimony for proposed recovery of these carrying charges in base rates. PNM intends to make severance payments for its employees at or near the same time that the proceeds from the energy transition bonds are received. For any severance costs incurred

prior to the issuance of the energy transition bonds, PNM also proposes to record these costs to the regulatory asset, and will record any applicable carrying charges only for the time period between when the payments are made and proceeds from the energy transition bonds are received.

Q. WHAT COSTS ARE BEING REQUESTED BY PNM FOR SEVERANCE AND JOB TRAINING COSTS FOR EMPLOYEES OF THE SAN JUAN COAL COMPANY COAL MINE?

A. PNM is requesting a total of $8.9 million, comprised of $1.5 million to be provided to a state agency for job training for these employees, with $7.4 million in severance costs for 185 employees of the San Juan Coal Company coal mine to be provided to a third-party trust. PNM estimated the job training costs at $8,000 per employee times 185 SJCC coal mine employees. PNM estimated the $7.4 million in severance costs based on 6 months' additional severance above any severance paid by SJCC, for these 185 employees, with an assumed annual salary of $80,000 ($80,000 divided by 12 months times 6 times 185 employees). PNM does not anticipate to true-up these payments. Please refer to the testimony of PNM Witness Darnell, for further discussion of these funds.

Q. HOW WILL PNM RECORD THE PAYMENTS MADE FOR SEVERANCE AND JOB TRAINING COSTS FOR EMPLOYEES OF SJCC?

A. With Commission approval, PNM intends to fund both the severance and job training costs for coal mine employees in advance of the abandonment of the San

Juan coal plant and issuance of the energy transition bonds. PNM is requesting to establish a regulatory asset in an amount equal to the payments made for severance and job training costs prior to the issuance and receipt of the proceeds from the energy transition bonds. PNM is requesting to recover carrying charges on these advance payments, at PNM's currently approved WACC. See Section VI of my testimony for proposed recovery of these carrying charges in base rates.

F. Other Costs Required by Changes in Law

Q. HAS PNM IDENTIFIED ANY OTHER COSTS REQUIRED BY CHANGES IN LAW AFTER JANUARY 1, 2019, AS CONTEMPLATED IN SECTION 2(H)(3) OF THE ETA?

A. No. At this time, PNM is not aware of any additional costs expected to be incurred as required by changes in law after January 1, 2019. In the event PNM identifies any costs related to changes in law subsequent to the issuance of a financing order for the energy transition bonds, there are provisions for PNM to seek an amendment to the financing order to include those additional charges in the energy transition bond financing, in accordance with Section 7(B)(2) of the Energy Transition Act.

G. Payments Made to State Agencies

Q. WHAT ARE THE COSTS ESTIMATED FOR PAYMENTS MADE TO STATE AGENCIES AS REQUIRED UNDER SECTION 16 OF THE

ENERGY TRANSITION ACT AND CONSIDERED ENERGY TRANSITION COSTS UNDER SECTION 2(H)(4) OF THE ENERGY TRANSITION ACT?

A. Pursuant to Section 16(J) of the Energy Transition Act , PNM shall transfer the following percentages of the financed amount of the energy transition bonds: one-half percent (0.5%) to the Indian Affairs Fund, one and sixty-five hundredths percent (1.65%) to the Economic Development Fund, and three and thirty-five hundredths percent (3.35%) to the Workers Assistance Fund. As discussed by PNM Witness Eden, the total payments expected to be transferred to the state agencies pursuant to Section 16 of the Energy Transition Act is just under $20 million.

Q. HOW WILL PNM RECORD THE PAYMENTS MADE TO THE STATE AGENCIES UNDER SECTION 16 OF THE ENERGY TRANSITION ACT?

A. As discussed by PNM Witness Darnell, PNM intends to make 25% of the payments available to the state agencies on January 1, 2021 prior to the issuance of the energy transition bonds, if approved by the Commission. The remaining payments will be transferred to the agencies within 30 days of receipt of the proceeds from the bonds. PNM is requesting to establish a regulatory asset in an amount equal to the advanced payments made to the state agencies prior to the issuance and receipt of the proceeds from the energy transition bonds. PNM is requesting to recover carrying charges on these advance payments, at PNM's

currently approved WACC. See Section VI of my testimony for proposed recovery of these carrying charges in base rates.

IV. ACCOUNTING FOR THE SECURITIZATION FINANCING

Q. PLEASE DESCRIBE THE OVERALL ACCOUNTING TREATMENT FOR THE SECURITIZATION FINANCING UNDER THE ETA.

A. As discussed by PNM Witnesses Eden and Atkins, PNM will create a Special Purpose Entity ("SPE") to obtain securitization financing. The SPE will exist for the limited purpose of issuing energy transition bonds as authorized under the ETA. The SPE will be a wholly owned subsidiary of PNM. The SPE and PNM will maintain separate accounting records. The accounting entries necessary to establish the SPE and the associated ongoing activities for the SPE and PNM related to the securitization financing are provided in PNM Exhibit HEM8 and PNM Exhibit HEM-9.

Q. WHAT ARE THE ANTICIPATED ACCOUNTING ENTRIES TO BE RECORDED AT THE SPE?

A. As illustrated on PNM Exhibit HEM-8, the accounting entries to be recorded by the SPE are as follows: (1) recording of capital from PNM initial investment; (2) recording of proceeds from the issuance of bonds; (3) purchase of energy transition property from PNM; (4) receipt of cash from PNM and recognition of revenue for the Energy Transition Charges collected; (5) amortization of the

energy transition property; (6) accrual of interest expense; (7) amortization of upfront bond issuance costs; (8) payment of bond principal and interest; (9) recording of on-going operating costs and servicing fees payable; (10) replenishment of capital investment through the Energy Transition Charges, if needed; (11) return impacts on the capital subaccount; and (12) transfer of cash in the event excess Energy Transition Charges is collected, if any.

Q. WILL PNM SELL THE ENERGY TRANSITION PROPERTY CREATED BY THE FINANCING ORDER TO THE SPE?

A. Yes. PNM will sell the energy transition property created in the Financing Order to the SPE. Under the Energy Transition Act , the energy transition property will be the rights and interests of PNM, or the SPE as assignee under the Financing Order, including the right to impose, charge, collect and receive energy transition charges in an amount necessary to provide for full payment and recovery of all energy transition costs identified in the Financing Order, including all revenues or other proceeds arising from those rights and interests. The energy transition property also includes the right to obtain periodic adjustments to the Energy Transition Charges as provided in the Financing Order and the Energy Transition Act. The SPE will use a portion of the proceeds of the energy transition bonds to pay the purchase price for the energy transition property. Additionally, any paid or accrued upfront financing costs will be included in the bond financing at the SPE.

Q. HOW WILL THE SPE AMORTIZE THE ENERGY TRANSITION PROPERTY?

A. The SPE will amortize the energy transition property based on the principal amount required for the repayment of the bonds over the expected life of the bonds.

Q. HOW WILL THE SPE RECOVER THE ONGOING FINANCING COSTS ASSOCIATED WITH THE ENERGY TRANSITION BONDS?

A. Following the issuance of the energy transition bonds, the ongoing financing costs associated with the bonds will be recovered through the Energy Transition Charges. The ongoing financing costs are energy transition costs and include payment of principal and interest on the bonds, as described in more detail by PNM Witness Atkins, and payment of other ongoing financing costs, including servicing fees, administration costs, auditing fees, legal fees, rating agency surveillance fees, trustee fees, independent director or manager fees, the return on the invested capital, and other miscellaneous fees and expenses, as discussed in more detail by PNM Witness Eden.

Q. HOW WILL THE SPE ACCOUNT FOR THE DIFFERENCE BETWEEN ITS EXPENSES AND THE REVENUES COLLECTED FROM PNM?

A. Each month, the SPE will compare its total expenses, including the amortization of the energy transition property, amortization of bond issuance costs, interest expenses, and ongoing costs and servicing fees, to its total revenues and the

difference will be deferred as either a regulatory asset or a regulatory liability, to serve as a balancing account for the SPE. The differences that occur in the balancing account for the SPE will be trued-up periodically as part of the True-Up Adjustment Mechanism as described by PNM Witness Settlage.

Q. WHAT ARE THE ANTICIPATED ACCOUNTING ENTRIES TO BE RECORDED AT PNM?

A. As illustrated on PNM Exhibit HEM-9, the accounting entries to be recorded by PNM are as follows: (1) recording of expenditure of cash to fund the capital at the SPE; (2) sale of the energy transition property to the SPE; (3) payments to state agencies; (4) recognition and collection of Energy Transition Charges, (5) recording of servicing fees and costs billed to the SPE; and (6) impact of earnings on the capital investment sub account of the SPE.

Q. HOW WILL THE ENERGY TRANSITION CHARGES COLLECTED FROM CUSTOMERS BE RECORDED?

A. The Energy Transition Charge collections will be remitted to and recorded as revenues at the SPE.

Q. PLEASE EXPLAIN THE PERIODIC REVENUE REQUIREMENT REFERENCED IN THE TESTIMONY OF PNM WITNESS SETTLAGE.

A. The "Periodic Revenue Requirement" represents the amount of revenues the SPE will need to receive from collections of energy transition charges over a

specified period to satisfy scheduled payments of principal and interest on the energy transition bonds and to pay its other ongoing financing costs over such period, as adjusted to take into account any over-or under-collection in the prior period. As discussed in the testimony of PNM Witness Settlage, the Periodic Revenue Requirement will be estimated for "Remittance Periods" that are generally six months in length, beginning on each debt service payment date and ending on the day preceding the next debt service payment date. The first Remittance Period will begin on the issuance date of the energy transition bonds and end on the day immediately preceding the first debt service payment. The first debt service payment is expected to be approximately nine months from the date of issuance of the bonds, based on the testimony of PNM Witness Atkins. During the last two years preceding the final maturity date of the energy transition, the Periodic Revenue Requirement will be estimated over three-month Remittance Periods.

Q. PLEASE EXPLAIN THE PERIODIC BILLING REQUIREMENT REFERENCED IN THE TESTIMONY OF PNM WITNESS SETTLAGE.

A. The "Periodic Billing Requirement" represents the amount of energy transition charges that must be assessed during a Remittance Period to collect the Periodic Revenue Requirement for the Remittance Period. The Periodic Billing Requirement accounts for collection lag and uncollectible amounts. For each Remittance Period, PNM will estimate the timing of collections of energy

transition charges based on a weighted average balance of days outstanding on PNM's customer bills. For example, if there were seven billing months in the initial Remittance Period and a 30-day weighted average balance of days on PNM's bills, PNM would only expect to receive during the Remittance Period payments on the amounts billed during the first six months of the Remittance Period. PNM also will estimate an uncollectable amount.

As described in the testimony of PNM Witness Settlage, the Periodic Billing Requirement for each Remittance Period will then be allocated to customer classes and rate schedules and energy transition charges will be calculated and determined for customers in each rate schedule.

V. PROPOSED RATEMAKING UNDER SECTION 4(B), PARTS 10 AND 11 OF THE ENERGY TRANSITION ACT

Q. WHAT DOES THE ENERGY TRANSITION ACT PROVIDE WITH RESPECT TO PROPOSED RATEMAKING FOR ENERGY TRANSITION COSTS?

A. Section 4, Part B(10) of the Energy Transition Act states that a utility application shall provide "a description of a proposed ratemaking process to reconcile and recover or refund any difference between the energy transition costs financed by the energy transition bonds and the actual final energy transition costs incurred by the qualifying utility or the assignee".

Q. WHAT IS PNM'S PROPOSED RATEMAKING PROCESS PURSUANT TO SECTION 4, PART B(10) OF THE ENERGY TRANSITION ACT?

A. PNM will track and reconcile each component of the energy transition costs listed earlier in my testimony. Any difference between the amounts financed by the energy transition bonds and the final actual energy transition costs will be deferred and recorded to either a regulatory asset (if the actual final energy transition costs are greater than the estimated energy transition costs) or a regulatory liability (if the actual final energy transition costs are less than the estimated energy transition costs).

Q. HOW DOES PNM PROPOSE TO COLLECT OR REFUND THE AMOUNTS RECORDED AND DEFERRED TO THE REGULATORY ASSET OR REGULATORY LIABILITY?

A. PNM will include the amortization of the regulatory asset or regulatory liability in its next general rate case, after the final energy transition costs are known. PNM will propose to collect or refund the differences over the remaining life of the energy transition bonds. PNM will include the unamortized balance of the regulatory asset or regulatory liability in rate base in its general cost of service studies, to compensate PNM or its customers for the time value of money. For example, if a there is a regulatory liability, then PNM would include this as a reduction to rate base which lowers the customers' overall costs and revenue requirement, to reflect that customers are paying more through the Energy Transition Charge and should be compensated for the amounts that are due to be

refunded to customers. PNM would request the same treatment for a regulatory asset; PNM would include as an increase to rate base, which increases costs and revenue requirements to reflect that customers are paying less through the Energy Transition Charge and PNM should be compensated for the amounts that are still to be collected from customers.

Q. ARE THERE CARRYING CHARGES ASSOCIATED WITH THESE REGULATORY ASSETS AND LIABILITIES?

A. Yes. To compensate both customers and PNM for any difference between amounts financed through the securitization bond issuance, and the final actual energy transition costs incurred by PNM, PNM will record carrying charges. PNM proposes to record carrying charges based on its then currently approved after-tax WACC. Once the regulatory asset or regulatory liability is reflected in rate base in PNM's general rate case cost of service study, PNM will terminate the calculation of carrying charges as the unamortized balance will be included in rate base.

Q. DOES THE ENERGY TRANSITION ACT PROVIDE FOR A COST OF SERVICE ADJUSTMENT ONCE THE ENERGY TRANSITION CHARGE IS APPLIED TO CUSTOMER BILLS?

A. Yes, it does. Section 4, Part B(11) of the Energy Transition Act states that a utility's application must include "a proposed ratemaking method to account for the reduction in the qualifying utility's cost of service associated with the amount

of undepreciated investments being recovered by the Energy Transition Charge at the time that charge becomes effective".

Q. WHAT IS PNM'S PROPOSED RATEMAKING PROCESS PURSUANT TO SECTION 4, PART B(11) OF THE ENERGY TRANSITION ACT?

A. Upon abandonment, the SPE will issue the Energy Transition Bonds. If PNM begins to collect the Energy Transition Charge from customers and has not adjusted its base rates charged to customers in a general rate case to reflect the retirement and abandonment of the San Juan coal plant, then PNM will record as a regulatory liability the revenue requirements associated with the undepreciated investment of the San Juan coal plant equal to the amount financed through the issuance of energy transition bonds. PNM will calculate the revenue requirements reflecting a return on and return of the amount financed related to the undepreciated investment of the San Juan coal plant. PNM will defer these amounts for as long as the San Juan coal plant is no longer used and useful and abandoned, PNM is collecting the Energy Transition Charge, and has not adjusted its base rates to reflect the removal of the undepreciated investment in customer's rates.

Q. HOW DOES PNM PROPOSE TO REFUND THE AMOUNTS RECORDED AND DEFERRED TO THIS REGULATORY LIABILITY?

A. PNM will include the amortization of the regulatory liability in its general rate case that reflects the removal of the net book value of the San Juan coal plant

from customers' rates. PNM will propose an amortization period for these costs in its next general rate case, once the final amounts are known. PNM is not requesting approval of an amortization period at this time, as the final amounts, if any, are dependent on the relative timing of the bond issuance and the rate case, which is not yet known. PNM will include the unamortized balance of the regulatory liability in rate base in its general cost of service studies, to compensate its customers for the time value of money.

Q. DOES PNM PROPOSE THAT CARRYING CHARGES ACCUMULATE ON THE REGULATORY LIABILITY BALANCE FROM THE TIME BETWEEN WHEN PNM BEGINS TO DEFER AMOUNTS UNTIL REFLECTED IN PNM'S COST OF SERVICE STUDIES?

A. Yes. To compensate customers, PNM will record carrying charges. PNM proposes to record carrying charges based on its then currently approved after-tax WACC. Once the regulatory liability is reflected in rate base in PNM's general rate case cost of service study, PNM will terminate the calculation of carrying charges as the unamortized balance will be included in rate base.

Q. DOES PNM ANTICIPATE ADJUSTING PNM'S BASE RATES TO REFLECT THE ABANDONMENT OF THE SAN JUAN COAL PLANT THROUGH A GENERAL RATE CASE AT THE SAME TIME THAT CUSTOMERS BEGIN TO PAY THE ENERGY TRANSITION CHARGE?

A. Yes. PNM intends to file a general rate case to reflect the abandonment of the San Juan coal plant for rates to go into effect at the same time as the Energy Transition Charge are collected from customers. In this instance, there would be no need for a regulatory liability to be recorded.

However, if there is a timing difference between commencement of the collection of the energy transition charge from customers when bonds are issued upon the abandonment and the time that base rates are adjusted to reflect the abandonment of the San Juan coal plant, then a regulatory liability will protect customers from double recovery of the undepreciated investments.

VI. ITEMS RELATED TO THE ABANDONMENT OF THE SAN JUAN COAL PLANT RECOVERED IN BASE RATES, AND NOT IN THE ENERGY TRANSITION CHARGE

Q. PLEASE SUMMARIZE THE ITEMS RELATED TO THE ABANDONMENT OF THE SAN JUAN COAL PLANT TO BE RECOVERED IN BASE RATES AND NOT RECOVERED IN THE ENERGY TRANSITION CHARGE.

A. There are certain one-time and on-going activities and items identified that will not be recovered through the Energy Transition Charge but will be reflected in PNM's future cost of service studies filed in general rate cases. These include: 1) a reduction to rate base by the Accumulated Deferred Income Tax ("ADIT") liability that results from the abandonment, 2) certain operating expenses that

PNM expects to incur and recover from customers that will remain after the abandonment of the San Juan coal plant, and one-time costs for recovery of stranded inventory balances, replacement power request for proposals ("RFP") and regulatory approval of replacement power resources costs, and external legal counsel costs associated with contractual due diligence and negotiations to exit the San Juan coal plant; and (3) carrying charges accumulated on advanced payments made to employees affected by the abandonment (severance and job training) and payments to state agencies pursuant to Section 16 of the ETA. Please see PNM Table HEM-9 below for estimate of 2023 revenue requirements associated with these items.

PNM Table HEM-9
2023 Revenue Requirement for Costs Associated with Abandonment not Recovered in Energy Transition Charge
$ in millions

1	(12.6)	ADIT Benefits Related to Abandonment
2	0.6	Ongoing Costs Related to San Juan coal plant
3	0.9	One-time Costs Related to San Juan coal plant
4	0.3	Carrying Charges on advanced payments
5	(10.7)	Total

A. Accumulated Deferred Income Taxes Created by Abandonment

Q. PLEASE EXPLAIN THE ADIT RELATED TO ABANDONMENT OF THE SAN JUAN COAL PLANT THAT WILL REMAIN IN BASE RATES.

A. At the time of abandonment, the San Juan coal plant will be retired for tax purposes, resulting in a write-off of the remaining tax basis in the facility at that time. PNM will also remove the net book value associated with the San Juan coal

plant from rate base as the facility will no longer be used and useful. Retiring the San Juan coal plant for book and tax purposes will cause the associated ADIT liability to be reversed, as the deferred balances will become currently payable. However, a regulatory asset will be recorded equal to the net book value that will be recovered under the Energy Transition Charge. The creation of this regulatory asset will also give rise to an ADIT liability balance equal to the net book value times the combined statutory tax rate because the regulatory asset will have zero tax basis. As PNM customers are paying for the Energy Transition Charge that recovers the net book value through the energy transition property, the ADIT generated from this transaction will reverse. PNM will include the ADIT liability balance in rate base, which will lower the Company's overall rate base and lower revenue requirements. PNM will also include the ADIT liability created associated with the other energy transition property transferred to the SPE as a reduction to rate base. Finally, PNM will continue to return the excess deferred income taxes associated with San Juan Units 1 and 4 to customers through base rates, including the unamortized balance as a rate base reduction, and the return of the excess deferred income taxes as a reduction to income tax expense in future cost of service studies. Please see PNM Exhibit HEM-10 for a calculation of the 2023 ADIT benefit associated with the San Juan coal plant closure.

B. One-time Costs Associated with Abandonment of the San Juan coal plant

Q. PLEASE DESCRIBE THE ESTIMATED ONE-TIME COSTS ASSOCIATED WITH THE ABANDONMENT OF THE SAN JUAN COAL PLANT THAT ARE NOT INCLUDED IN THE UPFRONT ENERGY TRANSITION COSTS.

A. The San Juan coal plant currently has inventory balances, consisting of tools, spare equipment, and other materials and supplies that are necessary to have on hand to operate the plant. Although PNM plans to minimize the inventory levels necessary through 2022, transfer any materials and supplies that are used and useful to other generation facilities, and sell any remaining inventory at salvage value, PNM estimates a remaining balance of $6.7 million that will need to be recovered from customers as the result of the abandonment of San Juan coal plant.

As discussed later in my testimony, PNM has allocated a portion of costs incurred in the RFP and regulatory approval process for new replacement resources to the PPAs identified in Scenario 1 replacement portfolio. PNM estimated these costs to be $0.8 million. PNM estimates that $1.2 million in external legal counsel costs associated with the closure of the San Juan coal plant will be needed to facilitate the necessary contractual negotiations with the remaining owners over the exit of the San Juan coal plant.

Q. HOW IS PNM PROPOSING TO RECOVER THESE ONE-TIME COSTS?

A. PNM is requesting to establish a regulatory asset for these one-time costs. PNM is proposing to recover the regulatory assets for stranded inventory and external legal costs associated with the exit of San Juan coal plant, over the same period PNM will collect the energy transition charges. PNM is proposing to recover the regulatory asset for the RFP and regulatory approval process costs associated with PPA's over the life of the PPA's or 20 years. PNM will include the unamortized balance in rate base in its general cost of service studies. Please see PNM Exhibit HEM-11 for the revenue requirement associated with these one-time costs.

C. On-going Costs After Abandonment of the San Juan coal plant

Q. PLEASE SUMMARIZE THE ON-GOING COSTS THAT ARE EXPECTED TO REMAIN AFTER THE ABANDONMENT OF THE SAN JUAN COAL PLANT.

A. PNM expects to have certain ongoing operational costs associated with the abandoned San Juan facility and the SPE will incur ongoing financing costs associated with the energy transition bonds. PNM Witness Fallgren discusses in more detail the ongoing San Juan operational costs and PNM Witness Eden discusses the ongoing financing costs.

Q. HOW IS PNM PROPOSING TO RECOVER THE ONGOING OPERATIONAL EXPENSES ASSOCIATED WITH THE ABANDONED SAN JUAN COAL PLANT?

A. As discussed by PNM Witness Fallgren, these costs reflect the normal operating expenses of the utility after the abandonment and include ongoing maintenance and insurance premiums expected to be incurred after the closure of the San Juan coal plant and are estimated at $0.6 million in 2023. PNM will include these costs in its cost of service studies in its next general rate case as an operating expense, similar to any other operations or maintenance cost of the utility. The amounts will be based on the amounts expected to be incurred in the applicable test period. PNM is not requesting any special accounting treatment for recovery for these costs.

D. Carrying Charges Associated with Payments Made in Advance of Issuance of Energy Transition Bonds

Q. HOW IS PNM PROPOSING TO RECOVER THE CARRYING CHARGES ON PAYMENTS MADE IN ADVANCE OF ISSUANCE OF ENERGY TRANSITION BONDS?

A. PNM is proposing to make advanced payments for job training and severance costs, as well as advance funding of a portion of the energy transition bond proceeds to state agencies to assist the impacted areas, if the Commission approves the creation of the associated regulatory asset. As such, PNM has requested carrying charges to compensate PNM for the time value of money

between when these payments are made and proceeds from the energy transition bonds are received. PNM is proposing to collect these carrying charges in PNM's next general rate case, as a component of its cost of service studies, and not collect these carrying charges as part of the Energy Transition Charge as PNM does not believe these carrying charges are eligible to be classified as energy transition costs pursuant to the ETA. PNM is proposing to recover these carrying charges over 3 years, and PNM will not request to include the unamortized balance of carrying charges in rate base. Please see PNM Exhibit HEM-12 for an estimate of carrying charges on the advanced payments to state agencies and for job training dollars. PNM is not aware of the specific timing of the severance payments for SJCC employees, so it has not estimated the carrying charges related to those payments, but PNM intends to calculate and request recovery for those carrying charges as incurred.

VII. REQUESTED APPROVALS FROM THE COMMISSION TO ESTABLISH REGULATORY ASSETS AND LIABILITIES

Q. CAN YOU PLEASE SUMMARIZE THE REQUESTED REGULATORY ASSETS AND LIABILITIES THE COMPANY IS REQUESTING IN ITS CONSOLIDATED ABANDONMENT APPLICATION?

A. Yes. PNM is requesting that the Commission authorize PNM to establish regulatory assets and liabilities for the purposes stated in my testimony. PNM Exhibit HEM-13 summarizes the requested regulatory assets and liabilities that PNM is seeking Commission authority to establish.

VIII. SAN JUAN COAL PLANT REVENUE REQUIREMENTS

Q. WHAT IS THE PURPOSE OF CALCULATING THE REVENUE REQUIREMENTS FOR THE SAN JUAN COAL PLANT?

A. In order to provide a meaningful comparison between a 2022 shutdown of the San Juan coal plant and continued operations beyond 2022, PNM has developed revenue requirements for the San Juan coal plant under two scenarios: (1) continued operations through a terminal date of 2040, and (2) early retirement on June 30, 2022. In both scenarios, PNM has excluded amounts associated with 65 MW of San Juan Unit 4 that is considered merchant plant and excluded from PNM's retail jurisdiction. The revenue requirements are based on a traditional cost of service model that reflects a return on rate base using the Company's WACC and return of the Company's investments, including recovery of operating expenses. See PNM Exhibit HEM-14 for the estimated 2023 annual revenue requirements for continued operations. These revenue requirements were provided to PNM Witness Phillips for resource modeling purposes and are also used to identify the customer benefits in 2023 as a result of the abandonment in 2022.

Q. PLEASE SUMMARIZE THE 2023 REVENUE REQUIREMENTS FOR THE SAN JUAN COAL PLANT CONTINUED OPERATIONS?

A. The revenue requirements are based on a traditional cost of service model that reflects a return on rate base using the Company's WACC and return of the

Company's investments, including recovery of operating expenses. See PNM Exhibit HEM-14 for 2023 annual revenue requirements for the San Juan coal plant continued operations. These revenue requirements were provided to PNM Witness Phillips for resource modeling purposes.

Q. WHY HAS PNM REFLECTED A TERMINAL DATE OF 2040 IN ITS ANALYSIS OF THE SAN JUAN COAL PLANT CONTINUED OPERATIONS?

A. The Commission has approved a depreciation schedule for the San Juan coal plant through 2053. However, the Company has stated a goal of being carbon-free by 2040, which ensures compliance with the ETA's zero-carbon resource portfolio requirements, which must be achieved by no later than 2045. Therefore, PNM has reflected that continued operations would only continue through 2040, 13 years earlier than the current terminal date of 2053.

Q. WHAT COSTS HAS PNM INCLUDED IN THE REVENUE REQUIREMENTS ASSUMING THE SAN JUAN COAL PLANT CONTINUED OPERATIONS?

A. PNM included a return on rate base utilizing PNM's currently approved WACC, depreciation expense, operations and maintenance expense, renewable energy certificate ("REC") purchases pursuant to the modified stipulation in NMPRC Case No. 13-00390-UT, fuel handling, costs associated with coal mine reclamation and plant decommissioning, property taxes, and payroll taxes.

However, as discussed by PNM Witness Phillips, PNM has not estimated costs associated with additional environmental controls that might be required to meet new emissions limits established in the Energy Transition Act if the San Juan coal plant were to continue operations.

Q. WHAT COSTS HAS PNM INCLUDED IN THE ANNUAL REVENUE REQUIREMENTS ASSUMING CLOSURE OF THE SAN JUAN COAL PLANT EFFECTIVE JUNE 2022?

A. PNM included the very same cost categories that I detailed in response to the foregoing question. The only difference is that the costs were based on retirement of San Juan in June 2022. These revenue requirements were provided to PNM Witness Phillips for resource modeling purposes.

IX. 2023 REVENUE REQUIREMENTS FOR THE RESOURCES PROPOSED IN SCENARIO 1

A. Proposed Replacement Resources under Scenario 1

Q. WHAT ARE THE NEW RESOURCES INCLUDED IN SCENARIO 1 PNM IS PROPOSING TO REPLACE THE SAN JUAN COAL PLANT?

A. PNM is proposing to replace the San Juan coal plant with 280 MW of utility-owned Pinon Gas Plant, 70 MW of utility-owned battery storage, and 350 MW of PPA solar generation paired with 60 MW of battery storage. Please see the direct testimony of PNM Witness Fallgren for discussion on the selection of Scenario 1.

Q. WHAT COSTS DID PNM ESTIMATE ASSOCIATED WITH THE RFP AND REGULATORY APPROVAL PROCESS FOR THE RESOURCES INCLUDED IN SCENARIO 1?

A. PNM estimates $2.1 million related to the RFP and regulatory approval processes utilized to determine Scenario 1 and obtain the necessary regulatory approvals in this proceeding. These include costs for external consultants, outside legal review of replacement power testimony and exhibits, as well as additional work to negotiate contracts and administrative costs. Please see PNM Exhibit HEM-15 for more detailed information.

Q. HOW IS PNM PROPOSING TO RECOVER THE COSTS INCURRED RELATED TO THE RFP AND REGULATORY APPROVAL PROCESS?

A. Costs associated with the RFP and regulatory approval processes, including internal costs to review and select the ultimate resources are subject to being capitalized as part of the resulting resource if owned and constructed by PNM. The results of these processes will result in a mix of replacement resources that are both constructed and owned resources and resources acquired through PPAs. These costs will be allocated equally to each resource selected as the result of these processes. The portion allocated to the 280 MW Pinon Gas Plant and utility-owned battery storage will be included as a cost of construction. PNM is proposing to recover the costs incurred and allocated to the PPAs as a regulatory asset and will recover these costs over the life of the PPAs in base rates. PNM proposes to include the unamortized balance of the regulatory asset associated

with the PPAs in rate base and will reflect the amortization of these costs as an operating expense in its cost of service studies. These costs were necessary to acquire the replacement resources under the PPA, therefore, aligning recovery of these costs over the life of the PPA matches the cost recovery over the period that customers receive the benefit of the PPA. See PNM Exhibit HEM-15.

B. PNM-Owned Resources included in Scenario 1

Q. WHAT IS THE 2023 ANNUAL REVENUE REQUIREMENT FOR THE 280 MW OF PINON GAS PLANT REPLACEMENT RESOURCES PNM IS PROPOSING TO REPLACE A PORTION OF THE SAN JUAN COAL PLANT?

A. PNM estimates the 2023 annual retail revenue requirement for the 280 MW of Pinon Gas Plant to be $33.0 million. Please see PNM Exhibit HEM-16. The retail revenue requirement includes a return on rate base, utilizing PNM's most currently approved WACC, including net plant and associated ADIT, depreciation expense, gas transportation, O&M, property taxes, income taxes and revenue tax.

Q. WHAT IS THE ESTIMATED COST OF THE 280 MW PINON GAS PLANT REPLACEMENT RESOURCE?

A. Construction and construction-related costs are estimated to be $190.9 million, including AFUDC of $12.0 million calculated using the formula prescribed in the FERC Uniform System of Accounts. Actual AFUDC rates will be calculated

based on actual capital costs as funds are expended on the project. A detailed description of the construction and construction-related costs is provided in the testimony of PNM Witness Fallgren.

Q. WHAT IS THE USEFUL LIFE USED FOR MODELING DEPRECIATION EXPENSE FOR THE 280 MW OF PINON GAS PLANT REPLACEMENT RESOURCE?

A. PNM has modeled an 18-year useful life when calculating depreciation expense in order to model the retirement of the new gas generation by 2040.

Q. WHAT RATE TREATMENT IS PNM REQUESTING FOR THE 280 MW PINON GAS PLANT REPLACEMENT RESOURCE?

A. PNM is requesting that the Commission grant PNM a CCN to construct, own and operate the plant and authorize PNM to include the actual cost of the plant up to the certificated estimated cost of $190.9 million in PNM's total rate base in future ratemaking proceedings as the capital cost for the facility. PNM is requesting authority to recover in future ratemaking proceedings the actual operating expenses incurred for O&M, property taxes, gas transportation costs, and depreciation expenses for the 280 MW Pinon Gas Plant. PNM estimates that these costs in 2023 will total $17.0 million. O&M expenses include the materials and services necessary to operate the facility as discussed in more detail by PNM Witness Fallgren. Property taxes were estimated based on the current property tax rate of 2.45%. Gas transportation costs were estimated based on a cost of $0.150

per MMBtu and an assumed use of 71,400 MMBtu per day, as discussed by PNM Witness Fallgren. Depreciation expense was estimated using an 18-year useful life.

Q. HOW WILL PNM RECOVER THE COST OF FUEL USED BY THE 280 MW PINON GAS PLANT REPLACEMENT RESOURCE?

A. PNM will recover the fuel costs incurred to operate the 280MW Pinon Gas Plant through PNM's Fuel & Purchase Power Cost Adjustment Clause ("FPPCAC") pursuant to 17.3.550 NMAC.

Q. WHAT IS THE 2023 ANNUAL REVENUE REQUIREMENT FOR THE ZAMORA 30 MW UTILITY-OWNED BATTERY STORAGE REPLACEMENT RESOURCE THAT PNM IS PROPOSING TO REPLACE A PORTION OF THE SAN JUAN COAL PLANT?

A. PNM estimates the 2023 annual retail revenue requirement for the Zamora 30 MW battery storage facility to be $5.9 million. Please see PNM Exhibit HEM-17. The revenue requirements include a return on rate base, utilizing PNM's most currently approved WACC, including net plant and associated ADIT, depreciation expense based on a 20-year useful life O&M, property taxes, income taxes and revenue tax.

Q. WHAT IS THE ESTIMATED COST OF THE ZAMORA 30 MW BATTERY STORAGE FACILITY REPLACEMENT RESOURCE?

A. Construction and construction-related costs are estimated to be $39.0 million, including AFUDC of $1.3 million calculated using the formula prescribed in the FERC Uniform System of Accounts. Actual AFUDC rates will be calculated based on actual capital costs as funds are expended on the project. A detailed description of the construction and construction-related costs is provided in the testimony of PNM Witness Fallgren.

Q. WHAT RATE TREATMENT IS PNM REQUESTING FOR THE ZAMORA 30 MW BATTERY STORAGE FACILITY REPLACEMENT RESOURCE?

A. PNM is requesting that the Commission grant PNM a CCN to construct, own and operate the battery storage facility and authorize PNM to include the actual cost of the facility up to the certificated estimated cost of $39.0 million in PNM's total rate base in future ratemaking proceedings as the capital cost for the facility.

PNM is requesting authority to recover in future ratemaking proceedings the actual operating expenses incurred for O&M, property taxes, and depreciation expenses for the Zamora 30 MW battery storage facility. PNM estimates that these costs in 2023 will total $2.7 million. O&M expenses include the materials and services necessary to operate the facility as discussed in more detail by PNM Witness Fallgren. Property taxes were estimated based on the current property tax

rate of 3.3%. Depreciation expenses were estimated based on a 20-year useful life.

Q. WHAT IS THE 2023 ANNUAL REVENUE REQUIREMENT FOR THE SANDIA 40 MW UTILITY-OWNED BATTERY STORAGE REPLACEMENT RESOURCES PNM IS PROPOSING TO REPLACE A PORTION OF THE SAN JUAN COAL PLANT?

A. PNM estimates the 2023 annual retail revenue requirement for the Sandia 40 MW battery storage facility to be $6.9 million. Please see PNM Exhibit HEM-18. The retail revenue requirement includes a return on rate base, utilizing PNM's most currently approved WACC, including net plant and associated ADIT, depreciation expense based on a 20-year useful life O&M, property taxes, income taxes and revenue tax.

Q. WHAT IS THE ESTIMATED COST OF THE SANDIA 40 MW BATTERY STORAGE FACILITY REPLACEMENT RESOURCE?

A. Construction and construction-related costs are estimated to be $48.9 million, including AFUDC of $1.6 million calculated using the formula prescribed in the FERC Uniform System of Accounts. Actual AFUDC rates will be calculated based on actual capital costs as funds are expended on the project. A detailed description of the construction and construction-related costs is provided in the testimony of PNM Witness Fallgren.

Q. WHAT RATE TREATMENT IS PNM REQUESTING FOR THE SANDIA 40 MW BATTERY STORAGE FACILITY REPLACEMENT RESOURCE?

A. PNM is requesting that the Commission grant PNM a CCN to construct, own and operate the plant and authorize PNM to include the actual cost of the plant up to the certificated estimated cost of $48.9 million in PNM's total rate base in future ratemaking proceedings as the capital cost for the facility. PNM is requesting authority to recover in future ratemaking proceedings the actual operating expenses incurred for O&M, property taxes, and depreciation expenses for the Sandia 40 MW battery storage facility. PNM estimates that these costs in 2023 will total $3.3 million. O&M expenses include the materials and services necessary to operate the facility as discussed in more detail by PNM Witness Fallgren. Property taxes were estimated based on the current property tax rate of 3.3%. Depreciation expense was estimated using a 20-year useful life.

Q. WHAT COST OF CAPITAL DID PNM USE IN CALCULATING THE RETURN COMPONENT OF THE REVENUE REQUIREMENTS FOR THE OWNED REPLACEMENT POWER IN SCENARIO 1?

A. PNM used the capital structure and cost of capital that was used in PNM's cost of service study in NMPRC Case No. 16-00276-UT as shown in PNM Table HEM-10.

PNM Table HEM-10
Schedule A-5 - Commission Final Order
Summary of Total Capitalization and the Weighted Average Cost of Capital
Test Period Ending 12/31/2018

Line No.	Capital Component	Total Capitalization Test Period	Percentage of Total Capitalization	Capital Component Cost	Weighted Average Cost
1	Long Term Debt	1,465,870	50.00%	4.86%	2.43%
2	Preferred Stock	11,529	0.39%	4.62%	0.02%
3	Common Equity	1,454,341	49.61%	9.575%	4.75%
4	Total	2,931,739	100.00%		7.20%
				Tax Rate	25.40%
					Tax gross up
				Debt	2.43%
				Preferred	0.02%
				Common	6.37%
				Total	8.81%

Q. IS PNM ASKING THE COMMISSION TO DETERMINE THE SPECIFIC CAPITAL STRUCTURE AND COST COMPONENTS USED IN THE WACC CALCULATION IN THIS CASE?

A. No. The capital structure and cost components used in the WACC calculation are for the purpose of illustrating the potential impact on revenue requirements resulting from the construction of the 280 MW Pinon Gas Plant and 70 MW of utility-owned battery storage. The WACC to be actually used to establish revenue requirements and set rates will be determined in future ratemaking proceedings.

Q. PLEASE SUMMARIZE THE 2023 NON-FUEL REVENUE REQUIREMENTS RELATED TO OWNED RESOURCES INCLUDED IN SCENARIO 1?

A. Please see PNM Table HEM-11 for a breakout of the 2023 non-fuel revenue requirement related to the utility-owned replacement resources. In addition, PNM has included the retail revenue requirement related to the required transmission network upgrades associated with the Arroyo Solar/Battery PPA. I discuss the transmission network upgrades associated with the Arroyo Solar/Battery PPA later in my testimony.

PNM Table HEM-11
2023 New Owned Resources - Non-Fuel Included in Scenario 1
$ in millions

		Total 2023 Retail Revenue Requirement	PNM Exhibit Reference
1	280 MW Pinon Gas Plant	33.0	HEM-16
2	40 MW Sandia	6.9	HEM-18
3	30 MW Zamora	5.9	HEM-17
4	Transmission Arroyo Solar Project PPA	1.3	HEM-20
5	Total	47.1	

Q. PLEASE SUMMARIZE THE RATEMAKING PRINCIPLES AND TREATMENT THAT PNM IS REQUESTING FOR THE 280 MW GAS AND BATTERY STORAGE FACILITIES.

A. PNM is requesting that the Commission establish a Certificated Estimated Cost, including AFUDC, of $190.9 million for the proposed 280 MW Pinon Gas Plant, $39.0 million for the proposed Zamora 30 MW battery storage facility and $48.9

million for the proposed Sandia 40 MW battery storage facility, in accordance with Rule 17.3.580 NMAC, and to authorize PNM, pursuant to NMSA 1978, 62-9-1(B), to include the actual cost of construction, up to the Certificated Estimated Cost, in total company rate base in future ratemaking proceedings as the capital cost for the facility. PNM is also requesting that the Commission authorize PNM to recover in future ratemaking proceedings the reasonable costs above of O&M, property taxes, gas transportation and associated depreciation expenses.

C. Revenue Requirements for PPAs in Scenario 1

Q. WHAT IS THE 2023 REVENUE REQUIREMENT FOR THE ARROYO 300 MW OF PPA SOLAR GENERATION PAIRED WITH THE40 MW OF BATTERY STORAGE REPLACEMENT RESOURCES PNM IS PROPOSING TO REPLACE THE SAN JUAN COAL PLANT?

A. PNM estimates the 2023 retail revenue requirement for the Arroyo 300 MW PPA solar generation paired with 40 MW of battery storage to be $18.8 million. The revenue requirement includes the purchase of energy from the solar developer at the contracted price of $18.65/MWh and capacity payment for the 40 MW of battery storage at $7.46/kW-month. Please see PNM Exhibit HEM-19 and the direct testimony of PNM Witness Fallgren for further detail on the 300 MW solar and 40 MW battery PPA.

Q. WHAT IS THE RETAIL REVENUE REQUIREMENT FOR TRANSMISSION NETWORK UPGRADES ASSOCIATED WITH THE ARROYO 300MW OF PPA SOLAR GENERATION PAIRED WITH THE 40MW OF BATTERY STORAGE?

A. As discussed by PNM Witness Mechenbier, PNM estimates it will need to construct transmission network upgrades, estimated at $20 million, associated with this PPA. The 2023 retail revenue requirement for these upgrades is estimated to be $1.3 million. Please see PNM Exhibit HEM-20 for more detail.

Q. IS PNM REQUESTING COMMISSION APPROVAL FOR THESE TRANSMISSION UPGRADES AS PART OF THIS CONSOLIDATED APPLICATION?

A. Network upgrades are generally recovered through standard ratemaking allocation of the transmission system. PNM is providing the revenue requirement for the transmission upgrades associated with these investments for the PPAs to determine the retail customer impacts in 2023 and has been included in PNM Table HEM-1.

Q. WHAT IS THE 2023 REVENUE REQUIREMENT FOR THE JICARILLA 50 MW OF PPA SOLAR GENERATION PAIRED WITH THE 20 MW OF BATTERY STORAGE REPLACEMENT RESOURCES PNM IS PROPOSING TO REPLACE THE SAN JUAN COAL PLANT?

A. PNM estimates the 2023 retail revenue requirement for the Jicarilla 50 MW PPA solar generation paired with 20 MW of battery storage to be $5.1 million. The revenue requirement includes the purchase of energy from the solar developer at the contracted price of $19.73/MWh and capacity payment for the 20 MW of battery storage at $9.97/kW-month. Please see PNM Exhibit HEM-21 and the direct testimony of PNM Witness Fallgren for further detail on the 50 MW solar and 20 MW battery PPA.

Q. WHAT PROPOSED RATEMAKNG IS PNM SEEKING IN REGARD TO THE PPAS INCLUDED IN SCENARIO 1?

A. PNM is proposing that the energy costs under the PPAs will be recovered through PNM's FPPCAC. PNM is proposing that the demand charges under the PPAs, initially flow through PNM's FPPCAC, until such time that PNM reflects the abandonment of SJGS in its base rates. At that time, PNM proposes the demand charges of the PPAs will be recovered through its base rates and not through its FPPCAC.

X. SUMMARY OF OTHER SCENARIOS

Q. PLEASE SUMMARIZE THE REVENUE REQUIREMENT IMPACTS FOR THE OTHER SCENARIOS DISCUSSED BY PNM WITHNESS FALLGREN.

A. As described by PNM Witness Fallgren, in addition to Scenario 1, PNM analyzed three other scenarios. Please see PNM Table HEM-12 for a summary of customer impacts in 2023 based on the various resource portfolios reflected in each of the additional scenarios described by PNM Witness Fallgren. As discussed in more detail by PNM Witness Phillips, although the 2023 revenue requirements for Scenario 1, 2 and 3 are relatively close, over the 20-year planning horizon, Scenario 1 results in the preferred option for customers.

PNM Table HEM-12
Summary of Impacts to 2023 Revenue Requirement for Scenarios*

$ in millions

		Scenario 1	Scenario 2	Scenario 3	Scenario 4
1	Savings from Closure of San Juan coal plant- Non Fuel	(94)	(94)	(94)	(94)
2	Energy Transition Charge – Securitization	23	23	23	23
3	Other Costs Not Included in Energy Transition Charge	(11)	(11)	(11)	(11)
4	2023 New Owned Resources - Non-Fuel	47	58	26	-
5	Fuel Costs/(Savings), net, due to change in resources	(49)	(56)	(26)	94
6	Net, 2023 Revenue Requirement Impacts (Savings)/Cost	(83)	(79)	(81)	12

* Please see the direct testimony of PNM Witness Fallgren and Phillips for the complete analysis and evaluation of each scenario

XI. CONCLUSION

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

GCG#525660

Resume of Henry E. Monroy

PNM Exhibit HEM-1

Is contained in the following 3 pages.

HENRY E. MONROY
EDUCATIONAL AND PROFESSIONAL SUMMARY

Name: Henry E. Monroy

Address: PNM Resources Inc.
MS 0915
414 Silver SW
Albuquerque, NM 87102

Position: Controller, Utility Operations

Education: Bachelor of Accountancy, New Mexico State University, 2001
Certified Public Accountant in the State of New Mexico, December 2012

Employment: Employed by PNMR Services Company since 2003.
Positions held within the Company include:

Controller, Utility Operations
Director, Budget, Cost of Service and General Accounting
Director, Cost of Service and Audit Services
Director, Cost of Service and Corporate Budget
Director, Utility Accounting
Manager, Cost of Service
Senior Manager, Derivative Accounting
Manager, Energy Analysis and Accounting
Project Manager
Senior Accountant

Testimony Filed:

- In the Matter of the Application of Public Service Company of New Mexico for Revision of its Retail Electric Rates pursuant to Advice Notice No. 352, NMPRC Case No. 08-00273-UT, filed September 22, 2008.

- In the Matter of Texas-New Mexico Power Company's Request for Approval of an Advance Metering System (AMS) Deployment and AMS Surcharge, PUCT Docket No. 38036, filed May, 2010.

- In the Matter of the Application of Public Service Company of New Mexico for the Abandonment and Decertification of the Generating Station in Las Vegas, New Mexico, NMPRC Case No. 10-00264-UT, filed August 30, 2010.

- Initial Filing of PNM to Revise Sheets in its OATT, Coordination Tariff, and GFAs Reflecting Implementation of Transmission Formula Rate, FERC Docket Nos. ER13-685-000, ER13-687-000 and ER13-690-000, filed December 2012.

- In the Matter of Public Service Company of New Mexico's Renewable Energy Portfolio Procurement Plan for 2014 and Proposed 2014 Rider Rate Under Rate Rider No. 36, NMPRC Case No. 13-00183-UT, filed June 1, 2013.

- In the Matter of the Application of Public Service Company of New Mexico for Continued Use of Fuel and Purchased Power Cost Adjustment Clause, NMPRC Case No. 13-00187-UT, filed May 28, 2013.

- In the Matter of Application of PNM for Approval to Abandon San Juan Generating Station Units 2 and 3, Issuance of CCNs for Replacement Power Resources, Issuance of Accounting Order and Determination of Ratemaking Principles and Treatment, NMPRC Case No. 13-00390-UT, filed December 20, 2013.

- In the Matter of the Application of PNM for Approval of Renewable Energy Rider No. 36 Pursuant to Advice Notice No. 439 and for Variances from Certain Filing Requirements, NMPRC Case No. 12-00007-UT, filed February 28, 2014.

- In the Matter of Public Service Company of New Mexico's Application for a Certificate of Public Convenience and Necessity and Related Approvals for the La Luz Energy Center, NMPRC Case No. 13-00175-UT, filed March 21, 2014.

- In the Matter of Public Service Company of New Mexico's Renewable Energy Portfolio Procurement Plan for 2015 and Proposed 2015 Rider Rate Under Rate Rider No. 36, NMPRC Case No. 14-00158-UT, filed June 2, 2014.

- In the Matter of the Application of Public Service Company of New Mexico for Revision of its Retail Electric Rates pursuant to Advice Notice No. 507, NMPRC Case No. 14-00332-UT, filed December 11, 2014.

- In the Matter of the Application of PNM for Approval of Renewable Energy Rider No. 36 Pursuant to Advice Notice No. 439 and for Variances from Certain Filing Requirements, NMPRC Case No. 12-00007-UT, filed February 27, 2015.

- In the Matter of Public Service Company of New Mexico's Renewable Energy Portfolio Procurement Plan for 2016 and Proposed 2016 Rider Rate Under Rate Rider No. 36, NMPRC Case No. 15-00166-UT, filed June 1, 2015.

- In the Matter of Public Service Company of New Mexico's Application for a Certificate of Public Convenience and Necessity and Related Approvals for the San Juan Gas Plant, NMPRC Case No. 15-00205-UT, filed June 30, 2015.

- In the Matter of the Application of Public Service Company of New Mexico for Revision of its Retail Electric Rates Pursuant to Advice Notice No. 513, NMPRC Case No. 15-00261-UT, filed August 27, 2015.

- In the Matter of the Application of Public Service Company of New Mexico for Prior Approval of the Advanced Metering Infrastructure Project, Determination of Ratemaking Principles and Treatment, and Issuance of Related Accounting Orders, Case No. 15-00312-UT, filed February 26, 2016.

- In the Matter of Public Service Company of New Mexico's Application for a Certificate of Public Convenience and Necessity and Related Approvals for an 80MW Gas-Fired Generating Plant Located at the San Juan Generating Station, NMPRC Case No. 16-00105-UT, filed April 26, 2016.

- In the Matter of the Application of Public Service Company of New Mexico for Revision of its Retail Electric Rates Pursuant to Advice Notice No. 533, NMPRC Case No. 16-00276-UT, filed December 7, 2016.

- In the Matter of Public Service Company of New Mexico's Application for Approval of its Renewable Energy Act Plan for 2018 and Proposed 2018 Rider Rate Under Rate Rider No. 36, NMPRC Case No. 17-00129-UT, filed June 1, 2017.

- In the Matter of the Application of Texas-New Mexico Power Company for Interim Update of Wholesale Transmission Rates, PUCT Docket No. 47422, filed July 19, 2017.

- In the Matter of Public Service Company of New Mexico's Application for Approval Pursuant to 17 .9 .551 NMAC of Three Purchased Power Agreements in Accordance with Special Service Contract with Facebook Inc., Case No. 18-00009-UT, filed January 17, 2018.

- In the Matter of Public Service Company of New Mexico's Application for a Continued use of its Fuel and Purchased Power Cost Adjustment Clause, Case No.18-00096-UT, filed April 23, 2018.

- In the Matter of Public Service Company of New Mexico's Petition for Approval to Acquire the Western Spirit 345 kV Transmission Project, Case No. 19-00129-UT, filed May 10, 2019.

- Affidavit in Support of Public Service Company of New Mexico's Section 205 Filing for the Western Spirit Project. FERC Docket No. ER19-1824. Filed May 10, 2019

PNM Securitization vs Traditional Recovery

PNM Exhibit HEM-2

Is contained in the following 1 page.

	A	B	C	D	E	F
1	**PNM Exhibit HEM-2**					
2	**PNM Securitization vs Traditional Recovery**					
3	*($ in millions)*					
4						
5			**Securitization**	**Traditional Recovery**	**(Savings)/Cost**	
6			Revenue Requirement	Revenue Requirement	Revenue Requirement	
7		**Recovery of Abandonment Costs**	2023	2023	2023	
8		Return On and Return of Abandonment Costs	23	45	(22)	
9		ADIT related to Regulatory Asset for Abandonment Costs	(13)	(12)	(0)	
10		Recovery of One-Time Costs	1	1	-	
11		Ongoing O&M (Decommomissioning, Property tax, insurance, other)	1	1	-	
12		Total	12	34	(22)	
13						
14	**Assumptions:**					
15	1	Return on and Return of Abandonment costs				
16		- Securitization includes annual bond payment recovered from customers through Energy Transition Charge				
17		- Traditional recovery includes full return on and return of regulatory asset				
18		+ Regulatory asset includes undepreciated investment of San Juan coal plant, PNM severances, job training, coal mine reclamation and plant decommissioning				
19						
20	2	ADIT related Abandonment of San Juan coal plant				
21		- Securitization includes ADIT calculated by multiplying average bond principal balance times the combined statutory tax rate of 25.4%				
22		- Traditional recovery includes ADIT calculated by multiplying average regulatory asset balance times the combined statutory tax rate of 25.4%				
23		- Both recovery scenarios include ADIT and amortization of Excess Deferred Income Tax Liability associated with the San Juan coal plant.				
24						
25	3	Recovery of One-Time Costs				
26		- Please see PNM Exhibit HEM-11				
27						
28	4	Ongoing O&M (Decommissioning, Property tax, insurance, other)				
29		- Both recovery scenarios account for ongoing O&M associated with maintenance, property tax and property insurance premiums				

Estimated Costs to Obtain Abandonment Order

PNM Exhibit HEM-3

Is contained in the following 1 page.

	A	B	C	D
1	**PNM Exhibit HEM-3**			
2	**Estimated Costs to Obtain Abandonment Order**			
3				
4	**Replacement Resources**	**Costs Incurred As of April 30, 2019**	**Estimated Remaining Costs to complete**	**Estimate of Total Costs**
5				
6	**Outside Legal Counsel:**			
7	Troutman	117,643	632,357	750,000
8	Miller Stravert	108,403	691,597	800,000
9	Bean & Associates	3,076	-	3,076
10	Wilkinson	13,472	75,000	88,472
11	Total Outside Legal Counsel	242,594	1,398,954	1,641,548
12				
13	**Outside Consultants:**			
14	Ascend	355,226	30,666	385,893
15	Horizons	-	105,000	105,000
16	Total Outside Consultants	355,226	135,666	490,893
17				
18	**Administrative Cost:**			
19	Travel and Administrative Expenses	643	410,000	410,643
20	Graphics/ Postage	1,315	100,000	101,315
21	Courier Service	237	-	237
22	Total Administrative Cost	2,195	510,000	512,195
23				
24	**Total Estimated Costs to Obtain Abandonment Order**	**600,015**	**2,044,620**	**2,644,636**

San Juan Coal Mine Reclamation

PNM Exhibit HEM-4

Is contained in the following 4 pages.

San Juan Coal Mine Reclamation – 2053 Study (Pre-2017YE) Cash Flows

October 2018

Table C.13: Pre-2017YE Costs by Major Category by Year (US$000s)

Project No. 1539815

Year	La Plata		San Juan Mine								Grand Total SJCC
	La Plata Mine	La Plata Haulroad	Monitoring and Maintenance	Pinon Pit	North Juniper	South Juniper	Underground Mine	Mine Facilities	Shumway Bridge	San Juan Total	
2018	$433	$54	$368	$3,901	$111	$1,761	$378	$31	$0	$6,549	$7,036
2019	$493	$61	$464	$2,248	$111	$278	$86	$31	$0	$3,219	$3,772
2020	$492	$846	$412	$2,430	$111	$278	$246	$31	$0	$3,509	$4,848
2021	$555	$0	$470	$1,666	$111	$352	$498	$31	$0	$3,128	$3,683
2022	$739	$0	$669	$725	$111	$286	$71	$31	$0	$1,894	$2,633
2023	$678	$0	$662	$439	$111	$278	$410	$31	$0	$1,932	$2,611
2024	$712	$0	$703	$116	$111	$278	$336	$31	$0	$1,575	$2,287
2025	$479	$0	$475	$109	$111	$278	$245	$31	$0	$1,250	$1,729
2026	$470	$0	$461	$104	$111	$278	$248	$31	$0	$1,234	$1,704
2027	$482	$0	$479	$95	$111	$278	$144	$31	$0	$1,137	$1,619
2028	$373	$0	$489	$52	$111	$278	$151	$31	$0	$1,112	$1,486
2029	$0	$0	$559	$36	$111	$278	$195	$31	$0	$1,210	$1,210
2030	$0	$0	$560	$28	$111	$278	$197	$31	$0	$1,206	$1,206
2031	$0	$0	$561	$27	$111	$278	$197	$31	$0	$1,205	$1,205
2032	$0	$0	$561	$27	$111	$278	$197	$31	$0	$1,205	$1,205
2033	$0	$0	$558	$3	$111	$278	$196	$31	$0	$1,178	$1,178
2034	$0	$0	$559	$0	$111	$278	$196	$31	$0	$1,175	$1,175
2035	$0	$0	$559	$0	$111	$278	$196	$31	$0	$1,175	$1,175
2036	$0	$0	$559	$0	$111	$278	$196	$31	$0	$1,175	$1,175
2037	$0	$0	$559	$0	$111	$278	$196	$31	$0	$1,175	$1,175
2038	$0	$0	$559	$0	$111	$278	$196	$31	$0	$1,175	$1,175
2039	$0	$0	$559	$0	$111	$278	$196	$31	$0	$1,175	$1,175
2040	$0	$0	$559	$0	$111	$278	$196	$31	$0	$1,175	$1,175
2041	$0	$0	$559	$0	$111	$278	$196	$31	$0	$1,175	$1,175
2042	$0	$0	$559	$0	$111	$278	$196	$31	$0	$1,175	$1,175
2043	$0	$0	$559	$0	$111	$278	$196	$31	$0	$1,175	$1,175
2044	$0	$0	$559	$0	$111	$278	$196	$31	$0	$1,175	$1,175
2045	$0	$0	$559	$0	$111	$278	$196	$31	$0	$1,175	$1,175
2046	$0	$0	$559	$0	$111	$278	$196	$31	$0	$1,175	$1,175
2047	$0	$0	$559	$0	$111	$278	$196	$31	$0	$1,175	$1,175
2048	$0	$0	$559	$0	$111	$278	$196	$31	$0	$1,175	$1,175
2049	$0	$0	$559	$0	$111	$278	$196	$31	$0	$1,175	$1,175
2050	$0	$0	$348	$0	$111	$8,482	$58	$31	$0	$9,030	$9,030
2051	$0	$0	$567	$0	$111	$1,588	$201	$31	$0	$2,498	$2,498
2052	$0	$0	$628	$0	$111	$1,252	$241	$31	$0	$2,265	$2,265
2053	$0	$0	$475	$0	$111	$2,408	$141	$31	$0	$3,166	$3,166
2054	$0	$0	$340	$0	$15,890	$6,573	$3,758	$2,286	$0	$28,848	$28,848
2055	$0	$0	$344	$0	$22,335	$2,610	$132	$93	$0	$25,514	$25,514
2056	$0	$0	$341	$0	$23,193	$1,302	$112	$3,283	$0	$28,232	$28,232
2057	$0	$0	$353	$0	$356	$873	$41	$1,708	$0	$3,331	$3,331
2058	$0	$0	$397	$0	$161	$432	$81	$43	$0	$1,114	$1,114
2059	$0	$0	$396	$0	$144	$365	$39	$37	$0	$981	$981
2060	$0	$0	$386	$0	$157	$358	$19	$74	$0	$994	$994
2061	$0	$0	$386	$0	$141	$370	$55	$37	$0	$989	$989
2062	$0	$0	$351	$0	$68	$167	$14	$16	$0	$616	$616
2063	$0	$0	$344	$0	$71	$130	$14	$47	$0	$606	$606
2064	$0	$0	$347	$0	$50	$125	$1	$14	$0	$537	$537
2065	$0	$0	$347	$0	$50	$125	$0	$14	$0	$536	$536
2066	$0	$0	$0	$0	$5	$282	$0	$740	$189	$1,217	$1,217
Total	$5,906	$961	$23,739	$12,005	$66,631	$37,903	$11,833	$9,512	$189	$161,811	$168,678

San Juan Coal Mine Reclamation – 2053 Study (Post-2017YE) Cash Flows

October 2018

Table C.14: Post-2017YE Costs by Major Category by Year (US$000s)

Project No. 1539815

Year	La Plata		San Juan Mine								Grand Total SJCC
	La Plata Mine	La Plata Haulroad	Monitoring and Maintenance	Pinon Pit	North Juniper	South Juniper	Underground Mine	Mine Facilities	Shumway Bridge	San Juan Total	
2018	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2019	$0	$0	$0	$0	$0	$0	$22	$0	$0	$22	$22
2020	$0	$0	$0	$0	$0	$0	$22	$0	$0	$22	$22
2021	$0	$0	$0	$0	$0	$0	$38	$0	$0	$38	$38
2022	$0	$0	$0	$0	$0	$0	$27	$0	$0	$27	$27
2023	$0	$0	$0	$0	$0	$0	$58	$0	$0	$58	$58
2024	$0	$0	$0	$0	$0	$0	$166	$0	$0	$166	$166
2025	$0	$0	$0	$0	$0	$0	$108	$0	$0	$108	$108
2026	$0	$0	$0	$0	$0	$0	$197	$0	$0	$197	$197
2027	$0	$0	$0	$0	$0	$0	$201	$0	$0	$201	$201
2028	$0	$0	$0	$0	$0	$0	$201	$0	$0	$201	$201
2029	$0	$0	$0	$0	$0	$0	$198	$0	$0	$198	$198
2030	$0	$0	$0	$0	$0	$0	$201	$0	$0	$201	$201
2031	$0	$0	$0	$0	$0	$0	$200	$0	$0	$200	$200
2032	$0	$0	$0	$0	$0	$0	$200	$0	$0	$200	$200
2033	$0	$0	$0	$0	$0	$0	$201	$0	$0	$201	$201
2034	$0	$0	$0	$0	$0	$0	$200	$0	$0	$200	$200
2035	$0	$0	$0	$0	$0	$0	$200	$0	$0	$200	$200
2036	$0	$0	$0	$0	$0	$0	$200	$0	$0	$200	$200
2037	$0	$0	$0	$0	$0	$0	$200	$0	$0	$200	$200
2038	$0	$0	$0	$0	$0	$0	$200	$0	$0	$200	$200
2039	$0	$0	$0	$0	$0	$0	$200	$0	$0	$200	$200
2040	$0	$0	$0	$0	$0	$0	$200	$0	$0	$200	$200
2041	$0	$0	$0	$0	$0	$0	$200	$0	$0	$200	$200
2042	$0	$0	$0	$0	$0	$0	$200	$0	$0	$200	$200
2043	$0	$0	$0	$0	$0	$0	$200	$0	$0	$200	$200
2044	$0	$0	$0	$0	$0	$0	$200	$0	$0	$200	$200
2045	$0	$0	$0	$0	$0	$0	$200	$0	$0	$200	$200
2046	$0	$0	$0	$0	$0	$0	$200	$0	$0	$200	$200
2047	$0	$0	$0	$0	$0	$0	$200	$0	$0	$200	$200
2048	$0	$0	$0	$0	$0	$0	$200	$0	$0	$200	$200
2049	$0	$0	$0	$0	$0	$0	$200	$0	$0	$200	$200
2050	$0	$0	$0	$0	$0	$0	$200	$0	$0	$200	$200
2051	$0	$0	$0	$0	$0	$0	$200	$0	$0	$200	$200
2052	$0	$0	$0	$0	$0	$0	$200	$0	$0	$200	$200
2053	$0	$0	$0	$0	$0	$0	$200	$0	$0	$200	$200
2054	$0	$0	$0	$0	$0	$0	$342	$0	$0	$342	$342
2055	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2056	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2057	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2058	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2059	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2060	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2061	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2062	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2063	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2064	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2065	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2066	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total	$0	$0	$0	$0	$0	$0	$6,387	$0	$0	$6,387	$6,387

San Juan Coal Mine Reclamation – 2022 Study (Pre-2017YE) Cash Flows

June 2018

Table C.12: Pre-2017YE Costs by Major Category by Year (US$000s)

Project No. 1779053

Year	La Plata		San Juan Mine								Grand Total SJCC
	La Plata Mine	La Plata Haulroad	Monitoring and Maintenance	Pinon Pit	North Juniper	South Juniper	Underground Mine	Mine Facilities	Shumway Bridge	San Juan Total	
2018	$434	$69	$368	$3,902	$129	$1,737	$336	$31	$0	**$6,503**	**$7,006**
2019	$625	$90	$577	$2,696	$129	$365	$108	$31	$0	**$3,906**	**$4,621**
2020	$542	$938	$449	$2,631	$129	$1,535	$277	$31	$0	**$5,052**	**$6,533**
2021	$520	$3	$429	$1,582	$129	$4,007	$487	$31	$0	**$6,664**	**$7,188**
2022H1	$275	$0	$194	$496	$129	$4,181	$40	$31	$0	**$5,070**	**$5,345**
2022H2	$170	$0	$174	$24	$404	$10,199	$87	$0	$0	**$10,889**	**$11,060**
2023	$446	$0	$348	$552	$398	$22,194	$3,113	$1,102	$0	**$27,708**	**$28,154**
2024	$448	$0	$349	$274	$388	$24,428	$574	$93	$0	**$26,107**	**$26,555**
2025	$422	$0	$329	$237	$9,389	$11,784	$95	$1,269	$0	**$23,104**	**$23,526**
2026	$422	$0	$328	$230	$10,627	$13,238	$147	$93	$0	**$24,664**	**$25,085**
2027	$422	$0	$329	$229	$19,506	$3,453	$135	$93	$0	**$23,745**	**$24,167**
2028	$273	$0	$331	$116	$13,225	$895	$41	$4,827	$0	**$19,435**	**$19,709**
2029	$0	$0	$529	$81	$452	$847	$36	$143	$0	**$2,087**	**$2,087**
2030	$0	$0	$422	$80	$190	$435	$55	$43	$0	**$1,225**	**$1,225**
2031	$0	$0	$411	$80	$190	$384	$20	$37	$0	**$1,123**	**$1,123**
2032	$0	$0	$411	$81	$199	$345	$14	$76	$0	**$1,125**	**$1,125**
2033	$0	$0	$408	$8	$165	$369	$15	$37	$0	**$1,003**	**$1,003**
2034	$0	$0	$360	$0	$95	$153	$14	$16	$0	**$638**	**$638**
2035	$0	$0	$350	$0	$92	$123	$1	$47	$0	**$613**	**$613**
2036	$0	$0	$355	$0	$61	$123	$0	$14	$0	**$552**	**$552**
2037	$0	$0	$355	$0	$61	$123	$0	$14	$0	**$552**	**$552**
2038	$0	$0	$327	$0	$67	$414	$0	$781	$196	**$1,786**	**$1,786**
Total	**$5,001**	**$1,101**	**$8,131**	**$13,298**	**$56,152**	**$101,333**	**$5,597**	**$8,843**	**$196**	**$193,551**	**$199,652**

San Juan Coal Mine Reclamation – 2022 Study (Post-2017YE) Cash Flows

June 2018

Table C.13: Post-2017YE Costs by Major Category by Year (US$000s)

Project No. 1779053

Year	La Plata		San Juan Mine								Grand Total SJCC
	La Plata Mine	La Plata Haulroad	Monitoring and Maintenance	Pinon Pit	North Juniper	South Juniper	Underground Mine	Mine Facilities	Shumway Bridge	San Juan Total	
2018	$0	$0	$0	$0	$0	$0	$21	$0	$0	**$21**	**$21**
2019	$0	$0	$0	$0	$0	$0	$21	$0	$0	**$21**	**$21**
2020	$0	$0	$0	$0	$0	$0	$21	$0	$0	**$21**	**$21**
2021	$0	$0	$0	$0	$0	$0	$21	$0	$0	**$21**	**$21**
2022H1	$0	$0	$0	$0	$0	$0	$11	$0	$0	**$11**	**$11**
2022H2	$0	$0	$0	$0	$0	$0	$21	$0	$0	**$21**	**$21**
2023	$0	$0	$0	$0	$0	$0	$357	$0	$0	**$357**	**$357**
2024	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**
2025	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**
2026	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**
2027	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**
2028	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**
2029	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**
2030	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**
2031	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**
2032	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**
2033	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**
2034	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**
2035	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**
2036	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**
2037	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**
2038	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**	**$0**
Total	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$473**	**$0**	**$0**	**$473**	**$473**

Coal Mine Reclamation Assumptions

PNM Exhibit HEM-5

Is contained in the following 1 page.

	A	B	C	D	E	F	G	H
1	**PNM Exhibit HEM-5**							
2	**Coal Mine Reclamation Assumptions**							
3								
4	Used to Develop Present Value of Reclamation Liability							
5								
6	*Measurement Date*	12/31/2018						
7								
8	*Escalation Rates Applied to Cash Flows (used, as applicable, on both 2022 Study and 2053 Study)*							
9	2018-2021	1.02%						
10	2022-2027	2.14%						
11	2028-2066	2.12%						
12								
13	*Discount Rate*	Rate		Term				
14	2053 Study	4.29%		30 yr.				
15	2022 Study	4.78%		20 yr.				

Schedule of Accretion and Depreciation Expense for Plant Decommissioning

PNM Exhibit HEM-6

Is contained in the following 1 page.

PNM Exhibit HEM-6

Schedule of Accretion and Depreciation Expense for Plant Decommissioning

(in millions)

			2014 Black & Veatch	2019 Burns & MCDonnell	Incremental	
ARO Liability at 4/30/19			9.0	9.0		
New Layer				12.8		
Accretion Expense -	5/1/19 - 12/31/19		0.3	0.6	0.3	
Accretion Expense -	2020		0.5	1.0	0.5	
Accretion Expense -	2021		0.5	1.1	0.6	
Accretion Expense -	1/1/22-6/30/22		0.3	0.6	0.3	
ARO Liability at 6/30/22			10.6	25.1	1.7	a
Accretion Expense -	7/1/22-12/31/22		0.3	0.5		
Accretion Expense -	2023		0.6	0.9		
Accretion Expense -	2024		0.6	0.5		
Accretion Expense -	2025		0.6	0.2		
Accretion Expense -	2026		0.7	0.2		
Accretion Expense -	2027		0.7	0.2		
Accretion Expense -	2028		0.7	0.2		
Accretion Expense -	2029		0.8	0.2		
Accretion Expense -	2030		0.8	0.2		
Accretion Expense -	2031		0.9	0.2		
Accretion Expense -	2032		0.9	0.2		
Accretion Expense -	2033		1.0	0.2		
Accretion Expense -	2034		1.0	0.2		
Accretion Expense -	2035		1.1	0.2		
Accretion Expense -	2036		1.1	0.2		
Accretion Expense -	2037		1.2	0.2		
Accretion Expense -	2038		1.2	0.3		
Accretion Expense -	2039		1.3	0.2		
Accretion Expense -	2040		1.4	0.1		
Accretion Expense -	2041		1.5			
Accretion Expense -	2042		1.5			
Accretion Expense -	2043		1.6			
Accretion Expense -	2044		1.7			
Accretion Expense -	2045		1.8			
Accretion Expense -	2046		1.9			
Accretion Expense -	2047		2			
Accretion Expense -	2048		2.1			
Accretion Expense -	2049		2.2			
Accretion Expense -	2050		2.3			
Accretion Expense -	2051		2.5			
Accretion Expense -	2052		2.6			
Accretion Expense -	2053		2.8			
		Final ARO liability	54.0	30.2		
Cash outflows						
Date 1	22-Jun			(0.8)		
Date 2	23-Jun			(9.8)		
Date 3	24-Jun			(10.6)		
Date 4	25-Jun			(2.3)		
Date 5	Jun-34			(0.8)		
Date 6	Jun-40			(5.9)		
Date 7	Dec-53		(54.0)			
		Total Cash Outflows	(54.0)	(30.2)		

		2014 Black & Veatch	2019 Burns & MCDonnell	Incremental	
ARC Asset at 4/30/19		5.1	5.1		
New Layer			12.8		
Depreciation Expense	5/1/19 - 12/31/19	(0.1)	(0.6)	0.5	
Depreciation Expense	2020	(0.1)	(0.8)	0.7	
Depreciation Expense	2021	(0.1)	(0.9)	0.8	
Depreciation Expense	1/1/22-6/30/22	(0.1)	(0.4)	0.3	
ARC Asset at 6/30/22		4.7	15.2	2.3	b

Proposed Recovery		
ARC Asset at 6/30/22		15.2
Incremental depreciation & amortization		4.0 a+b
Total dollars to collect		19.2

Assumptions	**Discount Rate**		
	Rate	**Term**	**Escalation Rate**
2014 Black & Veatch	4.60%	30	3.00%
2019 Burn & McDonnell (1)	4.43%	20	3.00%

(1) Based on 2019 dollars of $24.1 million as supported by PNM Witness Fallgren

PNM and PNMR Estimated Severance

PNM Exhibit HEM-7

Is contained in the following 1 page.

	A	B	C	D	E
1	**PNM Exhibit HEM-7**				
2	**PNM and PNMR Estimated Severance**				
3			**San Juan Coal Plant**	**PNMR Services**	
4		Total number of employees impacted	168	12	
5		Current union % split	73%	0%	
6		Union employees	123	-	
7		Non-union management employees	45	12	
8					
9		Average Salary 2018	$ 91,298	$ 91,298	
10		Current average start date	7/1/2002	7/1/2002	
11					
12		Union labor escalation 2018-2022	2.50%	2.50%	
13		Non-union labor escalation 2018-2022	3.00%	3.00%	
14		Number of escalation years	4	4	
15					
16		Average non-union salary in 2022	102,757	102,757	
17		Average union salary in 2022	100,776	100,776	
18		Average length of service at 06/2022 (yrs. employed)	20.1	20.1	
19					
20		Non-Union Severance Plan:			
21		Number of months of base salary benefit	5	5	
22		Addt'l week of base salary (= yrs. of service)	20.1	20.1	
23		Adder for 10-20 yrs. service	20%	20%	
24					
25		Union Severance Plan:			
26		Number of months of base salary benefit	4	4	
27		Addt'l week of base salary (= yrs. of service)	20.1	20.1	
28					
29					
30		Enhanced non-union, management severance benefits per FTE *(note 1)*	$ 99,042	$ 99,042	
31		Enhanced union severance benefits per FTE *(note 2)*	$ 72,546	$ 72,546	
32					
33		Employer Medicare	1.45%	1.45%	
34		Employer OASDI	6.20%	6.20%	
35					
36		Non-union, management severance pay *(Line 30 x Line 7)*	$ 4,456,874	$ 1,188,500	
37		Union severance pay *(Line 31 x Line 6)*	$ 8,923,125	$ -	
38		Payroll Taxes *(Line 36 + Line 37) x (Line 33 + Line 34)*	$ 1,023,570	$ 90,920	
39		6 Months of Benefits (Medical, Dental, Life) *(note 3)*	$ 1,031,270	$ 73,662	
40		Total Severance Costs	$ 15,434,840	**$ 1,353,082**	
41		PNM Share of San Juan coal plant (excluding 65MW of Unit 4)	58.7%	100%	
42		**Total PNM and PNMR Estimate**	**$ 9,055,775**	**$ 1,353,082**	**$ 10,408,857**
43					
44					
45					
46		Note 1: (Line 21 x line 16/12 + Line 22 x line 16/52) x (1 + line 23)			
47		Note 2 : (Line 26 x (line 17/12) + (line 27 x (line 17/52))			
48		Note 3 : Based on monthly cost of $1,023 for 6 months per employee			

Accounting Journal Entries Related to Securitization Financing - SPE

PNM Exhibit HEM-8

Is contained in the following 3 pages.

	A	B	C	D	E	F	G
1	**PNM Exhibit HEM-8**						
2	**Accounting Journal Entries Related to Securitization Financing - SPE**						
3							
4			**Account**	**Dr**	**Cr**	**Income Statement**	**Balance Sheet**
5							
6	**Entry #1 - Set-up of the SPE**						
7		- Establish initial capital subaccount at SPE.					
8							
9			Cash - Capital Subaccount	x			x
10			SPE Equity		x		x
11							
12	**Entry #2 - Issuance of Energy Transition Bonds**						
13		- Record the proceeds of the energy transition bonds.					
14							
15			Cash - General Subaccount	x			x
16			Upfront Bond Issuance Costs	x			x
17			Bonds Payable		x		x
18							
19	**Entry #3 - Purchase of Energy Transition Property**						
20		- Record the purchase of the energy transition property from PNM.					
21							
22			Energy Transition Property	x			x
23			Cash - General Subaccount		x		x
24							
25	**Entry #4 - Record revenues collected from customers and receipt of cash from PNM**						
26		- Entry to recognize revenue for amounts collected from customers.					
27							
28			Accounts Receivable from PNM	x			x
29			Revenues		x	x	
30							
31		- Entry to recognize cash received from PNM.					
32							
33			Cash - General Subaccount	x			x
34			Accounts Receivable from PNM		x		x
35							
36	**Entry #5 - Amortization of Energy Transition Property**						
37		- Monthly entry to record the amortization of the energy transition property.					
38							
39			Amortization Expense	x		x	
40			Energy Transition Property		x		x
41							

	A	B	C	D	E	F	G
1	**PNM Exhibit HEM-8**						
2	**Accounting Journal Entries Related to Securitization Financing - SPE**						
3							
4			**Account**	**Dr**	**Cr**	**Income Statement**	**Balance Sheet**
42							
43	**Entry #6 - Interest Expense on Energy Transition Bonds**						
44		- Monthly entry to record the interest expense on the energy transition bonds.					
45							
46			Interest Expense	x		x	
47			Interest Payable		x		x
48							
49	**Entry #7 - Amortization of Upfront Issuance Costs**						
50		- Monthly entry to amortize the upfront issuance costs related to the energy transition bonds.					
51							
52			Interest Expense	x		x	
53			Upfront Bond Issuance Costs		x		x
54							
55	**Entry #8 - Payment of Bond Principal and Interest**						
56		- Semi-annual payment of bond principal and interest.					
57							
58			Bonds Payable	x			x
59			Interest Payable	x			x
60			Cash - General Subaccount		x		x
61							
62	**Entry #9 -Ongoing operating and servicing costs**						
63		- Entry to record the operating and servicing fees of the SPE					
64							
65			Administrative and General Expense	x		x	
66			Cash - General Subaccount		x		x
67							
68			Servicing Fees - Billed by PNM	x		x	
69			Accounts Payable - PNM		x		x
70							
71			Accounts Payable - PNM	x			x
72			Cash - General Subaccount		x		x
73							

	A	B	C	D	E	F	G
1	**PNM Exhibit HEM-8**						
2	**Accounting Journal Entries Related to Securitization Financing - SPE**						
3							
4			**Account**	**Dr**	**Cr**	**Income Statement**	**Balance Sheet**
74							
75	**Entry #10 -Replenishment of Cash - Capital Account**						
76		- These entries are only needed if cash in the general subaccount is insufficient to make semi-annual bond and interest payable payments.					
77							
78		- Recognize bond and interest payment from Cash - Capital Subaccount, if necessary					
79							
80			Bonds Payable	x			x
81			Interest Payable	x			x
82			Cash - Capital Subaccount		x		x
83							
84		- Replenish Cash - Capital Subaccount through true-up mechanism of energy transition charge					
85							
86			Cash - Capital Subaccount	x			x
87			Cash - General Subaccount		x		x
88							
89	**Entry #11 - Record Earnings on Cash - Capital Subaccount held by SPE**						
90		- Record the collection of return on the Cash - Capital Investment component of the energy transition charge.					
91							
92			Cash - Capital Subaccount	x			x
93			Cash - General Subaccount		x		x
94							
95		- Record the cash dividend to PNM for return on the Cash - Capital Investment					
96							
97			SPE Equity	x			x
98			Cash - Capital Subaccount		x		x
99							
100	**Entry #12 - Record Excess Proceeds from Energy Transition Charge**						
101		- Record the excess proceeds from the energy transition charge remitted to the SPE after payments for principal, interest, and on-going servicing fees.					
102							
103			Cash - Excess Funds Subaccount	x			x
104			Cash - General Subaccount		x		x
105							
106							

Accounting Journal Entries Related to Securitization Financing - PNM

PNM Exhibit HEM-9

Is contained in the following 2 pages.

	A	B	C	D	E	F	G
1	**PNM Exhibit HEM-9**						
2	**Accounting Journal Entries Related to Securitization Financing - PNM**						
3							
4			**Account**	**Dr**	**Cr**	**Income Statement**	**Balance Sheet**
5							
6	**Entry #1 - Set-up of the SPE**						
7		- Initial funding of cash to establish the investment in the SPE					
8							
9			Investment in SPE	x			x
10			Cash		x		x
11							
12	**Entry #2 - Sale of Energy Transition Property to SPE**						
13		- Record the sale of energy transition property to the SPE.					
14							
15			Cash	x			x
16			Regulatory Asset - Undepreciated Investment		x		x
17			Regulatory Asset - Coal Mine Reclamation		x		x
18			Regulatory Asset - Plant Decommissioning		x		x
19			Regulatory Asset - Severance and Job Training - Paid in Advance		x		x
20			Regulatory Asset - State Agency Payments - Paid in Advance		x		x
21			Regulatory Asset - Changes in Law (If Any)		x		x
22			Liability - Remaining Severance and Job Training Payments		x		x
23			Liability - Remaining State Agency Payments		x		x
24							
25	**Entry #3 - Remaining Payment to State Agencies per Section 16 of ETA and Severance and Job Training for coal mine employees**						
26		- Record the payments to state agencies.					
27							
28			Liability - Severance and Job Training - Coal Mine	x			
29			Liability - State Agency Payments	x			x
30			Cash - General Account		x		x
31							
32	**Entry #4 - Record energy transition charges received from customers and transfer of cash to SPE**						
33		- Entry to recognize energy transition charges on customer bills. (Note1)					
34							
35			Customer Accounts Receivable	x			x
36			Payable to SPE		x		x
37							
38							
39		- Entry to record cash collected from customers					
40							
41			Cash	x			x
42			Customer Accounts Receivable		x		x
43							
44		- Entry to transfer cash collected to SPE for energy transition charge					
45							
46			Payable to SPE	x			x
47			Cash		x		x
48							

	A	B	C	D	E	F	G
1	**PNM Exhibit HEM-9**						
2	**Accounting Journal Entries Related to Securitization Financing - PNM**						
3							
4			**Account**	**Dr**	**Cr**	**Income Statement**	**Balance Sheet**
49							
50	**Entry #5 - Servicing Fees Charged to the SPE**						
51		- Entry to record servicing fees and costs billed to the SPE.					
52							
53			Accounts Receivable - SPE	x			x
54			Other Income (Note 2)		x	x	
55							
56			Cash Dividend from SPE	x			x
57			Accounts Receivable - SPE		x		x
58							
59							
60	**Entry #6 - Earnings on Investment in SPE**						
61		- Entry to record earnings on Cash - Capital Subaccount held by SPE that are dividend to PNM.					
62							
63			Investment in SPE	x			x
64			Other Income		x	x	
65							
66			Cash Dividend from SPE	x			x
67			Investment in SPE		x		x
68							
69			Note 1 - PNM will assess applicable GRT and franchise fees.				
70			Note 2 - PNM will include revenue collected from the SPE for servicing costs as a revenue credit in future cost of service studies				
71							
72							

ADIT Benefit Related to San Juan coal plant Abandonment

PNM Exhibit HEM-10

Is contained in the following 1 page.

	A	B	C
1	**PNM Exhibit HEM-10**		
2	ADIT Benefit Related to San Juan coal plant Abandonment		
3	*($ in millions)*		
4			
5			
6		**Recovery of Abandonment Costs**	**2023**
7		Average Principal Balance of the Energy Transition Bonds	$ 357
8		Combined Statutory Tax Rate	25.40%
9		ADIT (line 7 x line 8 x -1)	$ (91)
10		SJGS Related Excess Deferred Income Tax	$ (32)
11		Total ADIT 16-00276-UT Rate Base	$ (122)
12		Pre-Tax WACC	8.81%
13		Return on ADIT	$ (11)
14		Amortization of SJGS Related Excess Deferred Income Tax	$ (2)
15		Total ADIT Benefits Related to Abandonment of San Juan coal plant	$ (13)
16			
17		Assumptions:	
18		- Excess Deferred Income Tax balance at the end of 2022 will be amortized over	
19		the life of the bonds and excludes portions related to 132 MW of San Juan Unit 4	

One-Time Costs Related to San Juan coal plant not Recovered Through Energy Transition Charge

PNM Exhibit HEM-11

Is contained in the following 1 page.

	A	B	C	D	E
1	**PNM Exhibit HEM-11**				
2	**One-Time Costs Related to San Juan coal plant not Recovered Through Energy Transition Charge**				
3					
4		**Regulatory Asset for RFP and Regulatory Process Costs Allocated to PPA's**	**Regulatory Asset for Stranded Inventory**	**Regulatory Asset for Legal Costs**	**Total**
5	Return on Rate Base	$ 43,718	$ 329,723	$ 63,165	$ 436,607
6	Amortization	41,741	250,560	48,000	340,301
7	Income Taxes	10,382	77,976	14,938	103,297
8	Total 2023 Revenue Requirement	$ 95,841	$ 658,259	$ 126,103	$ 880,204

Carrying Charges on Payments in Advance of Energy Transition Bonds

PNM Exhibit HEM-12

Is contained in the following 1 page.

	A	B	C	D	E	F
1	**PNM Exhibit HEM-12**					
2	**Carrying Charges on Payments in Advance of Energy Transition Bonds**					
3						
4						
5	**Section 16 Payments (25% prefunding):**	2019	2020	2021	2022*	Total Incurred Carrying Charges
6	Spend @ 1/1/2021			4,951,467		
7	Accumulated Spend + Carrying Charge			4,951,467	5,307,973	
8	After Tax WACC			7.20%	7.20%	
9	Carrying Charge			356,506	191,087	547,593
10	Ending Accumulated Spend			5,307,973	5,499,060	
11						
12						
13	**Job Training (San Juan coal plant):**	2019	2020	2021	2022*	Total Incurred Carrying Charges
14	Spend During The Year	336,000	336,000	336,000	336,000	1,344,000
15	Accumulated Spend + Carrying Charge	336,000	672,000	1,056,384	1,468,444	
16	After Tax WACC	7.20%	7.20%	7.20%	7.20%	
17	Carrying Charge	-	48,384	76,060	52,864	177,308
18	Ending Accumulated Spend	336,000	720,384	1,132,444	1,521,308	
19						
20						
21	**Job Training (Westmorland):**	2019	2020	2021	2022*	Total Incurred Carrying Charges
22	Spend During The Year	370,000	370,000	370,000	370,000	1,480,000
23	Accumulated Spend + Carrying Charge	370,000	740,000	1,163,280	1,617,036	
24	After Tax WACC	7.20%	7.20%	7.20%	7.20%	
25	Carrying Charge	-	53,280	83,756	58,213	195,249
26	Ending Accumulated Spend	370,000	793,280	1,247,036	1,675,249	
27						
28	**Total Carrying Costs**	**-**	**101,664**	**516,321**	**302,164**	**920,150**
29						
30				Amortization Period (Years)		3
31				**Annual Amortization**		**306,717**
32						
33	*2022 Carrying charges are based on half year due to San Juan coal plant retirement in June 2022					

Summary of Regulatory Assets and Liabilities

PNM Exhibit HEM-13

Is contained in the following 1 page.

	A	B	C	D	E	F	G	H
1	**PNM Exhibit HEM-13**							
2	**Summary of Regulatory Assets and Liabilities**							
3								
4							Recovered In	
5	Regulatory Asset/Liability	Testimony Section	Carrying Charges Applied Before Recovery	Carrying Charges Applied After Recovery	Amortization Period	Estimated Amount (in Millions)	ETC	Base Rates
6	Upfront Financing costs	III B	None	None	N/A	8.7	x	
7	San Juan coal plant NBV Undepreciated Asset	III C	None	None	N/A	283.0	x	
8	Underground Coal Mine True-up	III C	None	None	N/A	9.4	x	
9	Plant Decommissioning	III D	None	None	N/A	19.2	x	
10	Job Training & Severance Expense PNM/PNMR Services/SJCC	III F	Approved After-tax WACC	None	N/A	20.0	x	
11	Advanced Payments to State Agencies (Section 16 ETA)	III F	Approved After-tax WACC	None	N/A	19.8	x	
12	Regulatory Asset/Liability Pursuant to (Section 4, Part B(10))	V	Approved After-tax WACC	Unamortized Balance in Rate Base	TBD	TBD		x
13	Regulatory Liability Pursuant to (Section 4 Part B(11))	V	Approved After-tax WACC	Unamortized Balance in Rate Base	TBD	TBD		x
14	Carrying Charges on Payments in Advance of Energy Transition Bonds	V	Approved After-tax WACC	Unamortized Balance in Rate Base	3	0.9		x
15	One time costs - Obsolete Inventory	VI	Approved After-tax WACC	Unamortized Balance in Rate Base	25	6.3		x
16	One time costs - External Legal Costs Associated with Closure of San Juan coal plant	VI	Approved After-tax WACC	Unamortized Balance in Rate Base	25	1.2		x
17	RFP and Regulatory Approval Costs Allocated to PPA's	IX	Approved After-tax WACC	Unamortized Balance in Rate Base	20	0.8		x

San Juan coal plant Continued Operations

PNM Exhibit HEM-14

Is contained in the following 1 page.

	A	B
1	**PNM Exhibit HEM-14**	
2	**San Juan coal plant Continued Operations**	
3	($ in thousands)	
4		
5		
6	**San Juan Coal Plant Continued Operations**	**2023**
7	Net Plant in Service	$ 344,525
8	ADIT	(88,907)
9	Other Rate Base *(Note 1)*	51,812
10	**Total Rate Base**	$ 307,430
11		
12	Return on Rate Base *(Note 2)*	22,135
13	O&M (Note 3)	43,266
14	BART Compliance REC costs *(Note 4)*	1,619
15	Fuel Handling	7,620
16	Coal Mine Reclamation (Underground)	1,691
17	Coal Mine Reclamation (Surface)	-
18	Depreciation Expense	16,977
19	Plant Decommissioning Expense	388
20	Property Tax (PY NBV / 3 * 2.45%)	2,795
21	Payroll Tax	1,683
22	Income Taxes *(Note 5)*	2,518
23	Revenue Tax @ 0.508573%	512
24	**Total PNM Non-Fuel Retail Revenue Requirement**	$ 101,202
25	***Total Non-Fuel Revenue Requirement Excluding Fuel Handling*** *(Note 6)*	$ 93,583
26		
27	*Note 1: Other Rate Base includes working capital (inventory/fuel stock & prepaids) and ARO liability.*	
28	*Note 2: Based on after tax WACC of 7.2% from case 16-00276-UT.*	
29	*Note 3 : Reflects average of 2019-2022 planned outages*	
30	*Note 4: Based on MWh generation from San Juan coal plant 132MW multiplied by estimated cost of $2.00/REC*	
31	*Note 5: Based on 25.4% state tax rate and $1.9 million of EDFIT.*	
32	*Note 6: Fuel handling is excluded in the modeling purpose, for customer impacts it is included in Fuel. (Line 24 - Line 25)*	

Estimated Costs for RFP and Regulatory Approval Process

PNM Exhibit HEM-15

Is contained in the following 1 page.

	A	B	C	D
1	**PNM Exhibit HEM-15**			
2	**Estimated Costs for RFP and Regulatory Approval Process**			
3				
4	**Description**	**Costs Incurred As of April 30, 2019**	**Estimated Remaining Costs to complete**	**Estimate of Total Costs**
5				
6	**Outside Legal Counsel:**			
7	Miller Stravert	570	-	570
8	Troutman Sanders	-	250,000	250,000
9	Wilkinson	-	50,000	50,000
10	Total Outside Legal Counsel	570	300,000	300,570
11				
12	**Outside Consultants:**			
13	Astrape	242,860	108,000	350,860
14	Enovation Partners	-	70,000	70,000
15	Horizon	-	35,000	35,000
16	HDR	912,032	225,000	1,137,032
17	Aragon & Associates Architects LLC	3,302	-	3,302
18	Class One Technical Services	3,148	-	3,148
19	Geomat Inc.	41,319	-	41,319
20	Montrose Environmental Group	14,062	-	14,062
21	Total Outside Consultants	1,216,724	438,000	1,654,724
22				
23	**Administrative Cost:**			
24	Internal Labor	311,750	-	311,750
25	Travel, Other Administrative and General Expenses	19,967	-	19,967
26	RFP Fees Collected	(199,982)	-	(199,982)
27	Total Administrative Cost	131,735	-	131,735
28				
29	**Total**	**1,349,028**	**738,000**	**2,087,028**
30		-	-	-
31				
32		Resources Selected as Result of RFP		5
33		Allocated RFP Dollars per Resource		417,406
34			(Line 29/ Line 32)	
35		Included in 280 MW Gas Generation Capital		417,406
36		Included in 30 MW Owned Battery Capital		417,406
37		Included in 40MW Owned Battery Capital		417,406
38		Allocated to PPAs (Regulatory Asset)		834,811

Pinon 280 MW Gas Generation 2023 Estimated Annual Revenue Requirement

PNM Exhibit HEM-16

Is contained in the following 1 page.

	A	B	C	D	E
1	**PNM Exhibit HEM-16 Pinon 280 MW Gas Generation**				
2	**2023 Estimated Annual Revenue Requirement**				
3					
4					
5					**2023**
6					**Revenue Requirement**
7					
8	**Generation Facilities***				192,263,226
9	**Land**				12,052
10	**Total Capital Investment**				192,275,278
11	**Accumulated Reserve**				(10,663,146)
12					
13	**Net Book Value Plant in Service**				181,612,132
14			*(Line 10+ Line 11)*		
15	**ADIT**				(2,036,808)
16					
17	**Average Rate Base**				$ 179,575,324
18			*(Line 13 + Line 15)*		
19					
20	**WACC**				7.20%
21					
22	**Return on Rate Base**				$ 12,923,284
23			*(Line 17 x Line 20)*		
24					
25	**Depreciation Expense**				10,741,896
26					
27	**Income Taxes**				2,915,272
28					
29	**Property Tax**				1,483,166
30					
31	**O&M**				905,888
32					
33	**Gas Transportation**				3,896,120
34					
35	**Subtotal**				$ 32,865,625
36			*(Line 22 + Line 25 + Line 27 + Line 29 + Line 31+ Line 33)*		
37					
38	**Revenue Tax @ 0.508573%**				167,146
39	**Annualized Non-Fuel Revenue Requirement**				**$ 33,032,771**
40			*(Line 35 + Line 38)*		
41					
42	*Cost includes $0.4M related to RFP and regulatory approval process costs as shown in HEM-15				

Zamora 30 MW Battery 2023 Estimated Annual Revenue Requirement

PNM Exhibit HEM-17

Is contained in the following 1 page.

	A	B	C	D	E
1	**PNM Exhibit HEM-17 Zamora 30 MW Battery**				
2	**2023 Estimated Annual Revenue Requirement**				
3					
4					**2023**
5					**Revenue Requirement**
6					
7	**Generation Facilities***				39,839,305
8	**Land**				500,000
9	**Total Capital Investment**				40,339,305
10	**Accumulated Reserve**				(2,443,977)
11					
12	**Net Book Value Plant in Service**				37,895,329
13			*(Line 9 + Line 10)*		
14	**ADIT**				(1,953,350)
15					
16	**Average Rate Base**				$ 35,941,979
17			*(Line 12 + Line 14)*		
18					
19	**WACC**				7.20%
20					
21	**Return on Rate Base**				$ 2,586,594
22			*(Line 16 x Line 19)*		
23					
24	**Depreciation Expense**				1,982,786
25					
26	**Income Taxes**				583,491
27					
28	**Property Tax**				411,349
29					
30	**O&M**				291,381
31					
32	**Subtotal**				$ 5,855,601
33			*(Line 21 + Line 24 + Line 26 + Line 28 + Line 30)*		
34					
35	**Revenue Tax @ 0.508573%**				29,780
36	**Annualized Non-Fuel Revenue Requirement**				**$ 5,885,381**
37			*(Line 32 + Line 35)*		
38					
39	*Cost includes $0.4M related to RFP and regulatory approval process costs as shown in HEM-15				

Sandia 40 MW Battery 2023 Estimated Annual Revenue Requirement

PNM Exhibit HEM-18

Is contained in the following 1 page.

	A	B	C	D	E
1	**PNM Exhibit HEM-18 Sandia 40 MW Battery**				
2	**2023 Estimated Annual Revenue Requirement**				
3					
4					**2023**
5					**Revenue Requirement**
6					
7	**Generation Facilities***				49,194,764
8	**Land**				1,300,000
9	**Total Capital Investment**				50,494,764
10	**Accumulated Reserve**				(2,947,498)
11					
12	**Net Book Value Plant in Service**				47,547,266
13			*(Line 9 + Line 10)*		
14	**ADIT**				(2,379,516)
15					
16	**Average Rate Base**				$ 45,167,750
17			*(Line 12 + Line 14)*		
18					
19	**WACC**				7.20%
20					
21	**Return on Rate Base**				$ 3,250,534
22			*(Line 16 x Line 19)*		
23					
24	**Depreciation Expense**				2,392,431
25					
26	**Income Taxes**				733,265
27					
28	**Property Tax**				508,720
29					
30	**O&M**				363,458
31					
32	**Subtotal ****				$ 7,248,408
33			*(Line 21 + Line 24 + Line 26 + Line 28 + Line 30)*		
34	**Retail Share Non-Fuel Revenue Requirement**				$ 6,902,107
35	**Revenue Tax @ 0.508573%**				35,102
36	**Annualized Non-Fuel Revenue Requirement**				**$ 6,937,209**
37			*(Line 34 + Line 35)*		
38					
39	*Cost includes $0.4M related to RFP and regulatory approval process costs as shown in HEM-15				
40	** Includes revenue requirement of $0.3M for transmission upgrades allocated to FERC wholesale transmission jurisdiction				

Arroyo 300 MW Solar/Battery PPA 2023 Estimated Annual Revenue Requirement

PNM Exhibit HEM-19

Is contained in the following 1 pages.

	A	B	C
1	**PNM Exhibit HEM-19 Arroyo 300 MW Solar/Battery PPA**		
2	**2023 Estimated Annual Revenue Requirement**		
3			
4			**2023**
5		**Purchased Power Agreement**	
6		***Arroyo: Solar PPA***	
7		*Annual Sales (MWh)*	813,433
8		*Price ($/MWh)*	18.65
9		*Energy* *(Line 7 x Line 8)*	$ 15,170,526
10			
11		***Arroyo: Battery PPA***	
12		*Battery Size (KW)*	40,000
13		*Capacity Price ($/kW-month)*	$7.46
14		Capacity Cost *(Line 12 x Line 13)* x 12 months	$ 3,580,800
15			
16		*WREGIS cost per MWh*	$ 0.01
17		*WREGIS fees* *(Line 7 x Line 16)*	8,134
18			
19		***Total Arroyo: Solar/Battery*** *(Line 9 + Line 14 + Line 17)*	**$18,759,460**

Transmission Network Upgrades for Arroyo PPA 2023 Estimated Annual Revenue Requirement

PNM Exhibit HEM-20

Is contained in the following 1 page.

	A	B	C	D	E
1	**PNM Exhibit HEM 20 -Transmission Network Upgrades for Arroyo PPA**				
2	**2023 Estimated Annual Revenue Requirement**				
3					
4					
5					**2023**
6					**Revenue Requirement**
7					
8	**Generation Facilities**				20,000,000
9	**Total Capital Investment**				20,000,000
10	**Accumulated Reserve**				(500,000)
11					
12	**Net Book Value Plant in Service**				19,500,000
13		*(Line 9+ Line 10)*			
14	**ADIT**				(368,300)
15					
16	**Average Rate Base**				$ 19,131,700
17		*(Line 12 + Line 14)*			
18					
19	**WACC**				7.20%
20					
21	**Return on Rate Base**				$ 1,376,828
22		*(Line 16 x Line 19)*			
23					
24	**Depreciation Expense**				500,000
25					
26	**Income Taxes**				310,589
27					
28	**Property Tax**				214,500
29					
30					
31	**Subtotal ***				$ 2,401,917
32		*(Line 21 + Line 24 + Line 26 + Line 28)*			
33	**Retail Shares - PPA Upgrades**				51.82%
34	**Retail Share Non-Fuel**				$ 1,244,674
35					
36	**Revenue Tax @ 0.508573%**				6,330
37	**Annual Non-Fuel Revenue Requirement**				**$ 1,251,004**
38		*(Line 34 + Line 36)*			
39					
40	* Includes revenue requirement of $1.2M for transmission upgrades allocated to FERC wholesale transmission jurisdiction				

Jicarilla 50 MW Solar/ 20 MW Battery PPA 2023 Estimated Annual Revenue Requirement

PNM Exhibit HEM-21

Is contained in the following 1 page.

	A	B	C
1	**PNM Exhibit HEM-21 Jicarilla 50 MW Solar/ 20 MW Battery PPA**		
2	**2023 Estimated Annual Revenue Requirement**		
3			
4			**2023**
5		**Purchased Power Agreement**	
6		**Jicarilla: Solar PPA**	
7		Annual Sales (MWh)	136,457
8		Price ($/MWh)	19.73
9		Energy/REC Cost *(Line 7 x Line 8)*	$ 2,692,291
10			
11		**Jicarilla: Battery PPA**	
12		Battery Size (KW)	20,000
13		Capacity Price ($/kW-month)	$ 9.97
14		Capacity Cost (Line 12 x Line 13) x 12 months	$ 2,392,800
15			
16		WREGIS cost per MWh	$ 0.01
17		WREGIS fees *(Line 7 x Line 16)*	$ 1,365
18			
19		**Total Jicarilla: Solar/Battery**	$ 5,086,455

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF PUBLIC SERVICE COMPANY OF NEW MEXICO'S CONSOLIDATED APPLICATION FOR APPROVALS FOR THE ABANDONMENT, FINANCING, AND RESOURCE REPLACEMENT FOR SAN JUAN GENERATING STATION PURSUANT TO THE ENERGY TRANSITION ACT	)	**19-_____-UT**

AFFIDAVIT

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

HENRY E. MONROY, Controller, Utility Operations at PNMR Services Company, upon being duly sworn according to law, under oath, deposes and states: I have read the foregoing **Direct Testimony of Henry E. Monroy** and it is true and accurate based on my own personal knowledge and belief.

SIGNED this 28th day of June, 2019.

HENRY E. MONROY

SUBSCRIBED AND SWORN to before me this 28th day of June, 2019.

NOTARY PUBLIC IN AND FOR
THE STATE OF NEW MEXICO

My Commission Expires:

1·21·2020