BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF NEW MEXICO FOR APPROVAL TO ABANDON SAN JUAN GENERATING STATION UNITS 2 AND 3, ISSUANCE OF CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY FOR REPLACEMENT POWER RESOURCES, ISSUANCE OF ACCOUNTING ORDERS AND DETERMINATION OF RELATED RATEMAKING PRINCIPLES AND TREATMENT,	)	**Case No. 13-00_______-UT**
PUBLIC SERVICE COMPANY OF NEW MEXICO,	)	
Applicant	)	

DIRECT TESTIMONY AND EXHIBITS

OF

TERRY R. HORN

December 20, 2013

NMPRC CASE NO. 13-_______-UT
INDEX TO THE DIRECT TESTIMONY OF TERRY R. HORN
WITNESS FOR
PUBLIC SERVICE COMPANY OF NEW MEXICO

I. INTRODUCTION AND PURPOSE

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

A. My name is Terry R. Horn. I am Vice President and Treasurer for Public Service Company of New Mexico ("PNM" or the "Company"). My address is 414 Silver Avenue, SW, Albuquerque, New Mexico 87102.

Q. PLEASE DESCRIBE YOUR RESPONSIBILITIES AS VICE PRESIDENT AND TREASURER OF PNM.

A. As Vice President and Treasurer, I am responsible for leading PNM's treasury and risk management functions. In that role, I am responsible for liquidity, cost of capital, capital structure, financings, cash management, and relationships with the credit rating agencies, and commercial and investment banks. I am also responsible for the investment performance of the portfolios accumulated for pension obligations, nuclear decommissioning liabilities, retiree medical commitments and other corporate purposes, as well as overseeing the risk management activities of insurance, credit risk and commodity market risk of gas and electricity. I have similar responsibilities for PNM's holding company, PNM Resources, Inc. ("PNM Resources" or "PNMR") as well as for PNM Resources' other subsidiaries. At PNMR, I am also responsible for the Investor Relations function.

Q. HAVE YOU PREVIOUSLY TESTIFIED IN UTILITY REGULATION PROCEEDINGS?

A. Yes I have. Attached is PNM Exhibit TRH-1 that summarizes my experience.

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my testimony is to support PNM's Application in this case. In doing so I will discuss PNM's financing approach associated with its projected five-year capital spending, including the capital expenditures required to comply with the Revised State Implementation Plan ("Revised SIP"), which involves installation of selective non-catalytic reduction technology ("SNCR") at San Juan Generating Station ("SJGS") Units 1 and 4 and the retirement of SJGS Units 2 and 3, and the implications of the five-year capital budget for PNM's liquidity and credit ratings. I will show that approval of PNM's Application by the Commission, including establishing the ratemaking treatment for associated costs, will be viewed favorably by the capital markets, helping PNM to maintain its investment grade credit rating for the ultimate benefit of both customers and shareholders, providing for lower cost capital to finance the costs related to installing SNCR as well as other capital investments that will be required to serve customer needs in the next few years, given both customer growth and the abandonment of SJGS Units 2 and 3. In addition, I will provide some context regarding the fair valuation of Palo Verde Nuclear Generating Station ("PVNGS" or "Palo Verde") Unit 3 for ratemaking purposes. I will also describe the current status of the PVNGS Unit 3 nuclear decommissioning trust ("NDT") and propose the structure for the PVNGS Unit 3 NDT with PVNGS Unit 3 as a jurisdictional resource. Finally, I will discuss the status of PNM's leasing arrangements for PVNGS Units 1 and 2.

II. FINANCING APPROACH AND LIQUIDITY IMPLICATIONS

Q. HOW IS PNM LIKELY TO FINANCE THE EXPENDITURES RELATED TO THE APPLICATION AND THE REST OF ITS FIVE-YEAR CAPITAL BUDGET?

A. The Company utilizes the cash flow from operations to provide funds for both construction and operational expenditures. If there is a shortfall of cash flow from operations, PNM typically finances that shortfall using its revolving credit facilities, which total $400 million today and are anticipated to total $450 million by January of 2014 (the "Revolvers"). The costs of PNM's five-year capital budget including those resulting from its Application in this case will be financed in the same fashion. Once PNM has a sufficient amount of short-term debt (typically $200-$300 million) on the Revolvers, the Company will pursue issuing longer-term bonds in the public market to more closely match the long-term nature of the assets being financed and restore the Company's liquidity under the Revolvers. In addition to using cash flow from operations, PNMR will contribute equity, as necessary, to ensure that the capital structure remains properly balanced to maintain an investment grade credit rating.

Q. WHAT ARE PNM'S EXISTING LIQUIDITY SOURCES?

A. PNM's short-term liquidity arrangements include a $400 million revolving credit facility that matures in October of 2018, as approved by the Commission in Case No. 10-00269-UT; a $50 million revolving credit facility that is anticipated to be in place by January of 2014 and mature in January of 2018, as approved by the Commission in Case No. 13-00295-UT; and a $100 million inter-company loan facility with PNM Resources, as authorized in Case No. 10-00269-UT.

Q. WHAT ARE THE OUTSTANDING BALANCES UNDER PNM'S CURRENT LIQUIDITY SOURCES?

A. As of November 30, 2013, there were no borrowings under PNM's Revolvers or the inter-company loan agreement with PNMR.

Q. WHY IS IT IMPORTANT TO MATCH LONG-TERM ASSETS WITH LONG-TERM FINANCING?

A. A general principle of financing is to match the length of the financing with the useful life of the asset being financed. For example, under this principle one should pay cash for a meal since it is an immediately consumed asset. The purchase of a car that will be useful for five years should be financed with a loan of no more than five years. A home can support a thirty-year mortgage because of the long useful life of the asset. There are many more considerations that a corporate entity takes into account when making financing decisions, but generally there is consistency between the useful life of the assets and the underlying financing.

Q. WHAT PORTION OF PNM'S FIVE-YEAR CAPITAL BUDGET IS FOR EXPENDITURES RELATED TO PNM'S APPLICATION?

A. The projected costs related to this Application represent a significant increase in PNM's capital budget and financing requirements. PNM's core capital budget for 2013 through 2017 is $1.2 billion which excludes expenditures related to the Revised SIP. The capital related to the Revised SIP is estimated to add approximately $358 million over the period, which includes approximately $82 million for SNCR construction, including balanced draft conversion, and approximately $276 million for the construction of new facilities to help offset the lost capacity from the shutdown of SJGS Units 2 and 3. This amount of additional spending assumes that PNM's interest in PVNGS Unit 3 is added to rate base to serve New Mexico retail customers. If PNM has to build additional replacement power instead of using PVNGS Unit 3, then the capital spending would be higher. PNM cannot fund its core capital expenditures and Revised SIP-related expenditures with cash flow from operations alone. It will be necessary for PNM to use short-term debt under its Revolvers, as described above, to fund a portion of the capital expenditures and ultimately obtain long-term financing during this period through debt issuances and possible PNMR equity contributions in order to repay borrowings under the Revolvers. It will also be important for PNM to maintain a properly balanced capital structure during this time.

Q. WHAT IS A PROPERLY BALANCED CAPITAL STRUCTURE?

A. A properly balanced utility capital structure is one that is comprised of debt and equity in proportions that are balanced so as to minimize the long-term after-tax cost of capital for the benefit of customers. Interest paid on debt is tax deductible so generally a corporation benefits from its use. However, if too much debt is in the capital structure, the risk of default increases, credit ratings deteriorate, and the cost of debt increases, offsetting any tax benefits, and the availability of financing becomes less certain. The cost of equity is not tax deductible and is generally more expensive than debt because it is a riskier investment, but in spite of this, equity is required to balance the debt in a capital structure. Greater amounts of equity in a capital structure reduce default risk, resulting in higher credit ratings, a lower cost of debt and better access to debt financing when needed. Therefore, there is an optimal balance of debt and equity needed in a capital structure to minimize the long-term after-tax cost of capital. This optimal balance of debt and equity differs by industry, and often by company within an industry, because of varying risk attributes of different industries and companies. Industries with more business risk, such as high tech, would have less debt. Industries with less business risk, like regulated utilities, can support more financial risk and therefore more debt. Generally, an appropriate range for electric utilities is an approximate mix of 50% debt and 50% equity, plus or minus 5%. PNM's current capital structure, which was used in Case No. 12-00007-UT to calculate PNM's weighted average cost of capital, is 48.89% debt, 0.50% preferred equity, and 50.61% equity. Looking forward for the period of 2013 to

2017, PNM has more than $1.5 billion of capital expenditures forecast, including the Revised SIP, some of which will require external financing. Therefore it is essential that PNM maintain its credit ratings above investment grade so that the cost of financing these expenditures is as low as possible.

Q. WILL THE PROPOSED SHUTDOWN OF SJGS UNITS 2 AND 3 AFFECT THE POLLUTION CONTROL REVENUE BONDS ISSUED BY THE CITY OF FARMINGTON ON BEHALF OF PNM FOR THOSE UNITS?

A. No, a shutdown of SJGS Units 2 and 3 will not have any effect on the associated pollution control revenue bonds. This lower cost debt will remain in PNM's capital structure even with the retirement of these units. There are currently $509.5 million of tax-exempt bonds issued by the City of Farmington on behalf of PNM, a portion of which were used to fund pollution control equipment on SJGS Units 2 and 3. These bonds can remain outstanding and PNM will remain obligated to pay the principal and interest on the bonds, regardless of the retirement of Units 2 and 3. The City of Farmington has no obligation for any payments on the bonds and that will not change with the retirement of Units 2 and 3.

III. CREDIT RATING IMPLICATIONS

Q. WHAT ARE CREDIT RATINGS AND HOW ARE THEY USED?

A. Credit ratings are assigned to a company's debt by credit rating agencies such as Moody's Investors Services ("Moody's") and Standard & Poor's Rating Services

("S&P"). The ratings reflect the agencies' assessment of the risk that a company will default on the debt, and not be able to make interest or principal payments. Potential lenders use credit ratings as a measure of the risk of default and typically charge a lower interest rate to borrowers with higher credit ratings. Conversely, borrowers with lower credit ratings are perceived to be riskier, and will typically need to pay a higher interest rate on debt. Equity investors also consider credit ratings and typically require higher equity returns on investments in firms that have lower credit ratings.

Q. WHAT ARE THE CATEGORIES OF CREDIT RATINGS?

A. Moody's and S&P use similar categories of credit ratings as shown in the table below, with Aaa or AAA representing the highest credit ratings.

	Moody's Category	S&P Category
Investment Grade Ratings	Aaa	AAA
	Aa	AA
	A	A
	Baa	BBB
Below Investment Grade Ratings	Ba	BB
	B	B
	Caa	CCC
	Ca	CC
	C	C
	--	D

Within each rating category, Moody's assigns a number between 1 and 3 while S&P assigns a "+" or "-" to further distinguish ratings within that category. For example a rating from Moody's of Baa1 is higher than Baa2 or Baa3, and a rating from S&P of BBB+ is higher than BBB or BBB–. In addition, the rating agencies assign a Positive, Negative or Stable outlook to the credit rating, which indicates whether their next action is likely to be an upgrade, downgrade or no change to the existing rating.

Q. WHAT IS AN INVESTMENT GRADE RATING?

A. A rating of at least Baa3 from Moody's or BBB– from S&P is considered an investment grade rating. Debt that is rated investment grade can be held by a larger universe of investors and generally has a lower interest rate because it is considered less risky than debt that is rated below investment grade. In addition, companies that are rated below investment grade may not be able to access capital in capital-constrained market conditions, except possibly under very onerous terms and conditions.

Q. WHAT FACTORS COULD CAUSE A DOWNGRADE IN PNM'S CREDIT RATINGS?

A. In its report on June 24, 2013, PNM Exhibit TRH-2, page 4, Moody's stated that PNM's rating could be downgraded "if we believe the New Mexico regulatory framework has become less supportive or predictable such that there is an adverse rate case ruling or cost recovery disallowances; or if there was deterioration in PNM's financial metrics….." In its report on April 5, 2013, PNM Exhibit TRH-3, page 5, S&P cited similar factors that could cause a rating downgrade and noted that, "Failure to adequately manage regulatory risks could result in lower ratings before any deterioration in credit measures." Moody's states in its July 29, 2013, report titled "PNM Resources and UNS Energy: San Juan Plant Generating Some Closure", PNM Exhibit TRH-4, page 1:

> An ability to recover and earn a return on [the Revised SIP-related] investments in a timely manner is important for both utilities [PNM and Tucson Electric Power ("TEP")] to maintain their financial metrics at current levels as the regulatory environments in New Mexico and Arizona have been exhibiting increased supportiveness.
>
> That said, if recovery is less timely, leading to liquidity issues or an increased risk of stranded investment, their credit profiles may suffer. Moreover, should additional liquidity or time constraints arise from material changes to the proposed SIP, there could be an impact on safety and reliability as well as operating performance, which would be credit negative.

Later in that same report, page 7, Moody's states:

> We think PNM and TEP are well positioned to recover the costs of environmental compliance associated with the revised SIP through regulated rates. However, in the event that recovery is less timely, leading to a stress on liquidity or an increased risk of stranded investment, credit profiles may suffer, absent some form of mitigating action.

Q. WILL GRANTING PNM'S APPLICATION AS REQUESTED BE HELPFUL IN KEEPING FINANCING COSTS DOWN?

A. Yes. The cost of capital, both debt and equity, is directly related to the risk of repayment. If the perceived risk of repayment is high, then the cost of the capital is higher than it would be if the risk of repayment and corresponding uncertainty were lower. As indicated in the reports cited above, in assessing the risk of repayment for a regulated utility, rating agencies, and ultimately potential lenders and investors, place substantial weight on their assessment of the regulatory environment in which the utility operates. Granting PNM's Application, including providing the accounting order described by Mr. Sategna addressing the undepreciated investment in SJGS Units 2 and 3, as well as approving the proposed valuation for the additional capacity in SJGS Unit 4 and for inclusion of PVNGS Unit 3 in rate base, will be seen by the rating agencies and providers of debt and equity capital as evidence of lower risk and uncertainty resulting from a supportive regulatory environment. Therefore, the cost of the capital will be lower, creating savings for customers.

Q. WHAT ARE PNM's CURRENT CREDIT RATINGS?

A. Moody's and S&P rate PNM's senior unsecured debt at Baa3 / BBB, respectively, which are both investment grade ratings. The outlook at Moody's is Positive and the outlook at S&P is Stable. Recent rating agency reports indicate that they expect the Company to continue its efforts to maintain financial stability, including targeting a balanced capital structure, accompanied by rate recovery to support any new debt. PNM's credit ratings or outlook could be revised downward if adverse rate case rulings or cost recovery disallowances result in a deterioration of cash flow, or if there is uncertainty regarding the adequate and timely recovery of significant costs such as those associated with PNM's Application regarding the Revised SIP.

Q. HOW CRITICAL IS IT FOR PNM TO MAINTAIN ITS INVESTMENT GRADE CREDIT RATING?

A. It is especially critical at this juncture because of PNM's capital expenditure and financing requirements during the next five years. Investors and lenders use PNM's credit ratings to determine their willingness to invest in or lend funds to PNM, and at what price. The rating agencies typically will formally reassess a company's credit ratings annually and in conjunction with a major capital expenditure program and financing. Investors and lenders commonly rely on the credit ratings published by the rating agencies to determine the return that they require on their capital. Given the global financial uncertainty that has existed over the last few years, and still exists, if PNM's credit ratings were to again fall below investment grade, investors and lenders could decide not to lend to, or invest in PNM. Credit ratings therefore impact not only the cost of PNM's capital, but may also have a direct impact on PNM's access to capital. The rating agencies continually review PNM's current and projected financial health, which is materially affected by capital expenditures and the financing for those expenditures. Regulatory risk is a critical factor in determining a utility's credit rating. Therefore, a regulatory environment that allows for timely cost recovery of prudent expenditures is a positive consideration for a utility achieving and maintaining an investment grade rating. Therefore, for PNM to maintain its access to capital and fund the necessary capital expenditures on favorable terms, it must ensure that it maintains investment grade status. This will ensure that PNM can continue to have access to favorably priced capital, even in the face of some adverse or unpredictable event or some structural shift in capital markets. Any delays, uncertainties or denials in the recovery could hurt PNM's credit quality.

Q. HAS PNM'S ACCESS TO THE CAPITAL MARKETS BEEN ADVERSELY IMPACTED IN THE PAST DUE TO ITS CREDIT RATINGS?

A. Yes. In late 2007 to mid-2008, PNM was downgraded three times in a very short period of time to a below investment grade rating of BB+ by S&P and to Baa3 by Moody's, its lowest investment grade rating, while placing the Company on review for possible further downgrade. These actions resulted from the credit rating agencies' concerns about PNM's deteriorating credit metrics and their reactions to a Recommended Decision in PNM's 2007 rate case (Case No. 07-00077-UT) which recommended approving only about 30% of PNM's requested revenue increase and denial of a fuel and purchased power cost adjustment clause ("FPPCAC"). The one-step Moody's downgrade resulted from the final order in that case that improved the rate relief slightly, to about 44% of the initial request and postponed the decision on a FPPCAC. The Commission ultimately approved a FPPCAC for PNM, significantly improving cash flows, and resulting in no further adverse credit action by Moody's, which allowed PNM to at least maintain a split credit rating at the time i.e., S&P rated PNM below investment grade and Moody's rated PNM at its lowest investment grade level.

At the same time, the global financial crisis that began in 2008 impaired access to the capital markets for all but the highest rated borrowers. Indeed, prior to the Commission's action authorizing a FPPCAC, PNM had been advised by debt underwriters that PNM's deteriorating financial condition and the uncertainty about the outcome of the FPPCAC and the 2007 rate case would prevent PNM from issuing long-term debt, at any cost, in the then-existing capital-constrained market. S&P noted in its March 10, 2008, report titled "PNM Resources' Outlook Revised to Negative", PNM Exhibit TRH-5, page 2:

> The negative outlook reflects our perception of increased regulatory risk at PNM that, if not managed or mitigated, could harm credit quality and lead to lower ratings for PNMR and its subsidiaries…. The hearing examiner's recommendation in PNM's pending electric rate case… could lead to weaker credit metrics than previously expected if adopted by the New Mexico Public Service [sic] Commission…. In addition, the company's liquidity position is stretched and maturities coming due in 2008 will necessitate access to markets.

When PNM was finally able to access the capital markets, it had to pay an interest rate of 7.95% on $350 million of 10-year fixed rate bonds, which was significantly higher than the rate of approximately 5.00% that it would have paid had it been investment grade. This difference translates into an additional $10.3 million of annual interest, or $103 million over the 10-year term of the bonds. In the best of times, PNM needs to maintain investment grade credit ratings to minimize financing costs. But as demonstrated by PNM's past experience, investment grade ratings are especially important when capital markets are volatile and there is uncertainty in the market. Although capital markets today are not in the crisis mode that existed in 2008, there remains a considerable level of uncertainty and volatility.

Q. WHAT EFFECT WILL THE RATE TREATMENT OF UNDEPRECIATED INVESTMENT IN SJGS UNITS 2 AND 3 HAVE ON PNM'S CREDIT RATINGS AND COST OF CAPITAL?

A. The San Juan Units 2 and 3 were financed with approximately 50% long-term debt and 50% shareholders' equity. As the depreciation associated with those assets is recovered in rates, the resulting cash flow is used to pay the interest, principal, and dividends due on the underlying financing. This regulatory construct of connecting asset depreciation and cost recovery is an important reason utilities have the ability to finance on favorable terms and conditions, and is an important consideration when rating agencies decide on the credit ratings for a utility.

Moody's states in its July 29, 2013, report titled PNM Resources and UNS Energy: San Juan Plant Generating Some Closure, PNM Exhibit TRH-4: "At March, 31, 2013, PNM's net book value of Units 2 and 3 was approximately $290 million. PNM's ability to recover and earn a return on these stranded investments as well as the costs incurred to retire the two units, in a timely manner, is important in maintaining its financial metrics at current levels."

If the Commission were to decide to not allow PNM to fully recover its undepreciated investment in San Juan Units 2 and 3, it would be negatively viewed by the rating agencies for at least three reasons. First, the rating agencies would be concerned because PNM still has debt outstanding from the financing of those assets for which it is no longer being reimbursed by customers. That outstanding debt, interest and principal, still has to be paid, which would put incremental financial strains on the Company. Second, equity investment by shareholders would be lost, making the Company much riskier and resulting in higher costs to raise equity capital when needed in the future. Third, the rating agencies would be concerned about whether the Commission has decided to be less supportive of the financial health of the Company and even possibly punitive, especially since, in authorizing abandonment of the two units for which full recovery would continue to be allowed in the absence of abandonment, the Commission will be confirming that the Company has acted in the public interest to identify an approach that is lower cost for customers, reduces the risk of future cost increases, and provides additional environmental benefits. These concerns could cause the rating agencies to downgrade PNM, in turn causing our cost of capital to increase.

Q. COULD ADEQUATE AND TIMELY COST RECOVERY RESULT IN AN UPGRADE OF PNM'S CREDIT RATING?

A. Yes. Granting adequate and timely cost recovery would be viewed favorably by the rating agencies and would contribute to maintaining and improving PNM's credit rating. On June 24, 2013, Moody's raised PNM's ratings outlook to Positive from Stable, PNM Exhibit TRH-2, and stated at page 4:

> "The positive outlook reflects our expectation that the New Mexico regulatory environment continues to improve, financial metrics will remain consistent with US regulated electric utilities in the upper end of the Baa range and that the timeline for the San Juan environmental compliance requirements play out such that PNM is able to recover prudently incurred costs and investments in a timely manner."

Clearly, the credit rating agencies are monitoring the Commission's treatment of these required environmental compliance expenditures. Therefore, approval of PNM's Application by the Commission would strengthen the rationale for an upgrade in PNM's credit rating.

Q. HOW WOULD A CREDIT RATING CHANGE AFFECT PNM'S BORROWING COST?

A. A one-notch improvement in PNM's credit ratings by Moody's and S&P to Baa2 / BBB+, respectively, could result in a reduction in its current borrowing cost on new 10-year debt of approximately 0.50%. This would reduce PNM's borrowing cost by approximately 10% compared to debt issued at its current ratings, and by approximately 20% compared to debt issued assuming a one-notch downgrade. The estimated effects of either an upgrade or downgrade on PNM's borrowing cost based on $750 million of debt issuance are summarized in the table below. A 10-year timeframe is used for illustrative purposes because it is the most common maturity for a debt financing and therefore the most liquid and least-cost form of long-term financing available.

	Moody's / S&P Ratings	Interest Rate	Annual Interest Expense	Total Interest for 10 Years
One-notch upgrade	Baa2 / BBB+	3.85%	$29 MM	$289 MM
Current rating	Baa3 / BBB	4.35%	$33 MM	$326 MM
One-notch downgrade	Ba1 / BBB –	4.85%	$36 MM	$364 MM

IV. PALO VERDE UNIT 3 VALUATION CONTEXT

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

A. I will discuss the proper valuation for ratemaking purposes of PVNGS Unit 3, due to PNM's Application for a Certificate of Public Convenience and Necessity ("CCN") to recertify PNM's interest in PVNGS Unit 3 as a resource to serve retail New Mexico customers.

Q. HOW DO YOU VIEW CONCENTRIC ENERGY ADVISORS, INC.'S ("CONCENTRIC") VALUATION?

A. Concentric's testimony provides a range of values for PVNGS Unit 3 between approximately $341 million ($2,542/kW) and $352 million ($2,625/kW) for the asset as a utility resource for an integrated utility such as PNM, which I believe reasonably represents both its value to PNM as well as the cost to acquire a similar asset in the market. Concentric's valuation is based upon a discounted cash flow ("DCF") analysis of PNM's interest in PVNGS Unit 3 that reflects a cost of capital consistent with PNM's actual financing cost. In addition, as Mr. O'Connell demonstrates in his testimony, PVNGS Unit 3 is lower cost to customers than other alternatives up to a valuation of $3,100/kW. Based on my recent experience negotiating with the owners of Palo Verde Unit 1 and 2 leases, Concentric's valuation is reflective of what would be actually required to purchase an ownership interest in Palo Verde Unit 1 or Unit 2 from one of the lessors today.

Q. PLEASE DISCUSS PNM'S RECENT ATTEMPTS TO PURCHASE PVNGS LEASES.

A. PNM purchased 29.8 MW of PVNGS lease interests in Unit 2 in a 2008 auction process at a capital cost of approximately $2,850/kW. The purchase was approved by the NMPRC in Case No. 08-00305-UT and, per the stipulation adopted in that case, the value for ratemaking purposes was established at approximately $2,500/kW. More recently, I attempted to purchase another PVNGS Unit 2 lease in 2011. In August of 2011, one of PNM's lessors contacted me regarding an auction process it was initiating to sell its 14.89 MW PVNGS Unit 2 lease interest. PNM submitted, subject to regulatory approval, an offer of $25.3 million in cash for the lease equity and agreement to assume a debt obligation of $12.1 million, making the total consideration offered by PNM approximately $37.3 million or $2,505/kW. The lessor advised me that there were two higher bids and I was provided the opportunity to increase PNM's bid. PNM raised its bid to a total consideration of $2,578/kW. PNM's bid was not accepted and the PVNGS Unit 2 lease was sold to another bidder, presumably at a higher price.

Q. WHAT VALUE IS PNM PROPOSING FOR PVNGS UNIT 3?

A. PNM is proposing a value for PVNGS Unit 3 of $2,500/kW, which is consistent with and somewhat lower than, Concentric's valuation as well as PNM's recent attempts to purchase PVNGS leases.

V. PALO VERDE UNIT 3 DECOMMISSIONING TRUST STATUS

Q. WHAT IS THE PURPOSE OF THE NDT?

A. The purpose of the NDT is to provide funds for the decommissioning of the Palo Verde nuclear units, as required by the Nuclear Regulatory Commission ("NRC") and the Arizona Nuclear Power Project ("ANPP") Participation Agreement, at the end of their useful lives.

Q. HOW IS THE NDT CURRENTLY FUNDED?

A. Currently, funding for the NDT for Palo Verde Units 1 and 2 is included in rates for electric service that are paid by PNM's customers. Funding for Palo Verde Unit 3 is not recovered in rates to PNM customers.

Q. ARE THE FUNDS FOR DECOMMISSIONING THE THREE UNITS COMINGLED OR SEGREGATED?

A. The accumulated contributions and respective earnings on those funding amounts are segregated into separate trust accounts for each Palo Verde Unit. Although they are legally and financially separated by Unit, they are managed in a combined manner to optimize investment efficiencies.

Q. WHAT IS PNM PROPOSING FOR THE PVNGS UNIT 3 NDT IN THIS APPLICATION?

A. PNM is proposing that, if as a result of this proceeding, Palo Verde Unit 3 becomes a generation resource serving jurisdictional customers, those customers would provide funding through their electric rates for the PVNGS Unit 3 NDT, similar to the funding they currently provide for PVNGS Units 1 and 2, but on a pro rata basis to recognize that PVNGS Unit 3 has been operated as a non-jurisdictional resource for many years. Assuming that PNM's Application is granted, PNM's shareholders will have had the benefit of the output of PVNGS Unit 3 from its initial license date of November 25, 1987, to December 31, 2017, (10,995 days) and PNM's retail customers will have the benefit of the output from January 1, 2018, to the end of the license period of November 25, 2047, (10,921 days). Shareholders will therefore have responsibility for 50.16% (10,995 / (10,995+10,921)) and PNM's retail customers would have responsibility for 49.84% (10,921 / (10,995+10,921)) of the ultimate decommissioning liability. The customers' share, of course, would be subject to allocation between the New Mexico retail jurisdiction and the FERC jurisdiction as is generally the case for costs related to generation assets. Essentially this means that customers would only have responsibility for funding the NDT for Palo Verde Unit 3 on a prospective basis, commencing with the date it becomes a resource to serve them.

PNM would set up a new fund within its PVNGS Unit 3 tax qualified NDT account to house the contributions of customers toward their pro-rata share of PVNGS Unit 3 NDT. This would be done so that the shareholder-contributed NDT amounts (fund balances at December 31, 2017, plus any future gains and losses until the ultimate decommissioning) could be kept separate from customer contributions and gains and losses on the customer contributions.

Q. HOW WILL FUTURE CONTRIBUTIONS TO THE PVNGS UNIT 3 NDT BE DETERMINED?

A. Future contributions to the PVNGS Unit 3 NDT would be determined using the same methodology as has been historically used to determine the contributions for the PVNGS Unit 1 and 2 NDT's. Currently, customers contribute $1,282,036 annually for PVNGS Unit 1 decommissioning and $1,354,833 annually for PVNGS Unit 2. I would expect the annual customer contribution for PVNGS Unit 3 decommissioning would be approximately $1,300,000 to provide the customers' pro-rata share of the funding for the ultimate liability. Since shareholders have already been contributing to the NDT, this estimated annual amount reflects what would be needed to fund the NDT on a prospective basis once Palo Verde Unit 3 is included in PNM's jurisdictional supply portfolio.

Q. HOW ARE THE NDT FUNDING CONTRIBUTIONS FOR EACH PALO VERDE PARTICIPANT DETERMINED?

A. Each of the seven PVNGS Participants develops a funding plan for each PVNGS unit, which is designed to satisfy its respective decommissioning obligations. The funding plan for each unit is based on funding curves that establish a percentage of the decommissioning costs that a PVNGS Participant commits to have in its NDT at the end of each year.

Q. WHO DETERMINES THE REQUIRED FUNDING CURVE?

A. Initial funding curves were developed by the individual PVNGS Participant for the PVNGS project and approved by the Termination Funding Committee in 1994. The Termination Funding Committee consists of one representative from each of the seven utilities that are PVNGS participants.

With the approval of the Termination Funding Committee, a PVNGS Participant may modify its funding curve in response to a material event such as a significant increase in the estimated decommissioning costs, a marked drop in the market value of the investments, regulatory action that causes a prolonged forced outage, the premature decommissioning of a PVNGS Unit, or a bankruptcy proceeding involving one of the PVNGS participants.

Q. WHAT ARE THE KEY ASSUMPTIONS AND METHODOLOGY USED TO DETERMINE THE FUNDING CURVE?

A. The funding curve developed by each PVNGS Participant and approved by the Termination Funding Committee is based on a sinking fund methodology, i.e., periodic deposits into an external trust. The most recent decommissioning cost estimate, an estimate of the real rate of return on investments and a discount rate are also key assumptions that are utilized in the funding curve development. A levelized annual contribution amount is determined based on these assumptions.

Q. HOW ARE THE PVNGS NDT FUNDS INVESTED?

A. NDT funds are accumulated in tax qualified and non-tax qualified trusts. The majority of PNM's PVNGS Unit 3 NDT is housed in a non-tax qualified trust due to certain historic tax code requirements. Realized gains on non-qualified trust investments are taxed at the Company's corporate tax rate, approximately 39.6%. Most of the PVNGS Unit 1 and 2 NDT monies are housed in qualified trusts and realized gains are taxed at a 20% rate. The PVNGS NDT funds held by all PVNGS Participants are invested pursuant to guidelines established by the Termination Funding Committee. Each PVNGS Participant sets an asset allocation to achieve its return objectives. The asset allocation and investment styles used by PNM for its PVNGS NDT are meant to achieve high after tax returns with a reasonable amount of risk. To meet this objective, the PVNGS NDT uses a growth equity approach for its domestic equity investments, and the fixed income portfolio is comprised mostly of tax-exempt municipal bonds.

Q. WHAT IS THE DIFFERENCE BETWEEN A TAX QUALIFIED ACCOUNT AND A NON-TAX QUALIFIED ACCOUNT?

A. Historically, if a nuclear unit was a regulated asset such as PVNGS Units 1 and 2, then the NDT funds could be accumulated in a tax qualified account where realized gains were taxed at a 20% rate. If the nuclear unit was not a regulated asset, such as PVNGS Unit 3, then the NDT funds had to be accumulated in a non-tax qualified account and realized gains were taxed at the corporate tax rate, approximately 39.6% for PNM. This tax regulation regarding non-regulated assets was removed from Internal Revenue Code Section 468A by the 2005 Energy Act, effective for years beginning after December 31, 2005. Since then, PNM has been allowed to contribute funds for PVNGS Unit 3 into a tax qualified trust.

Q. WHAT IS THE CURRENT NDT FUNDING STATUS OF EACH OF THE PVNGS UNITS?

A. As of September 30, 2013, PNM's PVNGS Unit 3 NDT is funded at approximately 72% of the latest cost study by TLG Services, Inc. ("TLG") while PNM's PVNGS Unit 1 is at 78.6% and Unit 2 is at approximately 89.5%.

Q. WHY IS THE NDT FUNDED STATUS OF PVNGS UNIT 3 AT A LOWER LEVEL THAN FOR PVNGS UNITS 1 AND 2?

A. Each unit of PVNGS has a different estimate of its ultimate decommissioning obligation. TLG's most recent cost report, in 2013 dollars, estimates that PNM's share of decommissioning Unit 1 will cost $84.9 million, Unit 2 is at $80.6 million and Unit 3 is at $95.3 million for a total of $260.8 million. As of September 30, 2013, Unit 1 had $66.7 million accumulated, Unit 2 had $72.1 million and Unit 3 had $68.7 million. Each of these NDT accounts is properly funded and meets all the criteria prescribed by the Termination Funding Committee. In addition, for most of its investment history, PVNGS Unit 3 NDT monies have been in a non-tax qualified account and taxed at a much higher rate, thus reducing the amount of accumulated funding.

Q. SINCE PVNGS UNIT 3 IS FUNDED AT A 72% VERSUS 78.6% FOR UNIT 1 AND 89.5% FOR UNIT 2, IS PNM WILLING TO CONTRIBUTE MORE TO THE UNIT 3 NDT ACCOUNT BY JANUARY 2018?

A. Yes. PNM is willing to contribute funding to the Unit 3 trust so that Unit 3's funding is equal to the average funding of Units 1 and 2 at December 31, 2017. Currently, the average funding of Unit 1 and 2 is 84% which would require approximately $11 million in contributions from shareholders into the Unit 3 NDT.

Q. AT WHAT LEVEL OF FUNDING ARE THE OTHER PVNGS PARTICIPANTS?

A. The latest public information on the funding level of the various Palo Verde participants, shown in the table below, is as of December 31, 2012.

	Unit 1	Unit 2	Unit 3	Total
APS	70.00%	88.57%	60.73%	72.66%
SRP	62.94%	58.76%	54.33%	58.41%
EPE	50.50%	46.75%	39.21%	45.13%
SCE	219.00%	211.00%	193.00%	207.00%
PNM	74.35%	75.21%	58.89%	68.96%
SCPPA	113.00%	108.00%	105.00%	109.00%
LADWP	95.00%	85.00%	78.00%	86.00%

Q. IF PVNGS UNIT 3 BECOMES A JURSIDICTIONAL ASSET, DOES PNM PROPOSE THAT CUSTOMERS REIMBURSE SHAREHOLDERS FOR THEIR CONTRIBUTIONS TO THE PVNGS UNIT 3 NDT?

A. No. PNM is proposing that customers only fund the pro-rata PVNGS Unit 3 decommissioning obligations going-forward beginning January 1, 2018.

VI. <u>PALO VERDE UNITS 1 AND 2 PLANS</u>

Q. WHAT ARE THE OWNERSHIP AND LEASING ARRANGEMENTS FOR PNM'S GENERATION CAPACITY AT PVNGS?

A. PNM is entitled to 10.2% of the energy generated by PVNGS which equates to 402 MW of generation capacity equally split among Units 1, 2 and 3. PNM has ownership interests of 2.3% in Unit 1, 4.6% in Unit 2 and 10.2% in Unit 3 and has leasehold interests of 7.9% in Unit 1 and 5.6% in Unit 2.

Q. WHY ARE THE LEASES ON PVNGS UNITS 1 AND 2 IMPORTANT FOR PURPOSES OF PNM'S APPLICATION IN THIS CASE?

A. With the proposed abandonment of SJGS Units 2 and 3, PNM must identify additional power supplies to replace this lost capacity and to meet customer needs. As demonstrated in the testimony of Mr. Ortiz and Mr. O'Connell, an integrated resource planning analysis using a twenty-year planning horizon has been adopted by the Commission for these purposes. As the Commission is aware, there are lease expiration provisions in the PVNGS leases within this planning horizon that must be addressed.

Q. WHAT ARE PNM'S LEASING ARRANGEMENTS FOR PVNGS UNIT 1?

A. PNM has four remaining facility leases for PVNGS Unit 1 representing 104 MW of generation capacity. On January 6, 2012, PNM provided the lessors of each lease with irrevocable notices that it would retain control of the lease interests upon expiration of the initial lease terms in January 2015. On January 9, 2013, PNM notified each of the lessors that it would renew the PVNGS Unit 1 leases at 50% of current lease payments through the Maximum Option Period ("MOP") under each lease for up to an additional eight years to January 2023. These renewals will reduce PNM's annual lease payments by approximately $16.5 million beginning January 15, 2015.

Q. DO THE PVNGS UNIT 1 LEASE RENEWALS REQUIRE ADDITIONAL NMPRC APPROVAL?

A. No. The exercise of the lease renewals under the provisions of each lease was approved by a predecessor of the NMPRC as part of the approval for the original leases in Case No. 1995.

Q. WHAT ARE PNM'S LEASING ARRANGEMENTS FOR PVNGS UNIT 2?

A. PNM has four remaining facility leases for PVNGS Unit 2 representing 74 MW of generation capacity. On January 9, 2013, PNM provided irrevocable notices to each of the lessors that it will retain control of the lease interests upon expiration of the initial lease terms in 2016. By January 15, 2014, PNM must specify whether it will retain control through the renewal of the leases or by exercising the purchase options specified in the leases. Of the 74 MW of generation capacity, one lease (10 MW) provides for a lease renewal MOP for up to an additional eight years to January 2024. The other three leases (64 MW) have a renewal lease term that expires in January 2018.

Q. WHAT ARE PNM'S PLANS WITH REGARD TO THE PVNGS UNIT 2 LEASES?

A. As mentioned above, PNM has until January 15, 2014, to advise the lessors of its intentions and no decisions have been made public to date. However, PNM has said that it is seriously considering issuing notices to purchase three of the four PVNGS Unit 2 leases. The PVNGS Unit 1 leases have been renewed until 2023 at 50% of their original lease costs and can be purchased in 2023 if PNM so desires. Three of the remaining four PVNGS Unit 2 leases can only be renewed until January 2018. Therefore, there is sound logic to purchase those leases at the end of their initial lease term of January 15, 2016. This also has the benefit of diversifying the purchase price risk away from 2023, when the PVNGS Unit 1 leases will be expiring. Only one of the four PVNGS Unit 2 leases, a 10 MW lease, has a long lease renewal term that goes to 2024. That lease, which is very similar to the PVNGS Unit 1 leases in renewal term, could be extended at half price for another 8 years, further diversifying purchase price risk.

Q. DOES THE LEASE RENEWAL OR EXERCISE OF THE PURCHASE OPTION UNDER EACH PVNGS UNIT 2 LEASE REQUIRE ADDITIONAL NMPRC APPROVAL?

A. No. The exercise of either the lease renewal or the fair market value purchase option under the provisions of each lease was approved by a predecessor of the NMPRC as part of the approval for the original leases in Case No. 2019 Phase I.

VII. <u>CONCLUSION</u>

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

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