

2017 DEC 22 PM 4: 12

DRAFT ORDER

Agenda 23-17 / Item No. 3B

BEFORE THE PUBLIC UTILITIES COMMISSION OF NEVADA

Application of Nevada Power Company d/b/a NV Energy for)	
authority to adjust its annual revenue requirement for general)	
rates charged to all classes of electric customers and for relief)	Docket No. 17-06003
properly related thereto.)	

_____)	
)	
Application of Nevada Power Company d/b/a NV Energy for)	
approval of new and revised depreciation and amortization rates)	Docket No. 17-06004
for its electric and common accounts.)	
_____)	

At a general session of the Public Utilities Commission of Nevada, held at its offices on December 29, 2017.

PRESENT: JOSEPH C. REYNOLDS, Chairman and Presiding Officer
ANN C. PONGRACZ, Commissioner
BRUCE H. BRESLOW, Commissioner

(PROPOSED ORDER)

**ORDER GRANTING IN PART AND DENYING IN PART
GENERAL RATE APPLICATION BY NEVADA POWER COMPANY**

EXECUTIVE SUMMARY

Every three (3) years the Public Utilities Commission of Nevada (PUCN) conducts a comprehensive review and financial analysis of Nevada Power Company d/b/a/ NV Energy and the rates charged to Southern Nevada customers. These proceedings commenced on June 5, 2017, and concluded on December 8, 2017. They involved sixteen (16) separate parties represented by legal counsel; eleven (11) days of court-reported legal arguments and fact-based testimony; over 8,000 pages of documents; and the admission of 216 separate exhibits into evidence. The purpose of this review is to ensure that the interests of Southern Nevada ratepayers and those of Nevada Power are reasonably and *fairly balanced* and prudent decisions are being made. Every penny has been counted. Originally, Nevada Power proposed an increase to its rates for the upcoming rate cycle. During the course of these proceedings, Nevada Power amended its proposal. The following Order addresses all of the issues, arguments, and evidence in greater detail. Having thoroughly reviewed the record and applicable law, the General Rate Application filed by Nevada Power is hereby **GRANTED IN PART AND DENIED IN PART**. Major decisions by the PUCN are summarized below.

RATE DECREASE IS ORDERED FOR SOUTHERN NEVADANS

Electricity rates for most customers of Nevada Power will be decreased by this Order.

The fixed monthly **basic service charge shall be decreased** for single-family residential customers from its current rate of \$12.75 per month to a new, lower rate of \$12.50 per month. Other rate classes will see a similar reduction in their monthly basic service charges.¹ The monthly **volumetric charge shall also be decreased**. Approximately \$30 million dollars cut from Nevada Power's revenue request shall be spread across all residential and commercial customer classes to reduce the per-kilowatt-hour (kWh) charge for electricity consumption. These reductions are projected to cut the average residential family monthly power bill by up to 2 percent. While relatively modest, this reduction is the first of its kind by the PUCN in over 30 years (since 1979).²

It is important to note that this rate decrease is occurring while historic levels of Net Energy Metering (NEM) rooftop solar are being installed, the closure and cleanup of coal plants are being accelerated, and new energy laws are being implemented. Voices of Nevadans have been heard.³

¹ These classes are residential single family (RS), multi-family residential (RM), large single family residential (LRS), and small commercial (GS).

² These calculations are based upon current rate revenue.

³ The Presiding Officer held three consumer sessions in Las Vegas where the concerns of Southern Nevada residents regarding their electricity rates and energy issues raised in these proceedings were heard.

This reduction in *both* the fixed and usage-based parts of electric bills will benefit lower-income Nevadans, all-the-while fostering growth in solar energy development and providing an incentive for even greater energy efficiency efforts.

LOWER RATE OF RETURN ON EQUITY

The current return on equity Nevada Power is authorized to earn on its investment is being lowered from 9.8 percent to a **new rate of 9.4 percent**. Evidence presented in these proceedings showed that a return on equity between 9.0 and 9.5 percent fell within a range of reasonableness determined by nearly all the parties. The rate of 9.4 percent is on the higher end of that range. Tens of millions of dollars are being cut by the PUCN from Nevada Power's current revenue request and/or deferred until the next general rate case. Over the following three (3) years, Nevada Power Company will have a total revenue requirement of approximately \$1.2 billion dollars.

NEW EARNINGS-SHARING MECHANISM TO CAPTURE OVEREARNINGS

Nevada Power Company will remain financially healthy with a return on equity of 9.4 percent. Future financial benefits that may flow to NV Energy, such as savings through the possible refinancing of its debt at a lower rate in 2018 and 2019 or from the "Tax Cuts and Jobs Act" recently passed by the United States Congress, which proposes reductions in the federal corporate tax rate, are unestablished, but they present a likely opportunity for Nevada Power to realize additional financial savings. To balance and temper the possibility of over-earning by Nevada Power, the PUCN establishes in this Order a first-of-its-kind in Nevada earnings-sharing mechanism between Nevada Power and its customers. Any return on equity received by Nevada Power in excess of 9.7 percent shall be thereafter split equally (50/50) between Nevada Power and ratepayers. This new earnings-sharing mechanism will help rein in any over-earning that may occur.

ACCELERATED CLOSURE OF COAL PLANTS

Nevada Power is making significant progress in accelerating the closure of Nevada's coal-fired generation plants. Senate Bill 123, passed in 2013 by the Nevada State Legislature and signed into law by Governor Brian Sandoval, mandated the closure of Nevada Power's coal-fired power plants. Originally, Navajo Generating Station was scheduled to close in 2025. That date has been moved up to 2019. Reid Gardner Generating Station Units 1-3 were expected to close in 2021. Those were closed in 2014. Reid Gardner Unit 4 was set to close in 2023. That occurred earlier this year in 2017. In this Order, the PUCN aligns the amortization of the costs for the Navajo closure with its new closure date so that future Nevadans will not pay for a power plant after it is no longer in use. The full costs of environmental cleanup and remediation at Reid Gardner are not expected to be known until 2020. Work on the project site is ongoing.

STEADY COURSE FORWARD FOR NEM ROOFTOP SOLAR

Since the PUCN began publically tracking the amount of new rooftop solar capacity installed in Nevada pursuant to Assembly Bill 405, 16.096 megawatts (MW) of new capacity has been applied for by Nevada residents, and 5.075 MW of capacity has actually been installed.⁴ This represents thousands of Nevada homes with newly-installed or soon-to-be installed NEM rooftop solar. The current time-of-use rates shall remain open and undisturbed until the issue is adjudicated with input from all stakeholders in Docket No. 17-07026 to ensure that any new time-of-use rates set by the PUCN enhance NEM growth and encourage electric battery storage.

Skepticism regarding the accuracy of the Marginal Cost of Service Study that has been relied upon in the past to project costs and rates continues, especially as innovation and technology change the grid. Concerns regarding that Study, the type of load shapes for NEM customers that should be relied upon, and any impact NEM has on Nevada rates will be addressed by the PUCN in Docket No. 17-07013, which is a newly-opened investigatory docket to determine a methodology for studying NEM in Nevada. It has been said that “[t]o those devoid of imagination, a blank place on the map is a useless waste; to others, the most valuable part.” Leopold, Aldo, *A Sand County Almanac and Sketches Here and There*, 176 (Oxford University Press Sp. Ed. 1989). The future of NEM rooftop solar in Nevada is currently a roadmap with blank space—a lot of value and opportunity to build a bright future is there. More information and study of NEM rooftop solar is needed, and that process is ongoing. The regulatory asset previously established for Nevada Power in implementing Assembly Bill 405 shall remain in place.

ADJUSTMENTS FOR NRS CHAPTER 704B EXITING BUSINESSES

Dissatisfaction with the costs associated with exiting from Nevada Power’s service pursuant to NRS Chapter 704B remain. This bundled-service-departure process is largely unique to Nevada and, therefore, little in the form of a template exists to follow. Energy prices are often in a state of flux and the future always in motion. It is difficult, if not impossible, to accurately predict future economic conditions. The PUCN is not bound to the views of its prior members, and it will look at these issues anew to ensure that the NRS Chapter 704B process is fair and nondiscriminatory to everyone involved. *See* NRS 704B.310(7)(b)(1). Obtaining fairness of process for *all* means acknowledging and fixing prior errors, so the terms for all departing customers are fair and reasonable, while still accounting for the unique facts of each case.

⁴ This information is current as of December 20, 2017.

MGM, Caesars, Switch, and Wynn have paid (or will pay) a combined total of approximately \$178 million dollars in upfront impact fees to no longer buy electricity from Nevada Power. It is clear, exiting NRS Chapter 704B customers do not object to paying an impact fee to assist and mitigate any financial harm to remaining Southern Nevada residential ratepayers—they have demonstrated this by already paying enormous amounts of money. Objection and disagreement, however, materialize when it is not clear that those impact fees are benefiting Nevadans and, instead, may go to the benefit and/or reduce the rates of other businesses. Greater transparency and accountability on how the impact fees are allocated is essential to restoring trust between Nevada Power and the NRS Chapter 704B customers. Irrespective of whether it is occurring as indisputable fact, or is merely a misperception, it remains a problem. The perception of unfairness can be every bit as destructive as true unfairness. Nevada Power shall begin paying carrying charges on all impact fees received.

Liability for non-bypassable charges regarding the closure of Reid Gardner that are a part of the terms of MGM's and Caesar's departures shall be deferred for them (just like all other ratepayers) until Nevada Power's next general rate case in 2020. Because no other ratepayers are being assessed costs regarding coal-fired plant decommissioning assets pursuant to Senate Bill 123, MGM and Caesars shall not pay those either at this time. Their surcharge for net book value **shall also be set at \$0 (zero)**. Similarly, any levy of these charges against **Wynn shall also be set at \$0 (zero)**, and this issue, as well as any other outstanding NRS Chapter 704B issues, will be adjudicated and re-examined in Wynn's currently-scheduled February 2018 proceedings.

The distribution-only-service rate now being charged by Nevada Power to MGM, Caesars, Wynn, and Switch is the same rate charged to all similarly-situated distribution-only customers, including the Southern Nevada Water Authority. Whether a subsidy that benefits Nevada residential families is unfairly embedded in that rate or the rates of other commercial customers is an issue that warrants closer scrutiny. Ongoing dispute exists about whether there is a subsidy at all. Accordingly, the PUCN is directing for the first time in over 35 years that Nevada Power complete a new and additional cost study for its next general rate case to assist the PUCN in addressing this concern.

NEVADA POWER IS HEALTHY

Nevada Power on the whole has made reasonable and sound business decisions in providing dependable electric service to its customers in Southern Nevada. The costs for which it is seeking recovery have been thoroughly reviewed, and the vast majority are approved by the PUCN as prudent. It is because of the current health of Nevada Power and the electric grid in Nevada that reductions in costs and accelerated progress toward more clean and renewable energy may continue to benefit Southern Nevadans.

TABLE OF CONTENTS

I.	INTRODUCTION	11
II.	CONSUMER SESSIONS.....	12
III.	LEGAL STANDARD OF REVIEW.....	12
IV.	RELEVANT PROCEDURAL HISTORY.....	13
V.	COST OF CAPITAL.....	15
	A. Capital Structure.....	15
	B. Cost of Debt.....	16
	C. Return on Equity.....	18
	D. Weighted Cost of Capital (Rate of Return).....	26
VI.	DEPRECIATION.....	27
	A. Service Life for Transmission, Distribution, and General Plant Accounts.....	27
	1. Account 303: Software.....	27
	2. Account 352: Transmission Structures and Improvements.....	28
	3. Account 353: Transmission Station Equipment.....	28
	4. Account 354: Transmission Towers and Fixtures.....	29
	5. Account 355: Transmission Poles and Fixtures.....	30
	6. Account 356: Transmission Overhead Conductors and Devices.....	31
	7. Account 361: Distribution, Structures, and Improvements.....	32
	8. Account 362: Distribution Station Equipment.....	33
	9. Account 364: Distribution Poles, Towers, and Fixtures.....	34
	10. Account 365: Distribution Overhead Conductors and Devices.....	34
	11. Account 366: Distribution Underground Conduit.....	35
	12. Account 367: Distribution Underground Conductors and Devices.....	36
	13. Account 368: Distribution Line Transformers.....	37
	14. Account 369: Distribution Services.....	38
	15. Account 372: Leased Property on Customer Premises.....	39
	B. Net Salvage Rates for Infrastructure, Power Plants, and General Plant Accounts.....	39
	1. Account 356: Transmission Overhead and Conductor Devices.....	39
	2. Account 362: Station Equipment.....	40
	3. Account 364: Poles, Towers, and Fixtures.....	41

4.	Account 365: Overhead Conductors and Devices.....	41
5.	Account 367: Underground Conductors and Devices.....	41
6.	Account 368: Line Transformers.....	41
7.	Account 369: Distribution Services.....	43
8.	Account 390: Structures and Improvements.....	44
9.	Navajo Generating Station Depreciation Accounting Treatment.....	44
10.	Navajo Generating Station Depreciation Interim Retirements.....	46
11.	Nellis Solar II Decommissioning Costs.....	47
12.	Allocation of Costs to Las Vegas Cogeneration Station Units.....	47
13.	Las Vegas Cogeneration Net Salvage Value.....	48
VII.	REVENUE REQUIREMENT.....	48
A.	NRS 704B Impact Fees.....	48
1.	Amortization of Impact Fees Paid on the Base Tariff General Rate (BTGR).....	49
2.	NRS Chapter 704B Regulatory Liability Carrying Charges on Impact Fees.....	50
3.	NRS Chapter 704B Regulatory Liability Amortization Period.....	52
4.	Application of Impact Fees to the Base Tariff Energy Rate (BTER).....	53
B.	Emissions Reduction and Capacity Replacement (ERCR) Plan.....	54
1.	Reid Gardner Generating Station.....	54
a.	Regulatory Asset Amortization Recovery and Decommissioning Costs.....	54
b.	Regulatory Asset Carry Charges.....	57
c.	Regulatory Liability Non-Labor Operation and Maintenance (O&M) Savings...	59
d.	Removing Unused Inventory from Unit 4 Regulatory Asset.....	61
e.	Environmental Cleanup Costs for Units 1-3 Prior to Docket No. 14-05003.....	62
f.	Deferral of Units 1-4 Property Tax and Insurance in a Regulatory Asset.....	63
g.	Operation and Maintenance (O&M) Benefit Savings Retirement of Unit 4.....	65
h.	Flood Control Project Reclassification.....	66
i.	Fuel Stock.....	67
j.	Groundwater Contamination and Remediation.....	68
k.	Contamination of Evaporation Ponds.....	69
2.	Navajo Generating Station.....	71
a.	Operation and Maintenance (O&M) Expenses.....	71
b.	Regulatory Asset Cost Recovery.....	71

c.	Regulatory Asset Carrying Charges.....	72
3.	Las Vegas Cogeneration Plant.....	73
a.	Normalizing Operation and Maintenance (O&M) Expenses.....	73
b.	Major Overhaul Costs.....	74
4.	Sun Peak Generating Station.....	75
a.	Normalizing Operation and Maintenance (O&M) Expenses.....	75
b.	Controls Retrofit and Related Depreciation Expenses.....	77
C.	Non- Emissions Reduction and Capacity Replacement (ERCR) Costs.....	78
1.	Higgins Generating Station.....	78
a.	Transformer Replacement and Related Depreciation Expense.....	78
b.	Condensate Pump System Plant Adjustment Related Depreciation Expense.....	79
c.	Digital Control System Upgrade and Related Depreciation Expense	80
2.	Lenzie Generating Station Retirements.....	81
3.	Goodsprings Generating Station Restoration	82
4.	Goodsprings Generating Station and Higgins Generating Station Paving Costs.....	84
5.	ERCR Replacement Capacity Regulatory Asset Amortization.....	84
6.	Carrying Charges on ERCR Replacement Capacity Regulatory Asset.....	86
C.	ON LINE.....	87
1.	Regulatory Asset Carrying Charge.....	87
2.	Cost Allocation between Nevada Power and Sierra Pacific Power.....	88
D.	Various Carrying Charges Issues.....	89
1.	Regulatory Asset Established in Other Dockets.....	89
2.	Cancelled Integrated Resource Plan (IRP) Regulatory Liability Carrying Charges....	91
3.	Carrying Charges on Three Settlement Payments to Nevada Power.....	92
4.	Carrying Charges on Net Energy Metering (NEM) Regulatory Liability.....	94
E.	Tax Issues.....	95
1.	Federal Corporate Tax Rate Lowered During Rate Effective Period.....	95
2.	Domestic Production Activities Deduction (DPAD) Adjustment.....	96
F.	Operation Expenses and Miscellaneous Rate Base Items.....	100
1.	Cost Savings from New Line Locate Service Provider.....	100
2.	Capitalized Line Locating Costs.....	101
3.	Employee Performance Incentive Plans.....	103

- a. Long-Term Incentive Plan.....103
 - b. Short-Term Incentive Plan.....103
 - 4. Banner Database Upgrade and Data Analytics Platform Projects.....105
 - 5. Regulatory Asset for Rate Case Expense & Recovery of Regulatory Asset Costs...108
- G. Savings for Nevada Power that May Arise During Next Rate-Effective Period.....109
 - 1. Potential Debt Refinancing.....109
 - 2. Tax Cut and Jobs Act.....112
- H. Earnings Sharing Mechanism to Address Future Over-Earning.....112
 - I. Adjusting Rate of Return Calculations.....114
- VIII. RATE DESIGN.....116
 - A. Overarching Rate Design Issues.....116
 - B. Monthly Basic Service Charge Reductions.....118
 - 1. Residential Single Family Basic Service Charge Reduction118
 - 2. Basic Service Charges Reduced for Other Customer Classes.....120
 - C. Volumetric Charge Reductions.....120
 - D. Net Energy Metering (NEM) Issues.....121
 - 1. Time of Use (TOU) Rates.....121
 - 2. Removal of AB 405 Designation from Class Names.....122
 - 3. Regulatory Asset Treatment for Alleged AB 405 Costs.....123
 - 4. Advanced Notice of Excess Energy Credits for NEM Customers.....124
 - 5. Investigatory Docket to Study NEM Impacts in Nevada.....126
 - a. Use of Total Load v. Delivered Load.....126
 - b. Marginal Cost of Service for NEM Customers.....128
 - E. Marginal Cost of Service.....130
 - 1. Approval of the Marginal Cost of Service Study.....130
 - 2. Future Embedded Cost of Service Study.....134
 - F. Rate Tilt.....136
 - G. Optional Critical Peak Pricing and Demand Use Schedule for Residential Classes.....137
 - H. NRS Chapter 704B Customers and Senate Bill 123 Regulatory Asset Rate.....137
 - I. Switch and Distribution Only Service (DOS) Charges.....141
 - J. The Alleged Residential Subsidy.....142
 - K. Unbundled Rates for Residential Customers.....144

- L. Zero Base Tariff General Rate (BTGR) Floor.....145
- M. Renewable Portfolio Standard (RPS) Adder.....146
- O. Nevada Power Renewable Energy Labor Expenses.....147
- IX. COMPLIANCE DIRECTIVES148
- X. CONCLUSION.....148

I. INTRODUCTION

Before REYNOLDS, JOSEPH C., Chairman and Presiding Officer.

Nevada law provides that every three (3) years a public utility shall file with the Public Utilities Commission of Nevada (PUCN) a general rate application regarding its costs and any proposed changes to the rates charged to its customers. *See* NRS 704.110. Once filed, the PUCN has a statutorily-imposed deadline of 210 days by which to either approve or disapprove, in whole or part, the proposed changes. NRS 704.110(2).

Here, Nevada Power Company d/b/a NV Energy filed with the PUCN a general rate application, as well as an application to revise depreciation and amortization rates, on June 5, 2017, regarding the electric utility costs and rates for services it provides to its customers throughout southern Nevada. Meanwhile, Assembly Bill 405, which amended Nevada's laws governing Net Energy Metering (NEM), was signed into law and became effective in-part upon being signed, with other provisions becoming effective on August 1, 2017, and September 1, 2017, respectively. Nevada Power's initial filings were amended on September 5, 2017.

Numerous parties intervened in the proceedings and were represented by legal counsel: Vote Solar; Nevada Cogeneration Associates 1 & 2; Wynn Las Vegas; Vivint Solar; Smart Energy Alliance (SEA); Caesars Enterprise Service; Nevadans for Clean Affordable Reliable Energy (NCARE); Sunrun; MGM Resorts International; Southern Nevada Gaming Group;⁵ Tesla (formerly Solar City); Walmart Stores and Sam's West; Federal Executive Agencies of the United States (FEA); and Northern Nevada Industrial Electric Users (NNIEU).⁶ The Office of the Nevada Attorney General, Bureau of Consumer Protection (BCP),⁷ and Regulatory Operations Staff of the PUCN (Staff) also participated.⁸

Based upon an extensive and thorough review of oral and written witness testimony and evidentiary exhibits admitted during eleven (11) days of administrative hearings, and in accordance with Nevada statutes and regulations, the PUCN hereby orders the general rate application filed by

⁵SNGG includes the following: Boyd Gaming Corporation; Station Casinos; Las Vegas Sands; South Point Hotel, Casino & Spa; Affinity Gaming; Tropicana Las Vegas; LVGV (The M); The Plaza Hotel and Casino; Binions Gambling Hall; and Four Queens Hotel and Casino.

⁶ NNIEU includes the following: EP Minerals; Heavenly Valley, Limited Partnership; Sheltie Opco d/b/a Nugget Casino Resort; Nevada Cement Company; Premier Magnesia; Prime Healthcare Services; The Ridge Tahoe Property Owners' Association; Saint Mary's Regional Medical Center; and Renown Health.

⁷The Attorney General intervened pursuant to NRS 228.360.

⁸Staff of the PUCN is automatically a party pursuant to NRS 703.301(1). It is noteworthy that Staff of the PUCN acts independently of the Presiding Officer. *See* NRS 703.301(2).

Nevada Power GRANTED IN PART AND DENIED IN PART.

II. CONSUMER SESSIONS

One original consumer session was held in Las Vegas on September 11, 2017, specifically for the PUCN to hear the comments and concerns of Southern Nevada residents regarding this case. Determining it to be in the public interest, two additional sessions were held in Las Vegas on December 6, 2017.⁹ See NRS 704.069; NAC 703.164.

III. LEGAL STANDARD OF REVIEW

The filings in this case are made pursuant to the Nevada Revised Statutes (NRS), Chapters 703 and 704, as well as the Nevada Administrative Code (NAC), Chapters 703 and 704.

The PUCN has dual responsibilities. It is responsible for ensuring that any charges imposed on Nevada utility customers are “just and reasonable,” see NRS 704.001(4); NRS 704.120(1), which is a statutorily-imposed standard consistent with the PUCN’s responsibility to “[p]rotect, further and serve the public interest.” See NRS 703.151(1). Yet, the PUCN is also legally required to balance the public interest with the interest of shareholders of public utilities to ensure that public utilities have “the opportunity to earn a fair return on their investments . . .” NRS 704.001(4). The touchstone of any PUCN proceeding should be achieving fairness and reasonableness in addressing the concerns of both the public *and the utility*. See *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1944). Indeed, the United States Supreme Court has stated: “There must be a fair return upon the reasonable value of the property at the time it is being used for the public.” *Bluefield Waterworks & Imp. Co v. Public Service Commission of West Virginia*, 262 U.S. 679, 690-91 (1923). However, the Supreme Court has explained that “[t]he ascertainment of that value is not controlled by artificial rules. It is not a matter of formulas, but there must be reasonable judgment having its basis in a proper consideration of all relevant facts.” *Id.*

The PUCN has broad authority to fix and remedy rates and charges that are unjust, unreasonable, discriminatory or preferential. See NRS 704.120(1). An order by the PUCN will be upheld by a higher court on judicial review when it is “within the legal framework of the law, and based on substantial evidence in the record.” *Nevada Power Co. v. Public Utilities Commission of Nevada (PUCN), et al.*, 122 Nev. 821, 834, 138 P.3d 486, 494 (2006) (other internal citations and quotations omitted). Substantial evidence is that which ““a reasonable mind might accept as adequate to support a conclusion.”” *Id.* (quoting *State, Emp. Security v. Hilton Hotels*, 102, 606, 608, 729 P.2d 497, 498 (1986)).

⁹AARP also filed written comments with the PUCN on September 13, 2017, opposing any rate increase.

Great deference is afforded to the PUCN's "interpretation of its governing statutes or regulations," *see Dutchess Business Service, Inc. v. Nevada State Board of Pharmacy*, 124 Nev. 701, 709, 191 P.3d 1159, 1165 (2008), and a higher court will not "reweigh the evidence" or substitute its judgment on factual questions. *Nevada Power Co.*, 122 Nev. at 495, 138 P.3d at 494; NRS 703.373 (11). Evaluating the credibility of witness testimony and the weight to be given to it resides well within the province of the PUCN, *i.e.*, fact finder. *See In the Matter of TR v. State*, 119 Nev. 646, 649, 80 P.3d 1276, 1278 (2003). This standard holds true even when expert testimony is conflicting. *See Allen v. State*, 99 Nev. 485, 487-88, 665 P.2d 238 (1983). Indeed, the Nevada Supreme Court has recognized that "[e]xpert testimony is not binding on the trier of fact; [triers of fact] can either accept or reject the testimony as they see fit." *Id.*

The PUCN may also take "[n]otice of judicially cognizable facts and generally recognized technical or scientific facts within the specialized knowledge of the agency," NRS 233B.123(5), and its final decisions "shall be deemed reasonable and lawful" and have operative effect unless they are set aside by a higher court on review upon a showing of clear error or abuse of discretion. *See* NRS 703.373(9) and (11); *see also* NRS 703.374(2). With the above standards of review in mind, the relevant procedural history is discussed below.

IV. RELEVANT PROCEDURAL HISTORY

The past collided with the future while these proceedings were ongoing. In other words, new laws and statutory deadlines through Assembly Bill 405 appeared in this case while old laws and statutory deadlines set forth in NRS Chapter 704 remained in place. Throughout these proceedings, various parties requested to be excused from select phases of the proceedings. All requests were granted by the Presiding Officer. The relevant procedural history of this case is as follows:

- On June 5, 2017, Nevada Power filed a General Rate Application for authority to adjust its annual revenue requirement for general rates charged to all classes of electric customers (Docket No. 17-06003). Nevada Power also filed a separate General Rate Application for approval of new and revised depreciation and amortization rates for its electric and common accounts (Docket No. 17-06004).
- On June 12 and June 14, 2017, the General Rate Applications were Publically Noticed.
- On June 15, 2017, Assembly Bill 405 was signed into law by Governor Brian Sandoval.
- On July 21, 2017, a Prehearing Conference was held.

- On July 28, 2017, Nevada Power and Sierra Pacific Power filed a Joint Application in Docket No. 17-07026 to implement its understanding of Assembly Bill 405.
- On September 1, 2017, the PUCN issued an Order in Docket No. 17-07026.
- On September 5, 2017, Nevada Power amended its pending General Rate Applications pursuant to the Order issued by the PUCN in Docket No. 17-07026.
- On September 11, 2017, the PUCN held a Consumer Session in Las Vegas to listen to comments by members of the public regarding the General Rate Applications filed by Nevada Power.
- On September 27, 2017, the amended General Rate Applications were publically re-noticed.
- On September 29, 2017, a second Prehearing Conference was held.
- On October 4, 2017, the Cost of Capital (Phase I) hearing began and was continued until November 1, 2017.
- On November 1, 2017, the continued Cost of Capital (Phase I) hearing occurred.
- On November 13, 2017, the Depreciation (Phase II) hearing occurred.
- On November 14-17, 2017, the Revenue Requirement (Phase III) hearing occurred.
- On December 4-5, 2017, the Rate Design (Phase IV) hearing began and was continued until December 7, 2017.
- On December 6, 2017, the PUCN held two additional Consumer Sessions in Las Vegas to listen to comments by members of the public regarding the amended General Rate Applications filed by Nevada Power.
- On December 7-8, 2017, the continued Rate Design (Phase IV) hearing occurred and the evidence closed thereafter.

This general rate case involves four areas of inquiry and review: Cost of Capital, Depreciation, Revenue Requirement, and Rate Design. Each is discussed below.

V. COST OF CAPITAL

1. The Cost of Capital phase evaluates the opportunity of a public utility to earn a fair return on its investment in providing electric service to customers. Bonbright, James C.; Danielsen, Albert L.; Kamerschen, David R., *Principles of Public Utility Rates*, Public Utilities Reports, Inc., 304-05 (1988). Here, the Cost of Capital hearings were held on October 4, 2017, and November 1, 2017. Seven (7) witnesses testified. Forty-two (42) exhibits and two (2) confidential exhibits were admitted into evidence. Below are the issues, the positions of the parties, and discussion and findings.

A. CAPITAL STRUCTURE

Party Positions

2. Nevada Power reports (as of May 31, 2017) that its capital structure is based on a debt/equity mix of 50.01 percent debt and 49.99 percent equity as shown below:

	Capital Amounts (thousands)	Capital Ratio
Customer Deposits	\$77,766	1.44%
Long-Term Debt	\$2,632,040	48.58%
Total Debt	\$2,709,806	50.01%
Total Equity	\$2,708,560	49.99%
Total Capital	\$5,418,366	100.00%

(Ex. 24 at 2-3; Ex. 20 at Statement F).

3. MGM contends that a 50/50 capital structure is “a little too thick with equity.” Notably, in Nevada Power’s general rate case in 2014, equity comprised only 48.18 percent of Nevada Power’s capital structure. Moreover, the PUCN approved an equity amount within the last year for Sierra Pacific Power of 48.03 percent. While MGM states that it does not believe a 50/50 debt and equity ratio is an issue that needs to be fixed at this time, MGM cautions against a higher level of equity. (Ex. 35 at 27).

4. BCP makes no changes to Nevada Power’s proposed capital structure and recommends the PUCN adopt Nevada Power’s capital structure of 50.01 percent debt and 49.99 percent equity. This capital structure recommendation is consistent with Nevada Power’s certification update request and the comparable groups. BCP notes that Nevada Power has slightly less financial risk than the comparable group in light of the group’s 47 to 48 percent average equity ratio compared to Nevada Power’s approximate 50 percent equity ratio. (Ex. 28 at 31-32).

5. Staff takes no issue with Nevada Power's certified capital structure and recommends that the PUCN accept Nevada Power's certified capital structure. (Ex. 31 at 6-7).

Rebuttal

6. Nevada Power argues that, contrary to BCP's assertion, its equity ratio is approximately equal to that allowed for the group of comparable companies. BCP incorrectly relies only on equity ratios as a measurement for financial risk. However, it is irresponsible to evaluate financial risk by only one ratio. Rating agencies analyze multiple ratios and credit factors to determine financial risk. BCP's conclusion that Nevada Power's financial risk is lower is based only on one ratio rather than on the more robust type of analysis performed by the broader financial community. (Ex. 36 at 4-5).

PUCN Discussion and Findings

7. The PUCN finds that Nevada Power's proposed capital structure is reasonable. No party contends otherwise. It is approved.

B. COST OF DEBT

Party Positions

8. Nevada Power reports (as of May 21, 2017) a cost of 6.66 percent for long-term debt and a cost of 0.61 percent for customer deposits, which total 6.49 percent for the weighted cost of debt. (Ex. 20 at Statement F).

9. MGM argues that Nevada Power's 6.66 percent cost of long-term debt is not reasonable in comparison with Sierra Pacific's, as Nevada Power's long-term debt interest payments are 275 basis points higher than Sierra Pacific's. This spread is too great to be just and reasonable. MGM calculated the cost of debt for the Regulatory Research Associates (RRA) Electric Utilities relied upon by Nevada Power witness Strunk as industry samples. MGM states that the cost of debt for these utilities is 4.27 percent and argues that Nevada Power's 6.66 percent cost of debt is unprecedented. (Ex. 35 at 19-22).

10. FEA and SEA contend that Nevada Power's cost of debt is overstated because it does not reflect an opportunity to refinance significant amounts of Nevada Power's internal embedded debt securities. Nevada Power has debt securities in 2018 and 2019, the refinancing of which will lower Nevada Power's debt interest expenses. FEA and SEA adjusted Nevada Power's embedded cost of debt down to 6.33 percent to reflect debt issues that Nevada Power can refinance at substantially lower interest rates. FEA and SEA recommend that Nevada Power advise the PUCN on its ability to lock in interest rates for 2018 and 2019. If Nevada Power cannot provide actual locked-in interest rates, the PUCN should award an embedded debt cost of 6.33 percent for 2018. The PUCN should also recognize Nevada Power's savings ability through refinancing to reduce regulatory assets of Nevada Power upon refinancing its debt. (Ex. 27 at 2-3, 22-23).

11. BCP proposes no changes to Nevada Power's cost of debt.¹⁰ (Ex. 28 at 32).
12. Staff recommends acceptance of Nevada Power's cost of debt. (Ex. 31 at 7).

Rebuttal

13. Nevada Power argues that MGM's assertion that Nevada Power's cost of debt is too high when compared to Sierra Pacific is flawed and contrary to positions taken by other witnesses in this case. All of Nevada Power's outstanding debt was outstanding during the last two rate cases. The PUCN accepted a 6.65 percent cost of debt in Nevada Power's general rate case in 2011 (Docket No. 11-06006), which included all of the long-term debt series included in this case. Moreover, MGM fails to account for differences in the debt portfolios of Nevada Power and Sierra Pacific. MGM does not acknowledge or adjust for differences in credit ratings, tenures, issuance dates, or debt structure. (Ex. 36 at 6-8).

14. Nevada Power also states that FEA and SEA's assertions that anticipated savings from refinancing in 2018 and 2019 should be used to lower the allowed Return on Equity (ROE), or to offset early refinancing, should be rejected. Nevada is a historical test period jurisdiction, requiring calculations to look backwards at test periods and certification periods. FEA and SEA seek to circumvent this concept by reaching into a future period for an asymmetrical, single-issue adjustment. This is an inappropriate departure from regulatory principals in this jurisdiction. (Ex. 36 at 10-14).

PUCN Discussion and Findings

15. The PUCN issued a letter on December 6, 2016, pursuant to NRS 704.655, establishing a 0.61 percent interest rate for customer deposits for the period of January 1, 2017, through June 30, 2017. The PUCN finds that Nevada Power's proposed customer deposit rate of 0.61 percent is reasonable and approved.

16. The PUCN also finds reasonable and approves Nevada Power's proposed cost of 6.66 percent for long-term debt. With regard to the proposal by SEA and FEA to use anticipated savings from refinancing in 2018 and 2019 to lower the allowed ROE, the PUCN finds that reaching forward outside of the certification period to capture speculative savings on the cost of debt in 2018 and 2019 is contrary to practice in Nevada. Any adjustment in these proceedings to capture future refinancing cost savings would not qualify for an Expected Change in Circumstance (ECIC) filing under NRS 704.110(4).

¹⁰ BCP recommends 6.49 percent for the cost of "long-term debt" with a capital ratio of 50.01 percent and a weighted cost of 3.246 percent. While BCP does not specify that these figures pertain to the total cost of debt (long-term debt and customer deposits), the recommendations made by BCP are the same as those made by Nevada Power for the total cost of debt.

C. RETURN ON EQUITY

Party Positions

17. Nevada Power requests a Return on Equity (ROE) of 10 percent. Nevada Power asserts that this ROE falls at the low end of the zone of reasonableness, considering risk factors specific to Nevada Power. As discussed in further detail below, to compensate for these risks, Nevada Power's cost of equity witness Strunk quantifies a risk premium adjustment of between 0.5 and 1 percent. Strunk recommends that the PUCN apply an additional 0.75 percent to Nevada Power's ROE, particularly if the PUCN issues an ROE below 10 percent.¹¹ Nevada Power notes that ROE awards in 2016 and 2017 for electric utilities have ranged anywhere from 8.64 percent (for a distribution utility) to 11.6 percent (for a generation facility), with the average state-awarded ROE for the electric industry being 9.77 percent in 2016 and 9.92 percent in 2017. Nevada Power contends that 10 percent is consistent with the range of observed ROE awards in other jurisdictions. (Ex. 26 at 4-5, 51-52, Ex. Strunk Direct-15; Ex. 2 at 6-7; Tr. at 126).

18. In its analysis, Nevada Power relies on a proxy group comprised of 30 comparable companies. Nevada Power identifies companies with similar characteristics to determine its proxy group, including: companies considered to be "electric utilities" by the Value Line Investment Survey; companies with a comparable credit rating; companies with 10 quarters of constant or increasing dividends; companies with a positive five-year growth forecast; companies that have not merged or participated in any extraordinary activity within the past 6 months significant enough to distort Discounted Cash Flow (DCF) inputs; companies that operate in a primarily regulated business; and companies with sufficient data available to perform DCF analysis. (Ex. 26 at 15-17).

19. Nevada Power applies three DCF Cost of Capital models, two Risk Premium models, and one Comparable Earnings model to its proxy group. Nevada Power's DCF proxy group model produces an average ROE of 9.01 percent. Nevada Power's DCF Yield Plus Growth model produces an ROE of 9.09 percent. Nevada Power's applied Federal Energy Regulatory Commission (FERC) DCF model produces an ROE of 10.85 percent. Nevada Power's first Risk Premium model, the Capital Asset Pricing Model (CAPM), produces an average ROE of 7.4 percent. Nevada Power's second Risk Premium model produces an average ROE of 9.85 percent. Nevada Power's Comparable Earnings model produces an average ROE of 9.64 percent for utility peers and 16.49 percent for similar,

¹¹ Nevada Power did not include this aspect of Strunk's recommendation in its cost of capital or revenue requirement calculations. (Ex. 2 at 6-7).

unregulated industrial firms. (Ex. 26 at 18-30; Ex. Strunk Direct-2; Ex. Strunk Direct-12; Ex. Strunk-Direct-14).

20. Nevada Power states that it faces unique risks due to uncertainty surrounding the pending Energy Choice Initiative to amend Nevada's Constitution and dismantle Nevada's regulatory structure. This issue will appear again before Nevada voters in 2018 and causes the utility to present higher risk to investors. (Ex. 26 at 31-32). Citing the Value Line Investment Survey and other restructured markets, Nevada Power states that the biggest risks to investors include the potential for unrecoverable costs, including stranded generation costs and Provider of Last Resort (POLR) costs. While stranded costs are generally recoverable, some restructured utilities have been prohibited from recovering stranded costs or faced inadequate stranded cost recovery. Uncertainty regarding possible POLR costs further increases risk. As utilities experience restructuring, stock prices become more volatile, and investors demand a higher return on their investment. (Ex. 26 at 32-41; Tr. at 75-80).

21. Nevada Power's cost of equity witness Strunk proposes that an additional 0.75 percent risk premium be applied to Nevada Power's ROE to compensate for the uncertainty and risks brought on by the Energy Choice Initiative. (Ex. 2 at 6-7; Ex. 26 at 49; Tr. at 75-84, 121-123, 124-126).

22. FEA and SEA recommend an ROE of 9 percent, which is the midpoint of its proposed range of reasonableness of 8.9 to 9.1 percent.¹² This recommendation will fairly compensate Nevada Power for its current market cost of common equity and mitigate Nevada Power's claimed revenue deficiency. Nevada Power's requested ROE of 10 percent overstates a fair and reasonable return for Nevada Power and is not supported by Nevada Power's own analysis. Authorized returns for electric utilities have been steadily declining over the last 10 years and recently-authorized ROEs for electric utilities have declined to about 9.6 percent. A majority of electric utilities were awarded ROEs from 9.5 to 9.7 percent over the last 18 months. (Ex. 27 at 2, 4-5, Ex. Gorman Direct-2).

23. FEA and SEA apply a constant growth DCF model using consensus analysts' growth rate projections, a constant growth rate DCF model using sustainable growth rate estimates, a multi-stage growth DCF model, and a Risk Premium model; and a CAPM to estimate Nevada Power's ROE. These models were applied to the same proxy group developed by Nevada Power.¹³ (Ex. 27 at 25-26).

¹² Although FEA and SEA propose a range of reasonableness of 8.9 to 9.1 percent, they also acknowledge that PUCN often takes a gradual approach to adjusting the ROE and, therefore, recommend an ROE of no more than 9.5 percent. (Tr. at 137-138).

¹³ FEA and SEA exclude two companies from Nevada Power's proxy group due to mergers that occurred after Nevada Power's initial ROE study was performed. (Ex. 27 at 26; Ex. 38 at 13).

