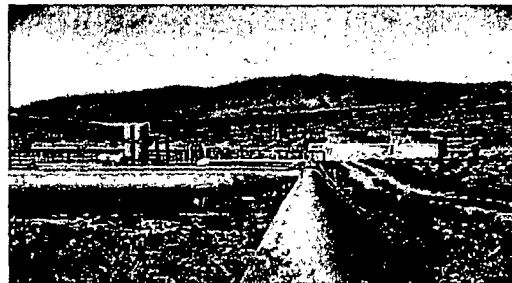
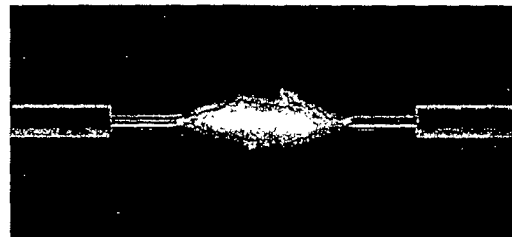


PUBLIC UTILITIES COMMISSION OF NEVADA

ENERGY CHOICE INITIATIVE FINAL DRAFT REPORT

INVESTIGATORY DOCKET No. 17-10001



APRIL 2018

FOREWORD

The idea of choice and open markets is as quintessentially American as apple pie, baseball, and jazz music. It is in our DNA to gravitate towards it. But ensuring a non-stop supply of electricity to every home, business, and governmental entity in Nevada every second of every day of the year, regardless of the weather or economy, makes it unique from other goods or services. Electricity is a basic necessity of modern life. Like air. Like water. Like food. It is so fundamental that most of us rarely pause to think about it: we just want our lights to turn on and our monthly bills to stay low. Today, Nevada enjoys on average some of the lowest electricity rates in the country, and Nevada is leading in job growth and the development of solar and renewable energy technologies.

The Energy Choice Initiative seeks to amend the Nevada State Constitution and fundamentally alter the historical framework by which Nevadans obtain and pay for their electricity by removing the ability of the Nevada State Legislature, and subsequently the Public Utilities Commission of Nevada (PUCN), to control a key component of electricity rates. The Energy Choice Initiative was approved by approximately 72 percent of Nevada voters in 2016,¹ and will appear again before voters in 2018.

The PUCN is an independent regulatory entity created by Nevada law, and it operates separately from all other state agencies—its only clients are the residents of Nevada. Thousands of pages of comments, information, and analysis, as well as 10 days of transcribed public dialogue and proceedings, regarding issues raised by Energy Choice Initiative have been reviewed by the PUCN through the course of this investigation. These records are included in Volumes 1 through 11 of the Appendix accompanying this Report.

Trying to predict the future with 100 percent accuracy is not possible. This Report does not purport to do so. Energy prices can be volatile and fluctuate—they do not stay the same for a variety of reasons, including costs of fossil fuel, weather, global conflict, and politics. Many variables exist in the analysis in this Report, and the findings could certainly change if new information became available. With this stated, much involving electricity is reasonably predictable based upon identifiable trends, objective analysis, and experience.

The findings and analysis in this Report do not advocate or take any position supporting or opposing the Energy Choice Initiative. This Report is only intended as an objective resource to help educate all Nevadans, so that informed decisions are made regarding Nevada's energy future.

Sincere regards,



JOE REYNOLDS, Chairman
Public Utilities Commission of Nevada

¹ Nevada Secretary of State, *Nevada General Election 2016—Ballot Questions*, <http://silverstateelection.com/ballot-questions/>.

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KEY FINDINGS

- Nevadans currently enjoy some of the lowest average electricity rates in the country, and Nevada is a leader in solar and renewable energy development, as well as job and business growth.
- The Energy Choice Initiative is reasonably likely to increase the average monthly electric bills of Nevadans, at least the in the short term, *i.e.*, the first 10 years. These cost increases will potentially diminish over the years as Nevada's new open-market paradigm becomes established, Nevada's economy and population grows, and the transition costs are paid off.
- Large commercial customers will likely see more immediate benefits from the Energy Choice Initiative due to the elimination of an alleged residential subsidy and reduced impact fees relating to NRS Chapter 704B.
- Ambiguous language within the Energy Choice Initiative makes it difficult to discern its full legal meaning and scope, and purported objectives of the measure appear to be in conflict with each other.
- No state has ever deregulated its energy market or made energy policy by amending its state constitution, which make the implications of the Energy Choice Initiative relatively permanent and unique to Nevada.
- Plain language of the Energy Choice Initiative removes the authority of the PUCN and, subsequently, the Nevada State Legislature to control the generation component of a bundled electricity rate. This will cause new exposure for Nevada ratepayers to market volatility and profit-driven ratemaking practices. It may also bring theoretical benefits of open market competition to Nevada.
- The Energy Choice Initiative will likely require in excess of 100 million dollars in new startup costs and, thereafter, over 45 million dollars in new annual operation and maintenance costs.
- NV Energy will likely be forced to divest its generating assets and assign its long-term power purchase contracts to new owners. Nevada ratepayers will remain liable for any financial losses incurred by NV Energy from these stranded costs, which could foreseeably exceed several billion dollars. While these stranded costs will not be new to Nevada ratepayers, they will offset any possible benefits from an open and competitive market created by the Energy Choice Initiative.
- At least 400 union electrical employees are likely to lose their jobs, and hundreds more may be negatively affected by the Energy Choice Initiative. The Energy Choice Initiative will also likely create new jobs for Nevadans, but what those jobs will be remains speculative and unestablished.
- Net Energy Metering (NEM)/rooftop solar laws and policies recently enacted through Assembly Bill 405, as well as other energy programs, will likely be negatively affected by the Energy Choice Initiative.
- The California Independent System Operator (CAISO) appears the most viable option for Nevada to participate in an organized wholesale market. Yet, this option has challenges, due to the need for bi-state legislation and changes to CAISO's governance structure to ensure Nevada's interests are represented.
- It remains an open question as to who will serve as a provider of last resort (POLR) for NV Energy's former Nevada customers in a retail market. This remains an area of concern given Nevada's diverse geography and population demographics.
- The Energy Choice Initiative can be implemented by July 1, 2023. But it will require an immediate and unprecedented commitment by Nevadans of financial, legislative, and legal resources.

INTRODUCTION

Informed and responsible decisions about electricity, and energy in general, cannot be made in a vacuum. Accordingly, it is prudent to place the results of the PUCN's investigation into the Energy Choice Initiative in Docket No. 17-10001 into their proper context by setting forth a broad overview of electricity regulation development, the history and work of the PUCN, statistics about electricity in Nevada today, as well as other relevant considerations, before addressing the specific questions raised in these proceedings.

Divergent Views about Government Regulation

Corporations exist to make money, not to protect the welfare of the public. Indeed, Adam Smith, a leader of modern capitalism theory, warned that the interests of a corporation "is always in some respects different from, and even opposite to, that of the public." See Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, 219-220 (1776). Without regulatory oversight, history has shown that left to their own devices certain corporations and marketplaces have created economic and environmental chaos and destruction. Children work in factories. Rivers catch on fire. Doctors operate without licenses. Senior citizens get cheated out of life savings. Investors are told lies. Home mortgages become upside down. Regulatory oversight arose out of necessity to serve as a governmental check on corporate greed and profits, *i.e.*, negative externalities, to protect public health and safety.

Yet, corporations have also driven some of our best efficiencies and inventions, and they employ a lot of people. History has also shown that regulation can go too far at times. John Stuart Mill, a leader in *laissez faire* economics theory, believed that "the business of life is better performed when those who have an immediate interest in it are left to take their own course, uncontrolled either by the mandate of law or by the meddling of any public functionary. The persons, or some of the persons, who do the work, are likely to be better judges than the government, of the means of attaining the particular end at which they aim." See John Stuart Mill, *Principles of Political Economy, with some of their Applications to Social Philosophy*, 952 (1848). Regulatory agencies can be run by government bureaucrats and 'paper pushers' who are more interested in outdated rules than real-world common sense and getting things done. Potentially life-saving drugs are withheld from the ill. Children are forced to get a permit before opening a lemonade stand. A construction project requires a dozen or more permits before it can break ground. Red tape delays a loan. Poorly-drafted (or interpreted) regulations can also perpetuate policies antithetical to economic growth, innovative ideas, and new technologies, which also better society and our way of life.

Balancing these competing interests and philosophies is a responsibility of the PUCN as mandated by Nevada law.² Irrespective of where one may fall in this philosophical debate, what is important to note is that regulation of electricity is unique from regulation of most any other produced goods and services.

² 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 is to achieve 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.*

Electricity is Different

Electricity is a commodity, and providing it to customers is a service. It is unique in several important respects. Former NASA Astronaut Neil Armstrong, while speaking to the National Academy of Engineering, recognized the electricity grid as the top engineering achievement: “[T]he top achievement, electrification, powers almost every pursuit and enterprise in modern society. It has literally lighted the world and impacted countless areas of daily life, including food production and processing, air conditioning and heating, refrigeration, entertainment, transportation, communication, health care, and computers.”³ Armstrong, for reference, noted that our nation’s journey to the Moon was ranked twelfth.⁴ It is complex.

First and foremost, electricity has become a necessity in modern life. Like air. Like water. Like food. Electricity is essential to not only turning on our home and business lights; but also for operating such things as refrigerators, computers, cell phones, air conditioners, heaters, life-saving medical equipment, and even vehicles. Unlike, for example, cable television; nobody dies and the economy does not falter if the television does not work. As a leader in modern utility regulation theory, James Bonbright, recognized, electric public utilities provide a service that is “essential” and “vital” to “present livelihood and future social growth.”⁵ Second, while electricity is a necessity for modern life, it must be created and/or generated. Unlike air or water, to be useful electricity must be intentionally produced. Third, unlike commodities such as food or even gasoline, large-scale storage of electricity is certainly limited.⁶ Meaning, once generated, most of it must be transmitted and used. As the United States Supreme Court has recognized: “[A]ny electricity that enters the grid immediately becomes part of a vast pool of energy that is *constantly moving* in interstate commerce.”⁷ Fourth, electricity can be physically dangerous, and requires highly specialized skills and training to properly handle. Nobody dies from the shock of touching most mass-produced commodities. That is not true with electricity. Fifth, the generation, transmission, and distribution of electricity requires enormous amounts of long-term capital investment in infrastructure and planning. Often, this planning looks decades into the future and takes hundreds of millions, if not billions, of upfront investment dollars. Design and construction of generation facilities and transmission lines that span hundreds of miles cannot be done quickly or overnight. Sixth, once electricity infrastructure is built, it is fixed in its geographic location. Seventh, electricity requires on-site service technicians and engineers who can travel and repair damaged lines, breakers, or connect service day or night and in any weather condition 24 hours a day, 365¼ days of the year. Eighth, electricity can be a volatile financial commodity that has price fluctuations based upon uncontrollable natural factors, political decisions in Washington D.C., or world events such as weather, trade tariffs, or the costs of fossil fuels. Ninth, electricity must be constantly available to meet society’s growing demand at any given time. Meaning, the electric grid must not only be able to meet today’s peak usage and demand, but tomorrow’s as well. Finally, the innovations and technology surrounding electricity generation and usage are evolving at an astounding rate, whereby what may be considered cutting-edge technology just a few years ago may soon become outdated.

³ See <http://www.greatachievements.org>.

⁴ *Id.*

⁵ Bonbright, James C.; Danielsen, Albert L.; Kamerschen, David R., *Principles of Public Utility Rates*, 8-9 (1988).

⁶ *Id.* at 9 and U.S. Energy Information Administration, *Today in Energy, Design and Application of Utility-Scale Battery Storage*, <https://www.eia.gov/> (Appendix 3761-3762).

⁷ *New York v. Federal Energy Regulatory Commission*, 535 U.S. 1, 7 (2002) (emphasis added).

The Regulatory Compact and Monopoly Paradigm

Because electricity is a different type of resource, how our society has traditionally regulated it is unique as well. It has been generally viewed that electricity regulation actually favors a monopoly structure. Indeed, as the United States Supreme Court has observed, the monopoly paradigm for electricity arose because, due to “its inherent technical characteristics,” an electric public utility could not “be operated with efficiency and economy unless it enjoys a monopoly of its market.”⁸ Often, competing electric utilities in an open and competitive electricity market place have over time run each other into bankruptcy.⁹ This was not beneficial to the public and would lead to a natural monopoly by an electric utility without the safeguards of regulatory oversight.

“Regulation represents third-party intervention by a government agency as an arbitrator between the company and the customers it serves.”¹⁰ In other words, it is government involvement between corporations doing business and people. In the traditional monopoly paradigm, the electric utility gives up many of the rights and protections that a traditional private business retains, such as the ability to fix its own prices and rates and the ability to enter into business arrangements without prior government approval. In exchange, the electric utility does not have to compete for service territory and is guaranteed an opportunity to earn a reasonable rate of return on its investments.¹¹ “The nature of governmental regulation of private utilities is such that a utility may frequently be required by the state regulatory scheme to obtain approval for practices a business regulated in less detail would be free to institute without any approval from a regulatory body.”¹²

The United States Supreme Court has recognized: “[T]o offset monopoly power and ensure affordable, stable public access to a utility’s goods or services, legislatures enacted rate schedules to fix the prices a utility could charge. As this job became more complicated, legislatures established specialized administrative agencies . . . to set and regulate rates.”¹³

Role of Regulators to Protect the Public Interest

Regulation arose in the United States to protect the public interest.¹⁴ “The traditional public interest view of regulation is to protect consumers against high or discriminating prices or unreliable service.”¹⁵ It is believed that without proper regulation, no sufficient penalties for corporate misbehavior exist, and social and political power would be concentrated in the hands of private corporations.¹⁶ Regulation also exists to insulate ratepayers from market volatility and electricity price spikes. The United States Supreme Court observed: “In periods of high electricity demand, prices can reach extremely high levels as the least efficient generators

⁸ Bonbright at 18-19.

⁹ *Id.*

¹⁰ *Id.* at 6.

¹¹ *Id.* at 9 n.5.

¹² *Jackson v. Metropolitan Edison Co.*, 419 U.S. 345, 357 (1974).

¹³ *Verizon Communications Inc v. Federal Communications Commission*, 535 U.S. 467, 477 (2002) (internal citation omitted).

¹⁴ Bonbright at 28.

¹⁵ *Id.* at 33.

¹⁶ *Id.* at 40.

have their supply bids accepted in the wholesale market auctions. Not only do rates rise dramatically during these peak periods, but the increased flow of electricity threatens to overload the grid and cause substantial service problems.”¹⁷ One of the primary responsibilities of an electric utility regulatory paradigm is to protect the consumer and ratepayer from these harms.

Origins of Federal and State Public Utility Regulation

In the early twentieth century, state and local agencies oversaw nearly all generation, transmission, and distribution of electricity.¹⁸ Recognizing the limitations placed upon states by the Commerce Clause of the United States Constitution to regulate the flow of goods and services within interstate commerce, the United States Congress passed the Federal Power Act in 1935.¹⁹

The Federal Power Act authorized the Federal Energy Regulatory Commission (FERC) to regulate the wholesale exchange of electricity in interstate commerce, including both wholesale electricity rates and any rule or practice affecting such rates. But it left the States free to regulate any other sale, *i.e.*, any retail sale, of electricity.²⁰ The Act provides that “[a]ll rates and charges made, demanded, or received by any public utility for or in connection with” interstate transmissions or wholesale transactions—as well as “all rules and regulations affecting or pertaining to such rates or charges”—must be “just and reasonable.”²¹ However, by limiting FERC’s regulatory reach, the Act maintains a zone of exclusive state jurisdiction regarding retail sales of electricity directly to end-use customers.²²

ABOUT THE PUBLIC UTILITIES COMMISSION OF NEVADA (PUCN)

Over 110 years ago, the PUCN was established by Nevada law as the Railroad Commission of Nevada.²³ As explained in a 1908 report by the newly-formed Commission to then Nevada Governor John Sparks, the Commission was created to protect Nevadans from discriminatory treatment and unfair business practices at the hands of the railroad and mining barons, who controlled the lifelines of transportation and commerce in the West.²⁴ The Report recognized that “[n]o State in the union has suffered more [from unfair rates by railroad operators], relatively, from unjust discrimination at the hands of interstate carriers, and with respect to interstate traffic within its borders, than has the State of Nevada.”²⁵ A few years later, the Public Service Commission of Nevada was created in 1911. The reason for the creation of the Commission was later articulated by the Nevada Supreme Court:

¹⁷ *FERC v. Electric Power Supply Association*, ___ U.S. ___, ___, 136 S.Ct. 760, 762 (2016).

¹⁸ *Id.* ___ U.S. at ___, 136 S.Ct. at 767.

¹⁹ *Id.*

²⁰ *Id.* ___ U.S. at ___, 136 S.Ct. at 762.

²¹ *Id.* ___ U.S. at ___, 136 S.Ct. at 767.

²² *Electric Power Supply Association*, ___ U.S. at ___, 136 S.Ct. at 767-768.

²³ See *Union Pacific Railroad Co. v. Adams*, 77 Nev. 282, 289-290, 362 P.2d 450, 453-454 (1961).

²⁴ *First Annual Report of the Railroad Commission of Nevada*, at 4 (Gazette Publishing Company, April 10, 1908).

²⁵ *Id.* at 15.

[The Commission] is the direct outgrowth of an urgent and persistent public demand for prompt, intelligent, and effective public control of public utilities. It is founded on necessity and convenience. *Competition did not prove effective* in preventing monopoly by public utility companies, and its consequent burden on the public in the different classes of public service rendered by them. It is recognized, also, that the rate-making power and the power to regulate and control these enterprises, vested by the Constitution in the Legislature, could not be conveniently exercised by that body to meet the changing conditions, which make the rates a public utility may lawfully charge for its service vary in value from time to time. These exigencies were met by the Legislature in the formation of the governmental agency designated, in the act creating it, as a Public Service Commission. The law presumes that the members of the commission shall be men trained in those lines of business in which public utilities are engaged, and who can fairly and intelligently adjust the complex questions that constantly arise. Necessarily to make the act effective to answer the purposes of its enactment, the commission has been clothed with broad discretionary powers; and to further accomplish these purposes the orders of the commission as to rates and charges have been made prima facie lawful from the date of the order until changed or modified by the commission, or until found to be unreasonable²⁶

(Emphasis added). The Railroad Commission of Nevada was merged into the Public Service Commission of Nevada in 1919 and remained under that name for nearly 70 more years. In 1997, the name of the Public Service Commission of Nevada was changed to the Public Utilities Commission of Nevada.

Organization

The PUCN is a unique executive-branch agency of the State with quasi-judicial and quasi-legislative responsibilities. It is headed by a Chairman and two Commissioners who are appointed by the Governor. About 100 people work at the PUCN, many of whom are licensed and certified engineers, accountants, lawyers, and economists. An Executive Director is appointed by the PUCN to assist in running the day-to-day operations and oversee agency finances. Unlike most other agencies, the PUCN has its own General Counsel, which is entirely independent of the Office of the Nevada Attorney General. The authority of the PUCN to exercise legal jurisdiction over electricity rates is vested to it through the Nevada State Legislature and can be traced to foundations in the Nevada State Constitution.²⁷ The PUCN is governed by the laws enacted by the Nevada State Legislature and Governor, namely, Chapters 703 and 704 of the Nevada Revised Statutes (NRS) and the Nevada Administrative Code (NAC). It is subject to the Administrative Procedures Act set forth in NRS Chapter 233B, the Public Records Act set forth in NRS Chapter 239, and the Open Meeting Law set forth in NRS Chapter 241. The PUCN's main office is located in Carson City with a smaller office in Las Vegas.

²⁶ *Steamboat Canal Co. v. Garson*, 43 Nev. 298, ___, 185 P. 801, 807 (1919).

²⁷ *Steamboat Canal*, 43 Nev. at ___, 185 P. at 806; see *Degiovanni v. Public Service Commission of Nevada*, 45 Nev. 74, ___, 187 P. 582, 583 (1921) (“The authorities of this and other jurisdictions are uniform in holding that the power to regulate and establish rates which a [utility] may lawfully charge for its service, is a legislative power.”).

Responsibilities

Every cent of the monthly utility bills received by most Nevada residents and businesses is scrutinized by the PUCN to ensure it is fair and reasonable: the average cost of electricity paid by Nevadans is among the lowest in the nation.²⁸ The PUCN oversees the full or limited regulation of over 400 entities engaged in providing electric, natural gas, telecommunications, water, wastewater, and rail services to the nearly three million residents of Nevada, as well as Nevada businesses. By far the largest and best known of these entities is NV Energy, which consists of Nevada Power Company and Sierra Pacific Power Company. These entities engage in billions of dollars of annual transactions and have billions of dollars in assets under the PUCN's jurisdiction.

The PUCN's basic regulatory duties are set forth in Nevada law and include: (1) providing for the fair and impartial regulation of public utilities; (2) providing for the safe, economic, efficient, prudent and reliable operation and service of public utilities; and (3) balancing the interests of customers and shareholders of public utilities by providing public utilities with the opportunity to earn a fair return on their investments while providing customers with just and reasonable rates.²⁹ To serve these objectives, the PUCN's mission statement provides for the following: "The Public Utilities Commission of Nevada serves to protect the public interest, ensure fair and reasonable utility rates, and regulate the delivery of utility services to benefit the economy, the environment, and all Nevadans." But the overriding goal of the PUCN is plain and simple: serve the public interest.

Nature of Proceedings

Proceedings before the PUCN can be generally grouped into three categories. The first of these are publicly-noticed agenda meetings with all three members of the PUCN in attendance. These meetings occur approximately every two-to-three weeks throughout the year and are video-conferenced between Carson City and Las Vegas, as well as live-streamed over the internet. Subject to the Open Meeting Law, the PUCN listens to public comment, deliberates as a full body on issues, and votes. Certain decisions are subject to judicial review.³⁰ The second of these proceedings are hearings in contested cases, which often involve adversarial positions, evidence, witnesses, fact-finding and legal conclusions—and, of course, they often involve lawyers too. The Office of the Nevada Attorney General's Bureau of Consumer Protection and the Regulatory Operations Staff of the PUCN participate in these proceedings as independent advocates. One member of the PUCN is designated by the Chairman to preside over the case, and he or she is prohibited from discussing it *ex parte* with PUCN Regulatory Operations Staff or anyone else.³¹ The order of these proceedings is set forth in regulation, and the Nevada Rules of Civil Procedure apply when the regulations are silent. A third category of proceeding involves workshops and investigatory dockets. These often lead to drafting regulations or the issuance of reports. Unlike contested cases, these proceedings are not adversarial and involve discussions about policy and the best ways to implement it. Key to the PUCN's mission is public involvement. Each of the above-listed proceedings has procedures to provide the public with notice of what the PUCN is doing and several opportunities to comment.³²

²⁸ Nevada is ranked as the 7th best state in the nation on average for the lowest cost per-kilowatt-hour for electricity. U.S. Energy Information Administration, *State Electricity Profiles 2016*, <https://www.eia.gov/> (Appendix 3763-3764).

²⁹ NRS 704.001.

³⁰ See NRS Chapter 233B.

³¹ NRS 703.301(2); NAC 703.481.

³² See, e.g., NRS 703.310; NRS 703.320; NRS 703.373; NRS 703.380; NAC 703.491; NAC 703.492.

Legal Authority

Our electric system in Nevada is complex and has been developed for over a century,³³ with rates being set by the PUCN for over 100 years.³⁴ The Nevada Supreme Court has recognized: “the Nevada [State] Legislature has created a comprehensive statutory scheme for the regulation of public utilities” in Nevada.³⁵ The PUCN is at the core of this system. Because the PUCN is a creature of statute, it has no inherent power and can only exercise its powers and jurisdiction pursuant to the authority granted to it through statutory provisions. “[W]here power is clearly conferred or fairly implied, and is consistent with the purposes for which the [PUCN] was established by law, the existence of the power should be resolved in favor of the commissioners so as to enable them to perform their proper functions of government.”³⁶

The Nevada State Legislature has expressly granted the PUCN authority to “supervise and regulate the operation and maintenance of public utilities” in accordance with the provisions of NRS Chapter 704. NRS Chapter 704 sets forth the general statutory framework for the regulation of public utilities and the setting of rates that public utilities may charge their customers. In enacting NRS Chapter 704, and NRS 704.001 in particular, the Nevada State Legislature declared the following purpose and policy:

1. To confer upon the Commission the power, and to make it the duty of the Commission, to regulate public utilities to the extent of its jurisdiction;
2. To provide for fair and impartial regulation of public utilities;
3. To provide for the safe, economic, efficient, prudent and reliable operation and service of public utilities; and
4. To balance the interests of customers and shareholders of public utilities by providing public utilities with the opportunity to earn a fair return on their investments while providing customers with just and reasonable rates.

The PUCN has authority to regulate utility rates and the Nevada Supreme Court has described that power as being “plenary.” Meaning, it is “broadly construed.”³⁷ The only limit on the PUCN’s authority to regulate utility rates is the legislative directive that rates charged for services provided by a public utility must be “just and reasonable.” Indeed, it is unlawful for a public utility in Nevada to charge rates that are not reasonable. The PUCN also has authority to regulate the service standards and practices of public utilities. Rates and regulations prescribed by the PUCN are presumptively lawful and reasonable until modified by the PUCN or by a court on judicial review.³⁸

³³ See *Nevada Power Company v. Eighth Judicial District Court (Bonneville Square Associates)*, 120 Nev. 948, 962, 102 P.3d 578, 588 (2004) (“[T]echnical issue[s] lie[] within the specialized knowledge of the PUC and its trained staff.”).

³⁴ See, generally, *Degiovanni*, 45 Nev. at ___, 187 P. at 582.

³⁵ *Nevada Power Company*, 120 Nev. at 955-956, 102 P.3d at 583-584.

³⁶ *Id.*

³⁷ *Id.* at 956-957, 102 P.3d at 584-585.

³⁸ NRS 704.130.

Resolution of Consumer Complaints

Nevada's statutory scheme also authorizes the PUCN to resolve customer complaints against a public utility related to the reasonableness of a rate, regulation, measurement, practice or act. The PUCN contains within it a Division of Consumer Complaint Resolution that investigates complaints against a public utility that an unjust or unreasonable rate is being charged for regulated services or that a "regulation, measurement, practice or act affecting or relating to the production, transmission or delivery or furnishing" of power or any service that is "unreasonable, insufficient or unjustly discriminatory."

If the PUCN's Division of Consumer Complaint Resolution is "unable to resolve the complaint," it must transmit the complaint and the results of its investigation to the full PUCN for additional review and consideration.³⁹ The PUCN may hold a hearing to resolve it. The PUCN has authority to give prospective relief from an unjust, unreasonable, or unjustly discriminatory rate, regulation, practice or service by substituting a just and reasonable rate, regulation, practice or service after an investigation and a hearing.⁴⁰

The PUCN's decision on a complaint against a public utility is subject to judicial review.⁴¹ Judicial review is limited to the record, and the reviewing court may set aside the PUCN's decision only under certain circumstances.⁴²

STATISTICS ON ELECTRICITY IN NEVADA TODAY

Currently, Nevada is leading the country on several metrics and is on the new frontier of energy innovation, while maintaining some of the lowest rates in the entire United States. From the most current available data from the U.S. Energy Information Administration, Nevada ranks no. 7 amongst all states in the country with the lowest annual average per-kilowatt-hour cost of electricity across combined residential, commercial, and industrial classes for the year 2016. In 2016, the average retail price of a kilowatt-hour of electricity in Nevada was 8.39 cents.⁴³ Meaning, our average energy prices are currently amongst the best in the country. Our residential rates are on average, and our commercial and industrial rates are lower than average.⁴⁴

Nevada ranks no. 1 in the country with the highest amount of installed solar generation per person.⁴⁵ Nevada ranks no. 4 overall in the country for total solar generation and has been identified as a "top solar state."⁴⁶ Nevada ranks no. 4 in total solar jobs and has more per-capita solar jobs than any state.⁴⁷

³⁹ NRS 703.310.

⁴⁰ NRS 704.120.

⁴¹ NRS 703.373.

⁴² NRS 703.376.

⁴³ U.S. Energy Information Administration, *State Electricity Profiles 2016*, <https://www.eia.gov/> (Appendix 3763-3764).

⁴⁴ U.S. Energy Information Administration, *Electric Power Monthly (January 2018)*, <https://www.eia.gov/> (Appendix 4619-4620).

⁴⁵ Solar Energy Industries Association, *Top 10 Solar States*, <https://www.seia.org/> (Appendix 3765-3772).

⁴⁶ *Id.*

⁴⁷ The Solar Foundation, *Solar Jobs Census 2016*, <https://www.solarstates.org/> (Appendix 3773-3779).

Nevada ranks no. 2 in the country in utility-scale net electricity generation from geothermal energy.⁴⁸ Nevada ranks amongst the top 10 best states in the country for lowest carbon dioxide emissions.⁴⁹

Most of Nevada's electricity generation comes from natural-gas fired generation facilities. However, about 22 percent of Nevada's electricity generation in 2016 originated from renewable sources, such as solar, geothermal, wind, and hydroelectric power.⁵⁰ Nevada is well on track to exceed the 25 percent Renewable Portfolio Standard mandated by law for 2025.⁵¹ Major new large-scale utility solar projects have been approved by the PUCN and are being (or have been) constructed throughout Nevada, such as Crescent Dunes Solar in Tonopah (2015),⁵² Techren Solar in Boulder City (2017),⁵³ and Turquoise Solar in Reno (2018).⁵⁴

Moreover, NV Energy is making significant progress in accelerating the closure of Nevada's coal-fired generation plants. Senate Bill 123 (Nevada 2013) mandated the closure of NV Energy'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, but instead closed early in 2017. The full costs of environmental cleanup and remediation at Reid Gardner are not expected to be known until 2020. Clean-up work on the project site is ongoing. North Valmy Generating Station is expected to close by 2025.

With the passage of Assembly Bill 405 (Nevada 2017) and its implementation through PUCN Docket No. 17-07026, Nevada's Net Energy Metering (NEM) program and rooftop solar is reemerging. Since the passage and implementation of Assembly Bill 405, approximately 12 new megawatts of rooftop solar have been installed in Nevada, and approximately 20 new megawatts have been applied for.⁵⁵ On March 14, 2018, the PUCN approved new time-of-use rates for NEM customers pursuant to a landmark agreement reached among NV Energy, Tesla, Sunrun, Vivant Solar, and Vote Solar, as well as others. These entities agreed in legal pleadings filed with the PUCN to "work together."⁵⁶ NEM has been reborn in Nevada.

⁴⁸ U.S. Energy Information Administration, *State Energy Profile and Estimates (Nevada)*, <https://www.eia.gov/> (Appendix 3781-3796).

⁴⁹ U.S. Energy Information Administration, *Rankings: Carbon Dioxide Emissions 2015*, <https://www.eia.gov/> (Appendix 3797-3798).

⁵⁰ U.S. Energy Information Administration, *State Energy Profile and Estimates (Nevada)*, <https://www.eia.gov/> (Appendix 3781-3796).

⁵¹ NRS 704.7821(1)(h).

⁵² PUCN Docket Nos. 09-07018, 10-09026, 11-03014.

⁵³ PUCN Docket Nos. 17-02008, 17-12004, 17-12005.

⁵⁴ PUCN Docket Nos. 17-11002, 17-11003, 17-11004.

⁵⁵ This information was current from the PUCN's website as of March 1, 2018.

⁵⁶ See Stipulation at page 5 filed on February 20, 2018, in PUCN Docket No. 17-07026.

Recently, historic energy policy emerged from the 79th Regular Session of the Nevada State Legislature regarding energy programs and resource planning in Nevada.⁵⁷ Currently, the PUCN has 247 open dockets.⁵⁸ The PUCN has opened 12 new investigations since July 1, 2017. Subjects of these investigations include creating a new electric vehicle infrastructure,⁵⁹ new battery storage technology,⁶⁰ and new energy efficiency incentives for low-income Nevada residents.⁶¹

Every three years the PUCN reviews the electricity rates of NV Energy.⁶² The PUCN ordered the rates of average residential family customers in Sierra Pacific Power Company's territory decreased in December 2016.⁶³ The PUCN ordered the rates of residential family and small commercial customers in Nevada Power Company's territory decreased in December 2017.⁶⁴ This decrease includes the first-ever reduction in the fixed basic monthly service charge since it was first implemented in the late 1970s.

NV Energy has also proposed a historic 84 million dollar across-the-board rate decrease for most Nevada ratepayers in the Nevada Power Company and Sierra Pacific Power Company service territories due to a reduction in the corporate income tax rate from the Tax Cuts and Jobs Act passed by the United States Congress in December 2017. This matter is currently being litigated in Docket Nos. 18-02010 through 18-02012. Meaning, average monthly bills of Nevadans will be going even lower.

Undeniably, a nexus exists between Nevada energy policies, PUCN decisions, and economic growth and business development in Nevada. In February 2017, the PUCN experienced first-ever briefing by the Governor's Office of Economic Development (GOED) regarding this connection. During Governor Brian Sandoval's tenure, Tesla has begun construction in Nevada of the largest lithium-ion battery facility in the world. Switch opened the largest data center in the world.⁶⁵ Corporations such as Tesla, Apple, and Google had proceedings pending before the PUCN.⁶⁶ By any reasonable measure, Nevada is thriving under its existing electricity regulatory structure.

⁵⁷ See, e.g., Senate Bill 65 (Nevada 2017) (requires the PUCN to analyze fossil fuel volatility and costs of carbon in integrated resource plans); Senate Bill 145 (Nevada 2017) (requires the PUCN to establish a low-income solar program; electric vehicle infrastructure demonstration program; and wind, solar, and waterpower incentive program); Senate Bill 146 (Nevada 2017) (requires NV Energy to file with the PUCN a first-ever joint integrated resource plan); Senate Bill 150 (Nevada 2017) (requires the PUCN to establish new energy efficiency goals); Senate Bill 204 (Nevada 2017) (requires the PUCN to establish new energy storage targets); Assembly Bill 405 (Nevada 2017) (requires the PUCN to implement new NEM policies and tariffs); Assembly Bill 223 (Nevada 2017) (requires the PUCN to include energy efficiency programs in integrated resource plans).

⁵⁸ This information is from the PUCN and is current as of March 5, 2018.

⁵⁹ PUCN Docket No. 17-08021.

⁶⁰ PUCN Docket No. 17-07014.

⁶¹ PUCN Docket No. 17-08023.

⁶² NRS 704.110.

⁶³ PUCN Docket Nos. 16-06006 through 16-06009.

⁶⁴ PUCN Docket Nos. 17-06003 and 17-06004.

⁶⁵ *Id.*

⁶⁶ See PUCN Docket Nos. 17-02045 (Tesla), 17-11002 (Apple), and 17-04019 (Google), respectively.

Prior Attempt to Deregulate Electricity in Nevada

The Energy Choice Initiative is not the first time Nevada has looked at deregulating its electricity market. Sparked by a report in 1995 from the PUCN to Governor Bob Miller and Legislative Subcommittee Chairman Pete Ernaud,⁶⁷ Nevada spent several years wrestling with the idea of deregulation.⁶⁸

In the mid-1990s, the Nevada State Legislature began to deregulate the retail electricity market, and adopted various measures from 1995 through 2001 designed to steer state-regulated public utility electricity providers and customers toward a private, competitive market. Notably, in 1999, the Nevada State Legislature enacted Senate Bill 438, which had three significant impacts:

First, it provided for a rate freeze on the retail electrical rates a utility could charge its customers through March 1, 2003. Second, it designated Nevada Power as the electrical “provider of last resort,” meaning that Nevada Power, or possibly a Nevada Power affiliate, would provide electricity services during the rate freeze period to those customers who did not wish to change services from the state-regulated utility to a private electric company. Third, because the market was moving toward competitive selling, the Legislature abandoned deferred energy accounting as a method for recouping lost revenue associated with power purchases.⁶⁹

The Western Energy Crisis

As the Nevada Supreme Court has recognized, “[f]rom the spring of 2000 to the summer of 2001, the western United States slipped into an energy crisis, which caused the wholesale power markets to experience dramatic price increases. Consequently, under the deregulation legislation, any added costs from a utility’s electrical purchases on the wholesale markets were being passed on to the customers. In response, the Legislature enacted Assembly Bill 369 (Nevada 2001).”⁷⁰ Think Enron and the rolling blackouts experienced by the State of California. The purpose of Assembly Bill 369 was to immediately restore “Nevada’s comprehensive regulation over electric utilities during the energy crisis, which would allow the State to regain control of energy costs and also ensure that the public had a steady supply of electricity.”⁷¹ Nevada abandoned its attempts to deregulate through Assembly Bill 369. Governor Kenny Guinn believed that deregulating in Nevada created too much uncertainty and too many problems—it was time for Nevada to move on from the idea.⁷²

⁶⁷ (Appendix 4173-4618).

⁶⁸ A more detailed synopsis of Nevada’s prior deregulation efforts is found in the *Historic Overview: Nevada Deregulation 1990’s* that was presented on November 7, 2017, to the Governor’s Committee on Energy Choice by PUCN Assistant General Counsels Hayley Williamson and Roman Borisov (Appendix 3139-3373).

⁶⁹ *Nevada Power Company v. PUCN*, 122 Nev. 821, 825, 138 P.3d 486, 489 (2006).

⁷⁰ *Id.* at 825, 138 P.3d at 489-490.

⁷¹ *Id.* at 825, 138 P.3d at 490.

⁷² *Guinn Stands by Deregulation Delay*, David Strow, Las Vegas Sun, (October 5, 2000) <https://m.lasvegassun.com/> (“[D]eregulation now, Gov. Kenny Guinn believes, could be disastrous, with the West in the throes of what he called ‘an energy crisis.’ Deregulating now, Guinn said, could cause power rates in Nevada to skyrocket, particularly for residential users.”) (Appendix 3800-3801).

No Deregulated State is Comparable to Nevada

While engaging in discussions and analysis regarding the Energy Choice Initiative, both proponents and opponents tend to invoke the experiences of other states as proof of deregulation's merit, or lack thereof. Certainly, it is prudent to examine the experiences of other states; but holding other states out as on-point examples for Nevada to follow is a tenuous argument wrought with pitfalls.

Nevada is unique from other states economically, geographically, and in terms of its resources. What is proposed through the Energy Choice Initiative—an amendment to our state constitution—fundamentally distinguishes this attempt to deregulate from those experienced by other states. Indeed, several other states undertook the prospect of deregulation *via* a 'grass-roots' movement through their respective public utilities commissions and legislatures. Here, in Nevada, the Energy Choice Initiative has been financed by corporate sponsors. While it had obvious voter support, it does not have hallmarks of a 'grass roots' movement by any means. Four states are often cited for their deregulation efforts as examples for Nevada: Illinois, Pennsylvania, Texas, and California. They should be examined by Nevadans closely.

Illinois has been ranked no. 1 in the country for nuclear power generation.⁷³ It is ranked no. 4 in the country in coal production.⁷⁴ Less than 0.1 percent of Illinois's electricity comes from solar generation.⁷⁵ In 2016, Illinois ratepayers paid on average 9.38 cents per kilowatt-hour for electricity (higher than Nevada).⁷⁶ Illinois has the fifth highest amount of carbon dioxide emissions in the country.⁷⁷

Pennsylvania has been ranked no. 2 in the country for nuclear power generation.⁷⁸ It is ranked no. 3 in the country for coal production.⁷⁹ Less than 1 percent of Pennsylvania's electricity comes from solar generation.⁸⁰ In 2016, Pennsylvania ratepayers paid on average 10.19 cents per kilowatt-hour for electricity (higher than Nevada).⁸¹ Pennsylvania has the third highest amount of carbon dioxide emissions of any state in the country.⁸²

⁷³ U.S. Energy Information Administration, *State Nuclear Profiles 2010*, <https://www.eia.gov/> (Appendix 3802).

⁷⁴ U.S. Energy Information Administration, *Rankings: Coal Productions 2016*, <https://www.eia.gov/> (Appendix 3803-3804).

⁷⁵ U.S. Energy Information Administration, *State Energy Profile and Estimates (Illinois)*, <https://www.eia.gov/> (Appendix 3805-3812).

⁷⁶ U.S. Energy Information, *State Electricity Profiles 2016*, <https://www.eia.gov/> (Appendix 3763-3764).

⁷⁷ U.S. Energy Information Administration, *Total Carbon Dioxide Emissions 2015*, <https://www.eia.gov/> (Appendix 3797-3798).

⁷⁸ U.S. Energy Information Administration, *State Nuclear Profiles 2010*, <https://www.eia.gov/> (Appendix 3802).

⁷⁹ U.S. Energy Information Administration, *Rankings: Coal Productions 2016*, <https://www.eia.gov/> (Appendix 3803-3804).

⁸⁰ U.S. Energy Information Administration, *State Energy Profile and Estimates (Pennsylvania)*, <https://www.eia.gov/> (Appendix 3813-3819).

⁸¹ U.S. Energy Information, *State Electricity Profiles 2016*, <https://www.eia.gov/> (Appendix 3763-3764).

⁸² U.S. Energy Information Administration, *Total Carbon Dioxide Emissions 2015*, <https://www.eia.gov/> (Appendix 3797-3798).

Texas has been ranked no. 5 in the country for nuclear power generation.⁸³ It is ranked no. 6 in the country for coal production.⁸⁴ Less than 1 percent of Texas's electricity comes from solar generation.⁸⁵ In 2016, Texas residents paid on average 8.43 cents per kilowatt-hour for electricity (higher than Nevada).⁸⁶ Texas leads the country in carbon dioxide emissions.⁸⁷ Moreover, Texas consumes more energy than any state in the country.⁸⁸ Notably, most of Texas does not engage in interstate electricity commerce and, therefore, it is not subject to FERC regulation. Rather, its market is overseen by the Electric Reliability Council of Texas (ERCOT). Texas is also not fully deregulated. Significant urban areas, such as San Antonio and Austin, are regulated.⁸⁹ The parts of Texas that have deregulated have no viable NEM development and Texas has no overall statewide NEM policy.⁹⁰

California has been ranked no. 10 in the country for nuclear power generation.⁹¹ It consumes the second most energy of any state.⁹² It is also the second largest producer of carbon dioxide emissions.⁹³ Yet, California is also ranked no. 1 in the country for solar generation.⁹⁴ Moreover, California is only partially deregulated—residential and certain small commercial customers remain under a form of state regulation, which keeps NEM rooftop solar programs intact.⁹⁵ In 2016, California residents paid on average 15.23 cents per kilowatt-hour for electricity (which is higher than Nevada).⁹⁶

⁸³ U.S. Energy Information Administration, *State Nuclear Profiles 2010*, <https://www.eia.gov/> (Appendix 3802).

⁸⁴ U.S. Energy Information Administration, *Rankings: Coal Productions 2016*, <https://www.eia.gov/> (Appendix 3803-3804).

⁸⁵ Solar Energy Industries Association (SEIA), *Texas Solar*, <https://www.seia.org/> (Appendix 3820-3826).

⁸⁶ U.S. Energy Information Administration, *State Energy Profile and Estimates (Texas)*, <https://www.eia.gov/> (Appendix 3827-3834).

⁸⁷ U.S. Energy Information Administration, *Total Carbon Dioxide Emissions 2015*, <https://www.eia.gov/> (Appendix 3797-3798).

⁸⁸ U.S. Energy Information Administration, *State Energy Profile and Estimates (Texas)*, <https://www.eia.gov/> (Appendix 3827-3834).

⁸⁹ See Senate Bill 7 (Texas 1999) and *Texas' deregulated electricity market, explained*, Dylan Baddour, Houston Chronicle (June 8, 2016) <https://www.chron.com/> (Appendix 3835-3840).

⁹⁰ *Texas' lack of statewide metering policy slows adoption of rooftop solar*, Ryan Maye Handy, Houston Chronicle (July 16, 2017) <https://www.chron.com/> (Appendix 3841-3843).

⁹¹ U.S. Energy Information Administration, *State Nuclear Profiles 2010*, <https://www.eia.gov/> (Appendix 3802).

⁹² U.S. Energy Information Administration, *State Energy Profile and Estimates (California)*, <https://www.eia.gov/> (Appendix 3844-3852).

⁹³ U.S. Energy Information Administration, *Total Carbon Dioxide Emissions 2015*, <https://www.eia.gov/> (Appendix 3797-3798).

⁹⁴ Solar Energy Industries Association (SEIA), *California Solar*, <https://www.seia.org/> (Appendix 3853-3860).

⁹⁵ *Consumer and Retail Choice, the Role of the Utility, and an Evolving Regulatory Framework*, Staff White Paper, California Public Utilities Commission, at 4 (May 2017), <https://www.cpuc.ca.gov/> (Appendix 3861-3874).

⁹⁶ U.S. Energy Information Administration, *State Electricity Profiles 2016*, <https://www.eia.gov/> (Appendix 3763-3764).

Given Nevada's opposition to nuclear energy and the protracted litigation surrounding the proposed nuclear waste dump at Yucca Mountain,⁹⁷ as well as Nevada's public policy to close coal-fired generation facilities,⁹⁸ looking to high carbon-dioxide emitting states such as Illinois, Pennsylvania, and Texas as models of what Nevada seeks to become appears misplaced and incongruent with Nevada's renewable energy goals.

Customers in the above-listed states pay more on average per-kilowatt-hour for electricity than Nevadans. Nevada's rates will continue to drop even lower in the coming months.⁹⁹ Legendary University of California, Los Angeles NCAA basketball coach John Wooden once recognized that "[b]eing a role model is the most powerful form of educating."¹⁰⁰ Nevada should carefully reflect on which states it looks to as models and what we may learn from them when analyzing the impacts of the Energy Choice Initiative. Nevada is uniquely situated. The issues we face are largely our own to resolve and for our own reasons (unless we want to become like those other states).

SCOPE AND PROCEEDINGS OF PUCN INVESTIGATORY DOCKET

On September 13, 2017,¹⁰¹ the issue of whether the PUCN should open an investigatory docket into the Energy Choice Initiative was on the agenda before the Governor's Committee on Energy Choice. Members of the Governor's Committee proposed that the PUCN investigate certain issues. During discussion of the agenda item, the Governor's Committee was informed that any request for the PUCN to open an investigatory docket into this matter would be "separate and apart" from anything that the Governor's Committee did or controlled and that once the docket was opened by the PUCN that it would "look at any items that need to be reviewed" to provide a credible and independent analysis consistent with the PUCN's statutory responsibilities. A proper investigation invariably includes examination of the potential costs and benefits to Nevada ratepayers.¹⁰² A majority of the members of the Governor's Committee voted to formally request that the PUCN open an investigatory docket.

On September 27, 2017, Lieutenant Governor and Chairman of the Governor's Committee Mark Hutchison sent a formal letter to the PUCN requesting that an investigation be opened into the following four issues: (1) identify any legal changes that may be necessary to comply with the Energy Choice Initiative; (2) provide analysis of wholesale market options reasonably available to Nevada; (3) provide analysis of retail market options, including those regarding a provider of last resort option (POLR); and (4) set forth a reasonable timeline for implementation.¹⁰³

⁹⁷ Assembly Joint Resolution 10, Nevada State Legislature (Nevada 2017) (opposing "the development of a repository for spent nuclear fuel and high-level radioactive waste at Yucca Mountain in the State of Nevada").

⁹⁸ See Senate Bill 123 (Nevada 2013).

⁹⁹ See PUCN Docket Nos. 16-06003 through 16-06006 (lowering rates in 2016 for Northern Nevada NV Energy customers), 17-06003 and 17-06004 (lowering rates in 2017 for Southern Nevada for NV Energy customers), and 18-02010 through 02012 (lowering rates in 2018 for NV Energy customers throughout the State).

¹⁰⁰ *Wooden: A Lifetime of Observations and Reflections On and Off the Court*, John Wooden and Steve Jamison (1997).

¹⁰¹ A request for the PUCN to open an investigation into the Energy Choice Initiative was first raised at the Governor's Committee on Energy Choice meeting on July 11, 2017. See 07/11/17 Minutes of Governor's Committee on Energy Choice at www.energy.nv.gov (Appendix 3875-3888).

¹⁰² See 09/13/17 Minutes of Governor's Committee on Energy Choice at www.energy.nv.gov (Appendix 3889-3897).

¹⁰³ (Appendix 1-2).

On October 11, 2017, the PUCN issued a public notice opening the Energy Choice Initiative investigation as PUCN Docket No. 17-10001. In this notice, the PUCN stated that it would investigate the four issues requested by the Governor's Committee, and also informed the public that it would examine a fifth issue regarding (5) the short- and long-term potential costs and benefits of the Energy Choice Initiative.¹⁰⁴

On December 8, 2017, initial written public comments were due. The following 50 entities and/or persons filed comments:

AARP Nevada
Vice Admiral Lee Gunn, U.S. Navy (Ret.)
National Energy Marketers Association (NEMA)
City of Las Vegas
Calpine Energy Solutions
Arizona Independent Scheduling Administrators Association
Valley Electric Association (VEA)
International Brotherhood of Workers Local Unions 396 and 1245
Arizonans for Electric Choice and Competition
Interwest Energy Alliance
Drift Marketplace
Southwest Energy Efficiency Project (SWEET)
Ceres BICEP Network
Infinite Energy, Inc.
Mt. Wheeler Power Company
Retail Energy Supply Association (RESA)
California Independent System Operator (CAISO)
NV Energy
Colorado River Commission of Nevada (CRCNV)
Arizona Competitive Power Alliance
Americans for Electric Choice
EDF Renewable Energy
ENEL Green Power North America
First Solar
Pattern Energy Group
Southern Company
Smart Energy Alliance (SEA)
White Pine County
Office of the Nevada Attorney General, Bureau of Consumer Protection
Christian Coalition of America
Western Resource Advocates
Nevada Rural Electric Association
Solar Energy Industries Association (SEIA)
Fred Voltz
Chispa Nevada
Faith Organization Alliance
Nevada Conservation League
League of Women Voters of Nevada

¹⁰⁴ (Appendix 3-5); *see also* Executive Order No. 2017-03 issued by Governor Brian Sandoval on February 8, 2017, seeking information and analysis on the possible economic impacts to ratepayers as a result of the Energy Choice Initiative (Appendix 3898-3900). Executive Order No. 2017-10 was later amended by Executive Order 2017-10 issued on June 16, 2017 (Appendix 3901-3902).

Vote Solar
Asian Community Development Council
Sierra Club Beyond Coal Campaign
Institute for a Progressive Nevada
Caring Helping and Restoring Lives
Uplift Foundation
PUCN Watchdogs
National Toxic Encephalopathy Federation
Natural Resources Defense Council
Environmental Defense Fund
Kennon Foster
Proponents of the Energy Choice Initiative.¹⁰⁵

On January 3, 2018, written reply comments were due.¹⁰⁶ The following 15 entities and/or persons filed reply comments:

Barrick Mining
Drift Marketplace
Retail Energy Supply Association (RESA)
Vote Solar
Valley Electric Association (VEA)
PUCN Regulatory Operations Staff
Office of the Nevada Attorney General, Bureau of Consumer Protection
Clean Energy Project
Natural Resources Defense Council
Proponents of the Energy Choice Initiative
NV Energy
Smart Energy Alliance (SEA)
Fred Voltz
California Independent System Operator (CAISO)
Nevada Rural Electric Association.¹⁰⁷

On January 9, 2018, a conference occurred that was formally transcribed by a court reporter, which set forth the procedural schedule for the upcoming Workshop Proceedings.¹⁰⁸ A total of 61 people attended that conference, in addition to various staff of the PUCN.¹⁰⁹

From January 16, 2018, through January 30, 2018, Workshop Proceedings on the Energy Choice Initiative were held at the PUCN and were video linked between Carson City and Las Vegas. The Workshop Proceedings were formally transcribed by a court reporter and total 1,273 pages of questions and voluntary comments.¹¹⁰ Maximum public input was solicited by the PUCN every day of the Workshop Proceedings,

¹⁰⁵ (Appendix 7-1232).

¹⁰⁶ On December 21, 2017, the PUCN issued an Order Extending Time for Written Reply Comments changing the original due date of December 29, 2017, to January 3, 2018 (Appendix 1233).

¹⁰⁷ (Appendix 2827-3116).

¹⁰⁸ (Appendix 1509-1547).

¹⁰⁹ On January 10, 2018, the PUCN issued a Procedural Order Setting Workshop Schedule (Appendix 1505-1507).

¹¹⁰ (Appendix 1552-2825).

and no member of the public was ever denied an opportunity to speak on the record. The Workshop Proceedings were live-streamed to the public through the PUCN's website at www.puc.nv.gov. Over the course of the 10-day Workshop Proceeding, a total of 256 people attended in addition to PUCN personnel. An average of 25 people attended in person each day.¹¹¹ An average of 125 people viewed the proceedings over the internet each day.¹¹²

On February 16, 2018, post-Workshop Proceeding written comments were due. The following 35 entities and/or persons filed post-Workshop Proceeding comments.

Valley Electric Association (VEA)
Mt. Wheeler Power Company
City of Fallon
EDF Renewable Energy
ENEL Greet Power North America
Pattern Energy Group
Retail Energy Supply Association (RESA)
Colorado River Commission (CRCNV)
LEAN Energy US
Kyoto USA
PROactive Strategies
Chispa Nevada
Faith Organization Alliance
Nevada Conservation League
League of Women Voters of Nevada
Vote Solar
Sierra Club Beyond Coal Campaign
Institute for a Progressive Nevada
Caring Helping and Restoring Lives
Uplift Foundation
Coalition for Community Solar Access
Solar Energy Industries Association (SEIA)
California Independent System Operator (CAISO)
Peak Reliability/PJM Connex
Interwest Energy Alliance
Natural Resources Defense Council
Western Resource Advocates
Southwest Energy Efficiency Project (SWEEP)
Calpine Energy Solutions
Nevada Rural Electric Association
Fred Voltz
NV Energy
Office of the Nevada Attorney General, Bureau of Consumer Protection
PUCN Regulatory Operations Staff
Proponents of the Energy Choice Initiative.¹¹³

¹¹¹ (Appendix 3117-3137). These numbers are calculated from the daily sign-in sheets at the PUCN Workshop Proceedings at the Carson City and Las Vegas locations.

¹¹² These numbers are calculated from the PUCN's internal Computer Systems Division.

¹¹³ (Appendix 1235-1504).

Information and analysis contained within this Report is derived from written materials filed by commenters, verbal comments made during the Workshop Proceedings, common knowledge and/or other credible and/or scientific and technical sources pursuant to NAC 703.755.

With the above facts, theories, and considerations in mind, the remainder of this Report contains information and analysis that has been discovered by the PUCN about the Energy Choice Initiative through this investigatory docket on the following five specific questions: (1) possible impacts and changes to Nevada laws, (2) how to establish a full wholesale market, (3) how to establish a retail market, (4) what financial costs and benefits are Nevadans likely to experience, and (5) what is a reasonable timeline going forward.

It is important to provide the caveat that the information and analysis produced through this investigation is preliminary in nature. Since before even the ancient Greek Oracle at Delphi, human beings have been attempting to predict the future—and we almost always get it wrong. Nobody knows for certain what the future holds. But the most sensible gauge of the future may be based on facts that we know today, experiences that Nevada has had in the past, and theories that are time-tested and proven.

Much of what the Energy Choice Initiative will bring to Nevada is unproven and unknown, and if voters approve the Energy Choice Initiative in its current form in 2018, then Nevada ratepayers will be headed into a new era regarding the way electricity is generated, delivered, and paid for in Nevada. Whether this is a good or bad thing is up to each voter to decide. What follows is the best analysis and information the PUCN can provide for the public at this time.

LEGAL MEANING AND LIKELY IMPACT OF THE ENERGY CHOICE INITIATIVE

To properly analyze and understand which Nevada laws and regulations may need to be changed as a result of the Energy Choice Initiative, it is first absolutely necessary to determine what the language actually means. Once it can be understood what the language of the Energy Choice Initiative means, *i.e.*, what it does and does not do, only then can a responsible analysis and discussion occur as to what laws and regulations may need to be amended, repealed, and/or drafted to implement it. Well-established hallmarks of reasoned rate design include the principles of simplicity, certainty, convenience of payment, economy of collection, understandability, public acceptance, feasibility of application, and, most important, “freedom from controversies as to proper interpretation.”¹¹⁴ It is through the lenses of these rate-design principles, as well as bedrock case law, that the following analysis occurs.

Intended Purpose of the Energy Choice Initiative

The stated intent of the Energy Choice Initiative’s proponents during the PUCN’s Workshop Proceedings was to create an open and competitive marketplace in Nevada. Specifically, the Proponents of the Energy Choice Initiative stated that the new constitutional amendment prohibits “the grant of monopoly and exclusive franchise, and that everybody should have meaningful choices among different providers, and that economic and regulatory burdens shall be minimized in order to promote competition in choices. This is the heart of what the petition dictates.”¹¹⁵ Proponents of the Energy Choice Initiative added that increasing “reliability and being able to get the energy that we need safely and securely” was also intended.¹¹⁶

¹¹⁴ Bonbright at 383-384.

¹¹⁵ 01/16/18 PUCN Workshop Proceeding Transcript at 44 (Appendix 1566).

¹¹⁶ *Id.* at 107.

Proponents of the Energy Choice Initiative do not view it as deregulating Nevada’s electric market, and, instead refer to it as ‘reregulating’ or ‘restructuring.’¹¹⁷ Proponents of the Energy Choice Initiative ranked their priorities when drafting the ballot measure as follows: (1) choice, (2) renewables, (3) and jobs.¹¹⁸ Proponents of the Energy Choice Initiative also stated that the constitutional amendment “doesn’t require anybody to set costs.”¹¹⁹ They contended that the focus was on creating an open and competitive market. A representative of the Proponents of the Energy Choice Initiative stated: “I don’t think I could say we want lower prices or even more green energy, I really don’t think I could make that call.”¹²⁰ These statements conflict with representations on the website located at <http://energyfreedomnv.com/#faqs>, where it is advertised that the Energy Choice Initiative will result in a stronger economy, lower energy costs, and provide more renewable energy.

The Energy Choice Initiative has been marketed with the inference that it will result in lower rates for Nevada ratepayers.¹²¹ But often semantics between the word “rates” and “monthly bills” or “costs” have been in play. When asked on the record during the PUCN Workshop Proceedings as to whether it will lower rates, no representative from the Energy Choice Initiative or participant would go on the record and guarantee that it will result in lower monthly rates for Nevadans:

CHAIRMAN REYNOLDS: . . . “[I]s there anybody here [in Carson City] in participation who would want to go on the record and guarantee that this petition will lower rates for the average residential families, if passed? Who can give that assurance?

(No Response)

CHAIRMAN REYNOLDS: Is there anyone in Las Vegas who would want to go on the record and give that assurance that this petition will lower rates for residential families?

(No Response)

CHAIRMAN REYNOLDS: And I want to just point out that nobody is coming up to the microphone.¹²²

Key Finding: A disconnect appears between the plain language of the Energy Choice Initiative, how it has been advertised, and what facts and reasoned analysis show on the record. Legal ambiguity will be resolved by the Nevada Supreme Court and/or a federal court. It is difficult to understand exactly what it means and its full scope with confidence. Or to reconcile what voters may have intended or expected when they voted to approve it.

¹¹⁷ *Id.* at 45.

¹¹⁸ *Id.* at 111-12.

¹¹⁹ *Id.* at 49.

¹²⁰ *Id.* at 107.

¹²¹ *Id.* at 114.

¹²² 01/19/18 PUCN Workshop Proceeding Transcript at 535 (Appendix 2088).

Deregulation through a Constitutional Amendment is Unprecedented

A total of 17 states have either partially or fully deregulated their electricity markets.¹²³ Of all these states, none has ever deregulated and crafted energy policy through a state constitution. Most states initiate the process of deregulation in phases through statutory changes made by their respective state legislatures and utilities commissions. The Energy Choice Initiative is extraordinarily unique in this regard because it will amend and add new provisions to the Nevada State Constitution that have never existed in any other state's constitution in the United States.

The Nevada State Constitution is the supreme law of the land (subordinate, of course, to the United States Constitution).¹²⁴ All state governmental authority over the people of Nevada and functions flow from it.¹²⁵ What this means is that any state law that conflicts with the language of the Energy Choice Initiative is unconstitutional and void.¹²⁶ No subsequent piece of legislation by the Nevada State Legislature and supported by the Governor can get around it or undo it.¹²⁷ Once passed, it is as final and set in stone as any law in Nevada can be.

The Energy Choice Initiative would add 453 new words of text to the Constitution of the State of Nevada. To place this into perspective, the First Amendment to the United States Constitution consists of only 45 words. People and courts of this country have been debating over what those 45 words mean for over 200 years. Indeed, the Energy Choice Initiative is about 10 times more 'wordy' than the First Amendment. As discussed throughout this Report, the meaning of the Energy Choice Initiative is not clear. But if approved, the only opinions on what the Energy Choice Initiative means that will matter are those of our Nevada Supreme Court and federal courts. Others can only reasonably opine.

Plain Language

The Nevada Supreme Court reviews questions of constitutional interpretation *de novo* and will give no deference to a lower court's legal opinion.¹²⁸ When doing so, the Nevada Supreme Court looks to the maxims of statutory construction to determine the meaning of a new constitutional amendment.¹²⁹ Language of a new amendment will be given its plain and ordinary meaning,¹³⁰ and the Nevada Supreme Court will not look to the intent of the voters unless the language is ambiguous. Language is ambiguous when it is capable of two or more reasonable, yet conflicting, interpretations. When language is ambiguous, the

¹²³ See <https://www.electrichoice.com/> (Appendix 3903-3908).

¹²⁴ See, generally *Ramsey v. City of North Las Vegas*, 133 Nev. ___, ___, 392 P.3d 614, 622 (2017).

¹²⁵ *Galloway v. Truesdell*, 83 Nev. 13, 19, 422 P.2d 237, 241-242 (1967); Nev. Const. art. 3, sec. 1.

¹²⁶ *Silvar v. Eighth Judicial District Court*, 122 Nev. 289, 292-293, 129 P.3d 682, 684-685 (2006).

¹²⁷ *Galloway*, 83 Nev. at 19, 422 P.2d at 241-242.

¹²⁸ *Sparks Nugget, Inc. v. State ex rel. Dept. of Taxation*, 124 Nev. 159, 163, 179 P.3d 570, 573-574 (2008).

¹²⁹ *City of Sparks v. Sparks Municipal Court*, 129 Nev. 348, 359, 302 P.3d 118, 1126 (2013).

¹³⁰ *Halverson v. Miller*, 124 Nev. 484, 488, 186 P.3d 893, 897 (2008).

Nevada Supreme Court “may look to the provision’s history, public policy, and reason to determine what the voters intended.”¹³¹

Here, the Energy Choice Initiative (Ballot Question 3) proposes that Article I of the Constitution of the State of Nevada be amended to add the following language:

1. Declaration of Policy

The people of the State of Nevada declare that it is the policy of this State that **electricity markets be open and competitive** so that all electricity customers are **afforded meaningful choices among different providers**, and that economic and regulatory burdens be minimized in order to promote competition and choices in the electric energy market. This Act shall be liberally construed to achieve this purpose.

2. Rights of Electric Energy

Effective upon the dates set forth in subsection 3, every person, business, association of persons or businesses, state agency, political subdivision of the State of Nevada, or any other entity in Nevada has the **right to choose the provider of its electric utility service**, including but not limited to, selecting providers from a competitive retail electric market, or by producing electricity for themselves or in association with others, and shall not be forced to purchase energy from one provider. Nothing herein shall be construed as limiting such persons’ or entities’ **rights to sell, trade or otherwise dispose of electricity**.

3. Implementation

(a) Not later than July 1, 2023, the Legislature shall provide by law for provisions consistent with this Act to establish an open, competitive retail electric energy market, to ensure that protections are established that entitle customers to safe, reliable, and competitively priced electricity, including, but not limited to, **provisions that reduce costs to customers**, protect against service disconnections and unfair practices, and **prohibit the grant of monopolies and exclusive franchises for the generation of electricity**. The Legislature need not provide for the deregulation of or **distribution of electricity** in Order to establish a competitive market consistent with this Act.

(b) Upon enactment of any law by the Legislature pursuant to this Act before July 1, 2023, and not later than that date, any laws, regulations, regulatory orders or other provisions which conflict with this Act will be void. However, the Legislature may enact legislation consistent with this act that provides for an open electric energy market in part or in whole before July 1, 2023.

(c) Nothing herein shall be construed to invalidate Nevada’s public policies on renewable energy, energy efficiency and environmental protection or limit **the Legislature’s ability to impose such policies** on participants in a competitive electricity market.

¹³¹ *Miller v. Burk*, 124 Nev. 579, 591, 188 P.3d 1112, 1119-1120 (2008).

4. Severability

Should any part of this Act be declared invalid, or the application thereof to any person, thing or is held invalid, such invalidity shall not affect the remaining provisions or application of this Act which can be given effect without the invalid provision or application, and to this end the provisions of this Act are declared to be severable. This subsection shall be construed broadly to preserve and effectuate the declared purpose of this Act.

(Emphasis added).

Creation of New Constitutional Rights

Section two of the Energy Choice Initiative appears to create at least two new state constitutional rights for Nevadans. This observation is contrary to the position of the Proponents of the Energy Choice Initiative.¹³² However, it is a reasonable interpretation of the plain language.

The first newly-created right is that of every Nevadan and business “to choose the provider of its electric utility service.” The word “choice” is defined and ordinarily understood to mean the act of selecting something with “a number and variety to choose among.”¹³³ This choice is further qualified by the phrase “meaningful choice” in Section 1 of the Energy Choice Initiative. Plainly understood, this new “right to choose” being granted to Nevadans cannot be a superficial or a technical choice—it has to be one of meaning and substance.

Implicit in implementing “meaningful choice” is the additional legal responsibility of the government to ensure significant consumer education; access to and accommodations for that education, including for any member of the public with a disability under the Americans with Disabilities Act;¹³⁴ and for the government to ensure that all Nevada ratepayers have the opportunity to choose from at least two or more distinct electric providers for their geographic area and electricity needs. This point is particularly relevant to the discussions later in this Report regarding what entities can be designated a provider of last resort (POLR).

A reasonable interpretation of this new ‘meaningful’ right to choose creates a requirement that the government secure at least two providers for each Nevada ratepayer. Otherwise, no ‘meaningful choice’ would exist. Arguably, a Nevada ratepayer could raise a legal challenge and have a claim against the State of Nevada that his or her constitutional rights are being violated by any failure of the government to provide the opportunity for a meaningful choice.¹³⁵

The second newly-created right is that of every Nevadan or business “to sell, trade or otherwise dispose of electricity.” These terms are broad and unqualified without any limitation to a specific generation source or type of electricity. Arguably, this second right reasonably creates a new constitutional right in Nevada to sell, trade or otherwise dispose of electricity generated from coal-fired power plants, nuclear fission, or even something a ‘backyard inventor’ may create on his or her own.

¹³² 01/23/18 PUCN Workshop Proceeding Transcript at 715 (Appendix 2277).

¹³³ <https://www.merriam-webster.com/dictionary/choice> (March 18, 2018).

¹³⁴ See, generally *United States v. Georgia*, 546 U.S. 151 (2006) (holding that the American with Disabilities Act creates a private cause of action for money damages and abrogates State sovereign immunity).

¹³⁵ See, generally *Malfitano v. Storey County*, 134 Nev. ___, ___, 396 P.3d 815, 820 (2017).

As will be later discussed in this Report, *infra* at 32, while the Energy Choice Initiative also recognizes and purports to retain the authority of the Nevada State Legislature to enact renewable energy policies, the language in that provision specifically uses the word “policies.” It does not retain in the Nevada State Legislature the authority to enact renewable energy laws. Proponents of the Energy Choice Initiative stated at the PUCN Workshop Proceedings that use of the word ‘policies’ instead of ‘laws’ had no intended distinction. This distinction in word choice is significant and important to recognize: the Nevada Supreme Court has held that a state “policy does not have the force of law.”¹³⁶ Thus, laws such as NRS 704.7316(1), which require reductions of emissions from “coal-fired electric generation plants and the replacement of the capacity of such plants” arguably may infringe upon a person’s or business’s new Nevada constitutional right “to sell, trade or otherwise dispose of electricity,” irrespective of whether the Nevada State Legislature has a ‘policy’ against it or not. If so, NRS 704.7316 and other similar types of ‘laws’ may become unconstitutional and unenforceable.

Again, ultimately, the Nevada Supreme Court and federal courts would decide this issue (if it ever arose in a legal challenge). Nevertheless, it is important for Nevadans to be aware of the Energy Choice Initiative’s effect on the Nevada State Legislature’s ability to enact energy legislation. Given that debates remain over the existence of environmental and scientific realities, such as the causes of climate change and global warming,¹³⁷ it is reasonably foreseeable that what is meant by the terms “public policies on renewable energy, energy efficiency and environmental protection” will become a source of new constitutional debates and political contention in Nevada.

The United States Supreme Court has recognized that certain constitutional rights are fundamental and personal in nature.¹³⁸ Constitutional rights include the freedom of religion, press, speech, and association; going to school; privacy and self-determination over your own body; owning private property; marriage; remaining silent; having a lawyer; due process; being left alone; and a fair jury trial—to name just a few. The Energy Choice Initiative elevates the importance of buying and selling electricity to the level of those other sacred rights that define us as Nevadans and, of course, Americans.

Eliminating Nevada’s Authority to Control Electric Bills

A clear effect of the Energy Choice Initiative is found in reading the language creating an “open and competitive” market in Section 1 with the language “prohibit[ing]” monopolies regarding the “generation of electricity” yet permitting the option of monopolies regarding “distribution of electricity” in Section 2. Reading these phrases together leads to the following reasonable conclusion: the Energy Choice Initiative removes the authority of the State of Nevada to control the generation component of a monthly electric bill and replaces that control with an open and competitive market.

As previously discussed in this Report, *supra* at 13, the authority of the PUCN to regulate electricity rates of Nevadans is derived from the constitutional authority granted to it through the Nevada State Legislature. In short, the addition of this new constitutional amendment at its heart is a limitation on the authority and powers of the Nevada State Legislature over energy laws and policies in Nevada.

¹³⁶ *Reno Newspapers, Inc. v. Gibbons*, 127 Nev. 873, 885, 266 P.3d 623, 631 (2011).

¹³⁷ Compare the article *Global Climate Change: How do we know?*, NASA’s Jet Propulsion Laboratory, (March 5, 2018) (finding scientific proof that it is “a change driven largely by increase carbon dioxide and other human-made emissions into the atmosphere”) <https://www.climate.nasa.gov/evidence/> (Appendix 3909-3916), with the article *E.P.A. Chief Doubts Consensus View of Climate Change*, Coral Davenport, New York Times (March 9, 2017) (EPA Chief Scott Pruitt stating that “carbon dioxide was not a primary contributor to global warming”) <https://www.nytimes.com/> (Appendix 3917-3920).

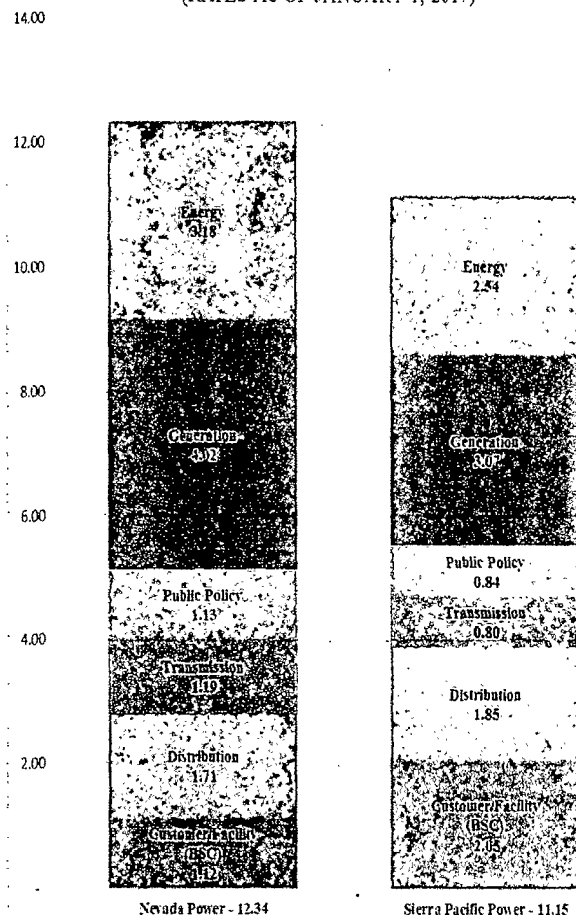
¹³⁸ See, e.g., *Obergefell v. Hodges*, ___ U.S. ___, ___, 135 S.Ct. 2584, 2591 (2015) (holding that “[t]he right to marry is a fundamental right inherent in the liberty of the person”).

To explain, electric bills are often referred to as 'bundled.' This is a way of saying that the monthly bills that average residential family ratepayers receive in Nevada have distinct component parts that are combined and comprise the overall single bill that is paid in one payment to the public utility each month. Think of it like a 'combo meal' from a fast food restaurant. The prices of the individual hamburger, fries, and drink are added up for a total 'combo meal' price. Yet, it is possible to isolate the individual prices of the hamburger, fries, and drink. A monthly electricity bill is similar in this way.

In Nevada, average bundled electricity bills are the combination of identifiable component costs. These are: (1) energy costs, (2) generation costs, (3) public policy costs, (4) transmission costs, (5) distribution costs, and (6) customer service and facilities costs. Energy costs included such things such as purchased power and fuel, *i.e.*, natural gas or coal that are necessary to run a power plant. Generation costs are the production costs of electricity produced by the utility. Public policy costs are costs added *via* legislation enacted by the Nevada State Legislature to achieve social, economic, or environmental policy objectives. Transmission costs are infrastructure costs associated with moving electricity through power lines. Distribution costs are cost of delivering electricity within Nevada through local distribution power lines. Finally, customer service and facilities costs are costs (basic service charges) for physical infrastructure of a public utility business, employees, customer service, and billing.

To help explain further, below is an illustrative chart prepared by the PUCN of rates as of January 1, 2017:

**ILLUSTRATIVE UNBUNDLED
MONTHLY BILL
CENTS PER KWH
(RATES AS OF JANUARY 1, 2017)**



Energy costs and generation costs are by far the largest two components of a monthly bill—about 60 percent. These costs are currently regulated and scrutinized by the PUCN pursuant to Nevada law to ensure they are ‘just and reasonable’ for Nevada ratepayers. A fair understanding of the Energy Choice Initiative is that it will eliminate the ability of the PUCN to control these components of a bundled monthly electricity bill. Removal of this oversight authority will expose Nevada ratepayers to the volatility of wholesale market forces, which could theoretically increase or decrease bills based on a number of factors. A new business in Nevada could offer to provide electricity at whatever price it really wanted to. If no other business wanted to compete, then the Nevada resident would have to pay that rate for electricity without any ability or formal process for the government to scrutinize that rate for fairness. It is the removal of this authority that is a core change that the Energy Choice Initiative will bring to traditional regulation of electricity in Nevada.

Transmission rates will largely stay the same and be set by FERC, whether the Energy Choice Initiative passes or not. Distribution costs will remain set by the PUCN. It is likely that a portion of the customer service and facilities costs will be impacted by the Energy Choice Initiative. While NV Energy will likely remain a distribution provider as a ‘wires company,’ some of the customer service and facilities costs may be subject to market forces, like the energy costs and generation costs. New competitive customer providers’ service costs would be in addition to NV Energy’s distribution service costs.

Conflicting Language and Possible Legal Issues

A responsible analysis of the meaning and possible legal implications of the Energy Choice Initiative cannot occur without identifying conflicting and competing ambiguous provisions contained within its language. Whether these conflicts and ambiguities reflect an intentional strategy of the drafters or unintended oversights is unclear. Nevertheless, the existence of these conflicts and ambiguities must be recognized because they are likely sources of future litigation involving the Energy Choice Initiative. These conflicts and ambiguities may hinder the ability of the Nevada State Legislature and the PUCN to fully implement the statutory and regulatory provisions required by the new constitutional amendment with full confidence until the Nevada Supreme Court or a federal court opines on it. It is certainly possible, but highly unlikely, that the Energy Choice Initiative will remain free of legal challenges regarding the meaning of its various provisions. This conclusion is readily apparent from even a casual observation of the lawyers and commenters who were unable to agree or discern consensus on the meaning of the text during the PUCN Workshop Proceedings.

The reason for identifying and discussing these conflicting provisions is not to search for legal fault in the Energy Choice Initiative—all language is an imperfect art. But as previously discussed in this Report, *supra* at 8, electricity is different from most any other good and service and the regulatory world surrounding it can be complex. Some of these legal concerns may not be obvious to the casual reader.

The Energy Choice Initiative explicitly proclaims that henceforth Nevada’s “electricity markets be open and competitive.” The problem with this language is that an “open market” is defined and commonly understood to be “an economic market in which prices are based on competition among private businesses and not controlled by a government.”¹³⁹ Yet, in direct conflict with this proclamation, the Energy Choice Initiative proceeds to direct that the government of the State of Nevada has the obligation and authority to “reduce costs to customers” and impose “environmental, renewable energy and energy efficiency policies” on market participants. A true open and competitive market cannot artificially impose price reductions or government policy objectives. These ideas are in conflict.

¹³⁹ <https://www.merriam-webster.com/dictionary/openmarket> (March 18, 2018).

Similarly, the Energy Choice Initiative establishes new constitutionally-protected rights for Nevadans to choose their electricity provider and to sell electricity as they see fit and proper. Yet, in direct conflict with these two new constitutional rights, language in the Energy Choice Initiative provides that the Nevada State Legislature retains authority to “impose” policies that may interfere with these rights. For example, what will happen when a resident of Nye County wants to exercise his or her new constitutional right to purchase electricity from a nuclear generation source? Or what happens when a mining company in Elko County wants to purchase the cheapest electricity possible from the “open market,” and it happens at that time to be electricity generated from coal? Constitutional litigation is reasonably foreseeable.

Moreover, the Energy Choice Initiative provides that “[n]othing herein shall be construed as limiting . . . [a] persons’ or entities’ rights to sell, trade or otherwise dispose of electricity.” Yet, it also provides that “[n]othing herein shall be construed to invalidate Nevada’s public policies on renewable energy, energy efficiency and environmental protection or limit the Legislature’s ability to impose such policies on participants in a competitive electricity market.” Permitting the government to “impose” policies on persons or businesses obviously ‘limits’ their constitutional right to sell or otherwise dispose of electricity. Again, these provisions appear in conflict and create a constitutional dilemma and ambiguity regarding how the Nevada Supreme Court may ultimately construe their meaning.

In summary, the Energy Choice Initiative seeks to eliminate regulation and create an open market, while also allowing the government the authority to set barriers to market entry and dictate energy policies, and grant Nevadans the right to choose amongst different electricity providers, while also placing on the government the responsibility of attracting those electric providers to Nevada, *i.e.*, making sure they will make a profit.

Impact on Low-Income Energy Programs

Proponents of the Energy Choice Initiative maintain that it will not harm low-income Nevadans.¹⁴⁰ Section 3 of the Energy Choice Initiative proclaims that “[n]othing herein shall be construed to invalidate Nevada’s public policies on renewable energy, energy efficiency and environmental protection or limit the Legislature’s ability to impose such policies on participants in a competitive electricity market.” However, this list of disclaimers reserving authority with the Nevada State Legislature to impose policies on new market participants says nothing about policies that assist low-income Nevadans.

The Universal Energy Charge is a fund that adds a percentage rate to every monthly bill and distributes the money collected “to the Division of Welfare and Supportive Services for programs to assist eligible households in paying for natural gas and electricity.” NRS 702.260(1). In 2017, approximately 9.7 million dollars was collected through this legal mechanism and dispersed to low-income Nevadans to help them pay their monthly electric and gas bills.¹⁴¹ This program helped 26,049 Nevada households in 2017 stay cool in the Las Vegas summers and warm in the Northern Nevada winters.¹⁴²

The Nevada Supreme Court has long-recognized the applicability of the Latin phrase *expressio unius est exclusio alterius* (‘the expression of one thing is the exclusion of another’) when interpreting provisions of

¹⁴⁰ 01/16/18 PUCN Workshop Proceeding Transcript at 180-181 (Appendix 1702-1703).

¹⁴¹ Division of Welfare Supportive Services, Nevada Department of Health and Human Services, *SFY 2017 Evaluation: Energy and Weatherization Assistance Programs*, Smith & Lehmann Consulting at 2 (November 30, 2017) <https://dwss.nv.gov/> (Appendix 3921-3979).

¹⁴² *Id.* at 2.

the Nevada State Constitution.¹⁴³ It is reasonable to conclude that the omission of any reference to preservation of low-income policies in the language of the Energy Choice Initiative when other policies are specifically included means that the Energy Choice Initiative does not preserve low-income policies and that they were intentionally excluded by its drafters. If this was not the intent of the drafters, it is an oversight. Nevertheless, the Energy Choice Initiative may impair the authority of the Nevada State Legislature and the PUCN to influence monthly electric bills to achieve various social and public policy objectives, such as collecting funds from ratepayers for the Universal Energy Charge to help low-income Nevadans. If this and other similar programs were to continue, the Nevada State Legislature may likely have to find approximately 10 million dollars in new revenue to make up this shortfall.

Open Market and Nevada's NEM/Rooftop Solar Laws

The 'open and competitive market' established by the Energy Choice Initiative will likely impact Nevada's growing rooftop solar industry and Net Energy Metering (NEM) laws recently enacted by the Nevada State Legislature through Assembly Bill 405 (Nevada 2017) and implemented by the PUCN in Docket No. 17-07026. Assembly Bill 405 monetized excess energy credits and provided a one-for-one crediting of kilowatt hours produced by rooftop solar systems. Under Assembly Bill 405, NV Energy is statutorily-required to accept and pay for, pursuant to the force of Nevada law, any excess energy created by NEM customers and delivered back into the grid.¹⁴⁴ This excess energy credit system for NEM in Nevada is a creation of statute and it remains unestablished that it is truly cost-based.¹⁴⁵ Given this doubt, the economic impact of Assembly Bill 405 and NEM is currently being studied through an investigatory docket also opened by the PUCN in Docket No. 17-07013. Electric utilities throughout the country, including NV Energy, have maintained that NEM is based upon a financial business model that operates at a loss. In other words, it is not truly cost-based and financially sustainable. Whether NV Energy is correct or not is presently a moot issue in Nevada because of Assembly Bill 405.

Passage of the Energy Choice Initiative will likely re-open the NEM debate because it remains an unanswered question as to whether NEM can thrive in an open and competitive marketplace without Assembly Bill 405. Section 34 of Assembly Bill 405 expressly recognizes possible impacts of the Energy Choice Initiative. Yet, it remains a bedrock principle of American jurisprudence that a constitutional provision supersedes a statutory one.¹⁴⁶ The Energy Choice Initiative even recognizes this legal reality: "[A]ny laws, regulations, regulatory orders or other provisions which conflict with this Act will be void." Accordingly, the Energy Choice Initiative very likely invalidates Assembly Bill 405's NEM provisions and the PUCN's orders implementing them.

¹⁴³ *Galloway*, 83 Nev. at 27, 422 P.2d at 246 ("The maxim . . . has been repeatedly confirmed in this State.").

¹⁴⁴ See Order On Assembly Bill 405 issued by the PUCN in Docket No. 17-07026 on September 1, 2017, and Assembly Bill 405, Sec. 28.3.

¹⁴⁵ PUCN Docket Nos. 16-06006 through 16-06009, General Rate Case Final Order for Sierra Pacific Power Company issued on December 22, 2016, at pages 46-47 (recognizing uncertainty surrounding the financial impacts of NEM on all Nevada rates); PUCN Docket Nos. 17-06003 through 17-06004, General Rate Case Final Order for Nevada Power Company issued on December 29, 2017, at page 124 (recognizing uncertainty surrounding the financial impacts of Assembly Bill 405 and NEM on all Nevada rates).

¹⁴⁶ See *Ramsey*, 133 Nev. ___, ___, 392 P.3d 614, 622 (2017).

This observation is informed by the fact that states that have deregulated, such as Texas and California, left certain urban and/or residential areas regulated, which allowed NEM to continue to exist in those states. A plain reading of the Energy Choice Initiative allows for no similar regulated areas in Nevada to exist. The constitutional amendment appears sweeping in its scope and, therefore, reasonable uncertainty about the future of NEM must be acknowledged.

Renewable Portfolio Standard (RPS)

Nevada enacted the Renewable Portfolio Standard (RPS) to encourage the development of renewable energy resources. Nevada's RPS is a credit standard: NV Energy is required to obtain a certain number of portfolio energy credits annually based on its retail energy sales for that year. A portfolio energy credit is equal to one kilowatt-hour of renewable energy generated or one kilowatt-hour of energy saved through an energy efficiency program. NV Energy's primary source of portfolio energy credits is long-term power purchase agreements from a combination of geothermal, solar, wind, and other smaller technologies. Currently NV Energy has 45 power purchase agreements and two utility-owned renewable facilities that produce 4,161,000 megawatt hours annually. All but one of these facilities are located in Nevada.¹⁴⁷

NV Energy states that the question as to whether an RPS mandate and deregulation can coexist is complicated. A question remains whether retail electric providers will enter into a market that requires them to comply with an aggressive RPS. In a deregulated environment, retail load is a wildcard. If customers have the ability to drop and switch their retail electricity provider at any time, their forecasted requirements for portfolio energy credits could change significantly month-to-month and year-to-year. NV Energy states that this inability to accurately predict future retail sales could actively discourage retailers from entering into long-term contracts with independent power producers for renewable energy.¹⁴⁸

NV Energy add that there is also the issue of what to do with renewable generation programs that are offered by NV Energy and mandated by law. NV Energy states that if the programs all sunset prior to deregulation, this is a non-issue. However, if Nevada wishes to continue offering incentives to encourage renewable energy development, it could become a problem. The current incentive programs are geared to a single provider, *i.e.*, NV Energy. They also assume a long-term relationship between the provider and a customer.

It remains uncertain who will fill the role that NV Energy currently plays in ensuring that all renewable energy facilities are properly registered and certified with the PUCN, and that monthly generation is uploaded to Nevada Tracks Renewable Energy Credits (NVTREC) or Western Renewable Energy General Information System (WREGIS) for certification in a deregulated market. Certifying the credits is critical in that it provides independent and verifiable proof that the utility did generate or acquire a sufficient number of credits to meet the RPS requirement. Currently, NV Energy plays the role of Qualified Reporting Entity in WREGIS for most Nevada-based renewable facilities and all of the aggregate groups.¹⁴⁹

Natural Resource Defense Council (NRDC) states that clean energy will not simply emerge out of retail competition. Clean energy requires detailed policy development that establishes minimum standards and accounts for some fundamental incentives.¹⁵⁰

¹⁴⁷ 12/08/17 NV Energy Initial Comments at 45 (Appendix 524).

¹⁴⁸ *Id.* at 45-46.

¹⁴⁹ *Id.* at 46.

¹⁵⁰ 12/08/17 NRDC Initial Comments at 3 (Appendix 1159).

NRDC states that because of load uncertainty with individual retailers rather than one investor-owned utility, large-scale renewable energy projects may be more difficult to build.¹⁵¹ NRDC states that renewable energy projects are relatively more capital-intensive than their fossil-fuel alternatives. For these renewable energy projects to yield a competitive price for their output, they require debt financing, and the traditional manner of getting debt financing in the power sector is a long-term power purchase agreement. A vertically-integrated utility, like NV Energy, has no problem making such long-term agreements, in part because vertically-integrated utilities are fairly confident of their load size. NRDC states that retail providers have no such comfort. Because their customers will be able to switch providers, they have no idea how much load they will serve in the future, and long-term agreements become risky.¹⁵²

NRDC states another complication is that, in retail competition, most customers choose providers based on price alone because it is hard for providers to differentiate themselves on a basis other than price. It is risky for retailers to do anything that might increase their rates. NRDC states that it is becoming a smaller problem because the price of renewable energy is dropping, but it remains a factor that adds on to the long-term contract issue.¹⁵³

Other Energy Programs

NV Energy states that if the Initiative passes, most energy policies/programs with public benefits would have to be changed. NV Energy states that the constitutional amendment would require restructuring the administration and funding sources of many programs currently facilitated by and funded through NV Energy's rates. In addition, Renewable Portfolio Standards (RPS) and public policy programs are currently only required in NV Energy's service territory. In a deregulated retail market, retail electric providers would be serving customers throughout the entire State, which could also require implementation and oversight of these programs in the territories currently served by Nevada's rural electric cooperatives, power districts, and municipalities. It remains unclear how Nevada will require deregulated retail electric providers to continue offering these programs, how the programs will be funded, or how compliance with the requirements will be enforced.¹⁵⁴

Two such energy programs involve Demand-Side Management and the Nevada Green Energy Rider on NV Energy's rate tariff. Demand-Side Management (DSM) programs are often referred to as energy efficiency and/or conservation programs. NV Energy currently implements both energy efficiency and demand response (or load shifting) programs along with many types of energy education. Energy efficiency is a permanent or ongoing decrease in energy consumption, while demand response provides a temporary change in consumption. The Nevada Green Energy Rider (NGR) provides an option for eligible customers to have all or some portion of their load supported by new or existing renewable energy generation. In total, NV Energy states that it has successfully utilized the NGR process and has procured and supported the development of more than 513 megawatts of nameplate renewable energy capacity in Nevada, for the benefit of all Nevadans.¹⁵⁵

¹⁵¹ *Id.* at 11.

¹⁵² *Id.*

¹⁵³ *Id.*

¹⁵⁴ 12/08/17 NV Energy Initial Comments at 39 (Appendix 518).

¹⁵⁵ *Id.* at 42.

Dormant Commerce Clause

The United States Supreme Court has long held that the United States Congress has the authority to regulate interstate economic activities through the Commerce Clause of the United States Constitution and, by implication, has created the Dormant (or Negative) Commerce Clause that prohibits states from enacting laws or policies that favor in-state businesses and economic activity but place burdens or prohibitions on out-of-state businesses from competing in the in-state market.¹⁵⁶ Discriminatory treatment of out-of-state businesses “simply means differential treatment of in-state and out-of-state economic interests that benefits the former and burdens the latter.”¹⁵⁷ Exceptions to the Dormant Commerce Clause exist when a state can show the law is necessary to advance a legitimate interest.¹⁵⁸

It is foreseeable that the existence of North Valmy, which is a coal-fired power plant operating in Humboldt County, could give rise to a Dormant Commerce Clause challenge based on the new constitutional rights guaranteed by the Energy Choice Initiative and complicate any attempts by the Nevada State Legislature to limit or restrict the sale of coal-generated electricity to Nevadans. Given the existence of in-state coal-generated electricity, Nevada may be prohibited pursuant to the Dormant Commerce Clause from limiting the import of coal-generated electricity from out-of-state sources, which is often relatively cheaper than other sources of electricity generation. Similar legal challenges could be brought against Nevada by producers of electricity from nuclear generation. This dynamic could open the door for Nevada to be viewed as hypocritical regarding its staunch opposition to the nuclear storage facility proposed at Yucca Mountain. Proponents of the Energy Choice Initiative recognize that it may raise Dormant Commerce Clause issues, but believe it also leaves “a lot of room” for Nevada to regulate.¹⁵⁹

Nevada’s Rural Cooperative Associations

Whether and to what extent the Energy Choice Initiative may impact Nevada’s rural cooperatives has been the source of discussion and uncertainty. Rural cooperatives are voluntary associations of people and businesses. They are found in Nevada in geographically-isolated and harder-to-serve rural areas and are fairly viewed as having a natural monopoly, which is a monopoly created by circumstance. This is in contrast to a legal monopoly, which is a monopoly created through an exclusive right granted by the government.¹⁶⁰

Unlike deregulation legislation proposed in the 1990s in Nevada,¹⁶¹ no carve-out or exception clause for rural cooperatives is found within the plain language of the Energy Choice Initiative. It is reasonable to conclude that the Energy Choice Initiative will fully apply to rural cooperatives.

¹⁵⁶ *United Haulers Association v. Oneida-Herkimer Solid Waste Management Authority*, 550 U.S. 330, 337 (2007); see also *Sierra Pacific Power Company v. State Dep’t of Taxation*, 130 Nev. ___, ___, 338 P.3d 1244,1248 (2014) (reviewing Dormant Commerce Clause challenge in Nevada).

¹⁵⁷ *United Haulers*, 550 U.S. at 337 (quoting *Oregon Waste Systems, Inc. v. Dep’t of Environmental Quality of Oregon*, 511 U.S. 93, 99 (1994)).

¹⁵⁸ See *C & A Carbone v. Town of Clarkstown*, 511 U.S. 383, 392 (1994).

¹⁵⁹ 01/16/18 PUCN Workshop Proceeding Transcript at 50 (Appendix 1572).

¹⁶⁰ See *Black’s Law Dictionary*, 1007 (6ed 1991).

¹⁶¹ See Assembly Bill 366 at Section 38 (Nevada 1997).

White Pine County states that the Energy Choice Initiative should have a ‘carve out’ provision for cooperatives and create an exception for them.¹⁶² However, the plain language of the constitutional amendment controls and a ‘carve out’ provision was not included by the drafters.

The Energy Choice Initiative guarantees the right of a Nevadan to choose who provides his or her electricity. It does not appear from the plain language of the Energy Choice Initiative that it will prohibit rural cooperative associations from operating in Nevada as a concept, pursuant to NRS Chapter 704.673-.677, inclusive. Rural cooperatives may exist similar to the idea of community aggregation, but new competition and no exclusivity to customers will enter their world.

To have meaningful choice, as previously discussed in this Report, *supra* at 37, territories currently served only by rural cooperatives will also need to be served by newly-established POLRs and other competitors. Cooperative members will have new opportunities (and a constitutional right) to leave and purchase their electricity from other sources, leaving the rural cooperatives with the financial burdens of long-term energy contracts and infrastructure investments and, potentially, a reduced base of customers to pay for them. These circumstances may undermine the premise upon which the rural cooperatives operate in Nevada.¹⁶³

Property Rights of Public Utilities

Public utility property “is protected by the Constitution” and is not subject to public appropriation without just compensation.¹⁶⁴ There should be little doubt on this issue. Whatever happens with the Energy Choice Initiative, the people and businesses of Nevada will be obligated to make NV Energy financially whole. The United States District Court, District of Nevada has held that the reasonable value of a public utility’s property “should be gathered from a careful and comprehensive consideration and comparison of its original cost, the cost of reproduction, depreciation, additions, improvements, present and probable future revenue and expenses, market value of the stocks and bonds of the corporation which owns the property, and, in short, any factor or circumstance which adds to or takes from its value, giving each such weight as may be just and right.”¹⁶⁵ Divestiture and deregulation are somewhat like a divorce from a utility. Nevada will likely be responsible for any costs and economic losses incurred by NV Energy as a result of the Energy Choice Initiative.

Nevada Laws Needing Further Review

Nevada’s statutory and regulatory electricity paradigm is the product of over 110 years of work by entities, such as the Nevada State Legislature, Governors, the PUCN, the Nevada Supreme Court, and the United States Supreme Court. A majority of these laws that specifically govern electricity regulation and proceedings before the PUCN are found within Chapters 701A, 701B, 702, 703, 704, and 704B of the Nevada Revised Statutes and Nevada Administrative Code.

¹⁶² 12/08/17 White Pine County Initial Comments at 1 (Appendix 1049).

¹⁶³ The Colorado River Commission of Nevada (CRCN) is much different than rural cooperatives and oversees the hydro-electric power contracts from Hoover Dam. It has no legal or natural monopoly and, instead, provides electricity to other entities. As will be discussed later in this Report, *infra* at 53, its hydropower contracts may be impacted.

¹⁶⁴ *Goldfield Consol. Water Co. v. Public Service Commission of Nevada*, 236 F. 979, 981 (D. Nev. 1916).

¹⁶⁵ *Reno Power, Light & Water Co. v. Public Service Commission of Nevada*, 298 F. 790, 794 (D. Nev. 1923); *see also Reno Power, Light & Water Co. v. Public Service Commission of Nevada*, 300 F. 645, 653-654 (D. Nev. 1921) (recognizing the right of a utility to be compensated for a fair return upon the reasonable value of its property).

Proponents of the Energy Choice Initiative stated at the PUCN Workshop Proceeding that it may be best for the Nevada State Legislature to “start from scratch,”¹⁶⁶ and that “it’s probably better to start with whole cloth.”¹⁶⁷ However, it was also acknowledged that it could be done “either way,”¹⁶⁸ *i.e.*, amending existing laws and regulations or drafting completely new ones.

A list of the Nevada laws that contain language likely to require careful review and possible partial or full amendment and/or repeal if the Energy Choice Initiative passes follows:

NRS Chapter 701A
(Energy Related Tax Incentives)
22 statutes

NAC Chapter 701A
(Energy Related Tax Incentives)
83 regulations

NRS Chapter 701B
(Renewable Energy Programs)
103 statutes

NAC Chapter 701B
(Renewable Energy Programs)
118 regulations

NRS Chapter 702
(Energy Assistance)
19 statutes

NAC Chapter 702
(Energy Assistance)
65 regulations

NRS Chapter 703
(Public Utilities Commission of Nevada)
52 statutes

NAC Chapter 703
(Public Utilities Commission of Nevada)
350 regulations

NRS Chapter 704
(Regulation of Public Utilities Generally)
297 statutes

¹⁶⁶ 01/16/18 PUCN Workshop Proceeding Transcript at 185 (Appendix 1707).

¹⁶⁷ 01/23/18 PUCN Workshop Proceeding Transcript at 700 (Appendix 2262).

¹⁶⁸ *Id.* at 699.

NAC Chapter 704
(Regulation of Public Utilities Generally)
1,042 regulations

NRS Chapter 704B
(Providers of New Electric Resources)
27 statutes

NAC Chapter 704B
(Providers of New Electric Resources)
38 regulations.

Total of potentially-impacted Nevada energy statutes and regulations: 2,216

In addition to the above-listed Nevada laws that may be impacted by the Energy Choice Initiative, the following statutory and regulatory chapters also contain some provisions that would need careful scrutiny and/or likely amendment or repeal: NRS Chapter 78 (Private Corporations), NRS Chapter 228 (Attorney General), NRS Chapter 278 (Planning and Zoning), NRS Chapter 354 (Local Financial Administration), NRS Chapter 361 (Property Tax), and NRS Chapter 598 (Deceptive Trade Practices). This list of laws is not all-inclusive. The burden of amending and/or drafting laws to implement the Energy Choice Initiative will fall squarely on the shoulders of the Nevada State Legislature and, thereafter, likely upon the PUCN to amend and/or draft regulations. This task will be onerous.

POTENTIAL COSTS AND BENEFITS

Much of the PUCN Workshop Proceedings focused on the potential short- and long-term costs, risks, and benefits of the Energy Choice Initiative. Analysis and discussion of potential costs and benefits is divided into the following categories: (1) divestiture of utility assets and liabilities, (2) legislative, litigation, education, new infrastructure and other transition costs, (3) job loss and creation, (4) joining and/or creating a wholesale market operator, and (5) building a retail market for Nevada. What makes analysis and discussion of these subjects challenging is that it is not a linear conversation, as many resolutions of the legal and legislative issues will influence potential costs and benefits from the Energy Choice Initiative.

Divestiture of Utility Assets

Perhaps the most important topic related to potential costs of implementing the Energy Choice Initiative is the issue of divestiture of utility assets and liabilities. Divestiture is defined as “the reduction of an asset or business through sale, liquidation, exchange, closure, or any other means for financial or ethical reasons. It is the opposite of investment.”¹⁶⁹ Here, divestiture includes the possibility of NV Energy selling, assigning, or auctioning of its generation assets (its physical power plants in Nevada), and its long-term electricity contracts (often referred to as “Power Purchase Agreements” or PPAs). When deregulation occurs in a state, these costs are often referred to as ‘stranded costs.’ They are ‘stranded’ because they are no longer productive or ‘of use’ in the regulatory paradigm, but the financial obligations are still owed for their original purchase. Think of having to still pay off a car loan when the car is no longer of use (or broken down). Money is still owed to the bank that financed it. To be clear, even after deregulation occurs, Nevadans will remain obligated to pay for the costs of NV Energy’s generation assets and long-term electricity contracts.

¹⁶⁹ <https://www.merriam-webster.com/dictionary/divestiture> (March 18, 2018).

Stranded costs for NV Energy may likely include the following: (1) generation assets (power plants, substations, field office) sold at below the remaining book value; (2) financial obligations under existing “out of the money” power purchase contracts (or PPAs), fuel contracts, transmission contracts, and service contracts; (3) outstanding regulatory assets, *i.e.*, money ‘on the balance books’ already owed to NV Energy; (4) computer, data and electronic information and technology programs and systems; and (5) costs to retire debt and equity capital.

The Energy Choice Initiative is silent as to whether Nevada public utilities, such as NV Energy, must divest generation assets and/or long-term power purchase contracts. A spectrum of views regarding divestiture, including whether any of Nevada’s public utilities would have to divest of their generation assets and/or long-term power purchase agreements, and, if so, how much stranded cost may be involved with divestiture, have been presented through this Investigation.

Is Divestiture Legally Required?

Retail Energy Supply Association (RESA)/PRO Active Strategies have asserted that the Energy Choice Initiative “does not require divestment of generation by Nevada utilities, let alone prescribe any method of doing so.”¹⁷⁰ They suggest that divestiture is simply an option for the Nevada State Legislature (or the PUCN) to address and determine during implementation of the Energy Choice Initiative.¹⁷¹ However, they have also stated that “all generation assets should be divested from the company that continues to own the distribution network by selling them into the market and receiving fair market value for them. Similarly, long-term contracts should be sold into the market or assigned to entities that will be serving load currently served by the utility.”¹⁷² RESA further added:

Divestiture of the assets through a competitive sale process will establish and reveal the true value of the assets, thereby insuring that proper price signals will be communicated to energy users on a going forward basis. Divesting utilities of competitive assets ensures the most competitive confidence-building environment for attracting new enterprises, capital, and talent to participate in the Nevada market.¹⁷³

In contrast, NV Energy believes that the Energy Choice Initiative mandates divestiture and that it

. . . would be required to sell all of its generating assets [power plants] and unload its power purchase agreements to comply with the proposed constitutional language prohibiting ‘the grant of monopolies and exclusive franchise for the generation of electricity.’ The forced sale of generation assets at inadequate prices would result in stranded costs. There also would be costs to resolve the future financial obligations of NV Energy and all other Nevada electric providers under existing long-term power purchase agreements, as well as costs to exit other contractual arrangements such as fuel contracts, transmission agreements, and shared services

¹⁷⁰ 02/16/18 PROactive Strategies Post-Workshop Comments at 3 (Appendix 1298).

¹⁷¹ *Id.* at 3-4.

¹⁷² 12/08/17 Retail Energy Supply Association (RESA) Initial Comments at 27 (Appendix 197).

¹⁷³ *Id.* at 29.

agreements. These costs would fall on Nevada's electric customers, taxpayers, or both.¹⁷⁴

As previously discussed in this Report, *supra* at 37, the federal courts have held that public utilities in Nevada have property rights protected by the United States Constitution.¹⁷⁵ For the purpose of this analysis, it will be presumed (and reasonably so) that NV Energy and other public utilities will be forced to divest of their regulatory assets and liabilities as a result of the Energy Choice Initiative. The notion that the regulatory paradigm that has operated in Nevada for the past century, and upon which NV Energy has financially invested in and relied upon with approval of the PUCN pursuant to well-settled Nevada law, can be fundamentally altered without making NV Energy (and other public utilities negatively impacted) whole has tenuous legal, business, and moral persuasive support.

NV Energy Power Plant and Electricity Contract Divestment Costs

NV Energy owns 75 power plants (or electricity generating units) that are located throughout Nevada. It has also entered into 61 long-term electricity contracts (or power purchase agreements or PPAs). These power plants and long-term electricity contracts bring more than 22,000 gigawatt-hours of electricity to Nevada yearly.¹⁷⁶ Currently, NV Energy's generation portfolio is reviewed triennially by the PUCN as part of an integrated resource planning process pursuant to NRS 704.736-.754, inclusive.

Summary of Participant Comments

Note: Not every comment by every participant is summarized below. Only those comments that best expressed the various views on this topic and that were not redundant to other comments are included. Omission of a particular commenting party from this summary should not be negatively construed. Every comment, whether detailed in this summary or not, has been carefully reviewed by the PUCN and the views (if not the exact language) of all commenters are represented. All comments received are contained within the Appendices attached to this Report.

NV Energy states that cost estimates necessary to implement the constitutional amendment are subject to uncertainty. However, J.P. Morgan and ICF International estimate that costs range from 5.18 to 6.13 billion dollars.¹⁷⁷ NV Energy provided ICF International with its plant characteristics, fixed cost, and capital maintenance expenditure projections for the years 2022 through 2027. ICF International used this information, as well as its outlook on natural gas, capacity, and energy prices to produce gross margin projections for 2022 through 2040 for non-coal generation assets and power purchase agreements (assuming Nevada's retail market would open in 2023). J.P. Morgan then used ICF International's gross margin projections and its own market valuation data to determine pro-forma market value of each gas plant and contract in December 2022. These stranded investments were inputs into NV Energy's estimate of the costs of deregulation.¹⁷⁸

¹⁷⁴ 12/08/17 NV Energy Initial Comments at 6 (Appendix 485).

¹⁷⁵ *Goldfield Consol. Water Co.*, 236 F. at 981.

¹⁷⁶ 12/08/17 NV Energy Initial Comments at 15 (Appendix 494).

¹⁷⁷ 12/08/17 NV Energy Initial Comments at 5-6 (Appendix 484-485) and 02/16/18 NV Energy Post-Workshop Comments at 16-17 (Appendix 1427-1428).

¹⁷⁸ 02/16/08 NV Energy Post-Workshop Comments at 17 (Appendix 1428).

NV Energy states that divestiture represents the greatest risk associated with implementing the Energy Choice Initiative.¹⁷⁹ Grid reliability problems may also emerge if NV Energy does not own and control generation necessary to provide ancillary services and support during must-run conditions. Additionally, NV Energy states that the combination of implementing a deregulated retail electric market with fully divested Nevada utilities presents serious risks to resource adequacy, *i.e.*, ensuring that Nevada families and businesses have enough electricity available to meet demand. NV Energy states that it does not currently own or have long-term contracts for electric supply to meet its peak retail customer demand. The shortage of supply versus peak demand is forecasted to increase leading up to 2023 if NV Energy is prevented from investing in new electric supply assets or entering into long-term contracts.¹⁸⁰

NV Energy states that the resource adequacy risk will be compounded by the fact that Nevada will not be able to require retail electric providers to invest in new energy supply. Those providers are also not likely to seek or receive financing from investors for new projects due to the uncertainty of their customer base and associated revenues. Buyers of the utilities' divested generation assets and supply contracts will not be required to sell the associated energy to Nevada customers and are likely to find more stable and lucrative revenues by entering into long-term agreements with regulated utilities in other states that have a predictable customer base and obligation to serve. NV Energy's divestiture and exit from its role in resource optimization would also result in the loss of efficiencies gained through the current economic optimization practices, including the joint dispatch agreement, the energy imbalance market, and the systems and personnel used to achieve those benefits.¹⁸¹

NV Energy states that stranded costs can have a negative impact on the utilities' financial viability and capital costs to the detriment of utility customers.¹⁸² Nearly all states that have implemented some level of a deregulated market took steps to mitigate negative impact on utilities by implementing legislation that allows recovery of stranded costs and the ability to securitize cash flows generated from those recovery mechanisms. The securitization of cash flows received through stranded cost recovery mechanisms allows utilities to lower capital costs by financing almost 100 percent of the stranded costs with non-recourse debt rather than a higher cost blend of equity and debt.¹⁸³

NV Energy states that stranded cost securitization represents an assignment of cash flows received from a distinct monthly charge that is collected by the utility as part of the customer billing process. These cash flows are assigned to an independent bond trustee as part of the financing documents and are then used to pay interest and re-pay principal of the securitized debt. The authorization granting the recovery of stranded assets must be irrevocable in order to assign and finance the cash flows. The securitized debt will remain on the utilities' balance sheets but is non-recourse, which means that the holders of the stranded cost debt will have no right of claims against the utility.¹⁸⁴

¹⁷⁹ 12/08/17 NV Energy Initial Comments at 34 (Appendix 513).

¹⁸⁰ *Id.*

¹⁸¹ *Id.*

¹⁸² *Id.*

¹⁸³ *Id.* at 34-35.

¹⁸⁴ *Id.* at 35.

NV Energy states that many of its long-term electricity contracts are “out of the money.”¹⁸⁵ “Out of the money” means that the contractually stated price of electricity exceeds the replacement cost and refers to renewable contracts that were entered into early to comply with State mandated RPS requirements and before renewable technology advancement resulted in significantly lower prices for the consumer. This makes it extremely unlikely that new retailers entering the market would want to assume them. NV Energy believes that cancelling the agreements is not a realistic option because they were entered into by NV Energy and approved by the PUCN and renewable energy prices have dropped significantly. If these power purchase agreements are cancelled or reassigned at a discount, the stranded cost will need to be recovered. Assigning the stranded cost to new retail electric providers for recovery would be an obstacle to attracting new entrants needed for a deregulated electricity market in Nevada to function properly.¹⁸⁶

NV Energy states that Nevada’s electric grid depends on the coordinated operation of generators and transmission assets. Certain generators, known as ‘reliability-must-run units,’ are managed and operated to ensure reliability, supply isolated and specific loads, and prevent the overload of other equipment. Securing the operation of these units in a wholesale market would be costly. Transmission investment would alleviate the ‘reliability-must-run’ conditions. However, the transmission investment would likely cause electricity prices to increase.¹⁸⁷ The cost to remove all ‘reliability-must-run’ generation conditions is estimated to be 611 million dollars.¹⁸⁸ The operator of a wholesale market system would need to enter into contracts with the new owners of these generators at rates established by FERC to provide the required locational capacity. These costs would be passed onto Nevada retail electric customers.

Proponents of the Energy Choice Initiative state that no party in this proceeding has denied that different costs will arise associated with new market functions. However, Proponents of the Energy Choice Initiative believe these stranded costs will be entirely absorbed by the benefits of opening a retail market and joining an organized wholesale market. They believe that overwhelming benefits and savings outweigh any costs associated with the Energy Choice Initiative.¹⁸⁹

Proponents of the Energy Choice Initiative state it is important to recognize the difference between the actual incremental future costs to implement the Energy Choice Initiative and the fact that certain existing stranded costs will be treated differently in a restructured market. Proponents of the Energy Choice Initiative state that failure to understand this distinction would result in not recognizing the savings that will arise from the elimination of monopoly overearnings and the value of monopoly assets.¹⁹⁰ The costs to implement the Energy Choice Initiative are the incremental costs that residents and businesses of Nevada must bear in order to transition to an open and competitive market. Other costs are ones that ratepayers will have to bear regardless of whether the Energy Choice Initiative is approved or not.¹⁹¹

¹⁸⁵ *Id.* at 46.

¹⁸⁶ *Id.*

¹⁸⁷ *Id.* at 38 and 02/16/18 NV Energy Post-Workshop Comments at 17 (Appendix 1428).

¹⁸⁸ 02/16/18 NV Energy Post-Workshop Comments at 17.

¹⁸⁹ 02/16/18 Proponents of the Energy Choice Initiative Post-Workshop Comments at 5 (Appendix 1496).

¹⁹⁰ *Id.*

¹⁹¹ *Id.*

Proponents of the Energy Choice Initiative state they have reviewed independent studies estimating that if NV Energy were to sell its physical generation assets there would be a net benefit to Nevada ratepayers of approximately 940 million dollars that would offset a large portion of the losses that NV Energy might experience if it were to sell its above-market power purchase agreements.¹⁹² NV Energy included approximately 1 billion dollars in its stranded assets estimate corresponding to its contract for federal hydropower from the Hoover Dam for the next 50 years. Inclusion of this cost is misleading because that power is cheaper than the open market. If this contract were sold, it would result in a massive benefit. More importantly, this contract would never have to be sold because the Colorado River Commission of Nevada has verified that it has full power to assign these extremely cheap, carbon-free resources to other Nevada utilities.¹⁹³

Proponents of the Energy Choice Initiative believe that the Energy Choice Initiative does not require NV Energy to sell any generation assets—it only requires customers to have the freedom to choose providers. Proponents of the Energy Choice Initiative maintain that no participant in the PUCN’s Investigatory Docket has had the time necessary to fully evaluate the potential stranded costs related to NV Energy’s assets.¹⁹⁴ Nevertheless, Proponents of the Energy Choice Initiative agree that the investments that have been made by ratepayers into the electric grid in Nevada must be protected.¹⁹⁵

Retail Energy Supply Association (RESA) states that the estimate of 5 to 7 billion dollars should not be considered transition costs.¹⁹⁶ RESA states that NV Energy’s power purchase contracts are not properly considered stranded investments, and NV Energy’s figures incorrectly presume that its power plants have an aggregate market value of zero dollars.¹⁹⁷ RESA states that compensation for stranded investment or lost revenue in the course of a transition to competition is not a new cost. The costs of any uneconomic generation investment or above market power purchases are already being paid for by customers under the monopoly arrangement.¹⁹⁸

RESA states that the issue facing policymakers and regulators when transitioning to a competitive market is the extent to which the full benefits of a competitive market will be diluted and delayed by requiring that customers continue to pay for prior uneconomic investment or power purchases.¹⁹⁹ RESA contends that deregulated states have chosen varying ways to estimate stranded investment or lost revenue for purposes of devising transition charges for the benefit of the former monopoly provider. RESA asserts that, generally, deregulated states have satisfied stranded investment or lost revenue compensation for public utilities. RESA states that customers have been realizing the benefits of in-depth competition without the overhang of monopoly-era costs for nearly a decade. RESA notes that this issue has not deterred states from completing their transition to a competitive market.²⁰⁰

¹⁹² *Id.* at 7.

¹⁹³ *Id.* at 7-8.

¹⁹⁴ *Id.* at 8.

¹⁹⁵ *Id.* at 3.

¹⁹⁶ 02/16/18 RESA Post-Workshop Comment at 4-5 (Appendix 1280-1281).

¹⁹⁷ *Id.*

¹⁹⁸ *Id.*

¹⁹⁹ *Id.*

RESA states that NV Energy throws out “wild speculations” to support its view that the transition is insurmountable or too costly.²⁰¹ When the assets are sold, RESA states, presumably at fair market value, through bid or auction, the difference between NV Energy’s book value and the fair market value will be established. RESA believes that, if the book value is higher, then NV Energy’s asset is not valued by the market as a good asset for the future. RESA states that if that happens, the shortfall would represent a “transition cost.”²⁰²

Smart Energy Alliance (SEA) states that the PUCN should study the experiences of other states to understand how the full benefits and costs of generation assets can best be recovered. SEA states that discussion of asset costs in this proceeding is premature and raises the specter that a party could hijack and politicize this proceeding with hyperbolic claims about generation asset value.²⁰³

PUCN Regulatory Operations Staff states that the total net book value of NV Energy’s power plants as of December 31, 2016, is 3.015 billion dollars.²⁰⁴ PUCN Regulatory Operations Staff states that NV Energy has not provided detailed estimates of its undepreciated net book value based on a date of July 1, 2023. PUCN Regulatory Operations Staff estimates that the net book value of NV Energy’s assets in mid-2023 will be 1.91 billion dollars.²⁰⁵ PUCN Regulatory Operations Staff states that Proponents of the Energy Choice Initiative believe that the market value for NV Energy’s power plants in 2023 will be approximately 1.91 billion dollars.²⁰⁶

In other words, PUCN Regulatory Operations Staff understands that the Proponents of the Energy Choice Initiative believe that market value for NV Energy’s assets in 2023 will be exactly the same amount as the net book value. The Proponents of the Energy Choice Initiative have not shown their analysis for evaluation or scrutiny. Recent data does not support the assumption that NV Energy will make money or even break even if it is forced to divest its power plants.²⁰⁷

PUCN Regulatory Operations Staff states that NV Energy’s relatively recent attempt to acquire the South Point Energy Center in Arizona in 2016 at the initial capital cost of 100 million dollars provides some guidance on power plant costs in areas surrounding Nevada. The PUCN in a two-to-one vote rejected NV Energy’s acquisition of South Point due to uncertainty surrounding the Energy Choice Initiative.²⁰⁸ It was not because of the cost of South Point. Given that NV Energy’s newly-constructed natural gas plants in Nevada are similar to South Point, it is an appropriate measure of the current market prices for those assets.²⁰⁹

²⁰⁰ *Id.* at 5.

²⁰¹ 01/03/18 RESA Reply Comments at 13 (Appendix 2865).

²⁰² *Id.* at 13-14.

²⁰³ 12/08/17 SEA Initial Comments at 11 (Appendix 1046).

²⁰⁴ 02/16/18 PUCN Regulatory Operations Staff Post-Workshop Comments at 7 (Appendix 1460).

²⁰⁵ *Id.* at 7-8.

²⁰⁶ 01/26/18 PUCN Workshop Proceeding Transcript at 1092-1093 (Appendix 2677-2678).

²⁰⁷ 02/16/18 PUCN Regulatory Operations Staff Post-Workshop Comments at 8-9 (Appendix 1461-1462).

²⁰⁸ PUCN Docket No. 16-07001 (Chairman Reynolds, J. dissenting in December 23, 2016, Order) (Appendix 3988).

Recent data from an Arizona transaction also does not support assertions by the Proponents of the Energy Choice Initiative regarding the value of NV Energy's power plants. For example, the Salt River Project in Arizona recently purchased two 550 megawatt natural gas generating units at the Gila River Power Station for 330 million dollars. The acquisition of 1100 megawatts of natural gas generation for 330 million dollars does not indicate that NV Energy can expect positive returns for many of its gas generating plants, which are generally half the size of the Salt River Project's 1100-megawatt acquisition.²¹⁰

PUCN Regulatory Operations Staff states that the net book value of NV Energy's generating units will likely decrease by approximately 37 percent by 2023 but will also likely experience some additional capital investment.²¹¹ Yet, a dilemma exists. NV Energy makes capital investments to its generation assets to maintain their reliability and/or efficiency and these improvements will likely increase their undepreciated net book value. If the Energy Choice Initiative is approved, NV Energy may be criticized if it makes any capital investments for power plants prior to divestiture in 2023. Capital improvements of 63 million dollars approved by the PUCN in 2018 may serve as a benchmark for necessary improvements before 2023.²¹² Given that NV Energy expends about 63 million dollars each year for capital maintenance, approximately 350 million dollars in additional capital will be added to the 1.9 billion dollars of net-book value expected by 2023.²¹³

PUCN Regulatory Operations Staff states that NV Energy also has numerous long-term electricity contracts (or Power Purchase Agreements or PPAs). Whether these remaining obligations are stranded costs or not is dependent on a number of factors, including if NV Energy is forced to, or is permitted to, divest these long-term contracts. Abrogating these contracts should only be exercised in extreme circumstances.²¹⁴ Abrogating these contracts sends a negative message to future investors and businesses that Nevada will not honor contracts it required NV Energy to enter into.²¹⁵ It may prevent Nevada customers from receiving the benefit of the energy produced by these facilities. It also may result in years of litigation with an uncertain result—Nevada customers may still end up paying for all remaining obligations associated with the contracts without receiving any of the energy.²¹⁶

According to the PUCN Regulatory Operations Staff, the best course of action is for Nevada to continue paying through the remaining contract terms and receiving the benefit of the energy mandated by the long-term electricity contracts. If divestiture occurs, the Nevada State Legislature may want to consider a strategy whereby a state agency is assigned NV Energy's long-term contracts. The agency could require that retail service providers take and pay for a portion of the energy from the long-term electricity contracts based on their load.²¹⁷

²⁰⁹ 02/16/18 PUCN Regulatory Operations Staff Post-Workshop Comments at 10 (Appendix 1463).

²¹⁰ *Id.* at 10-11.

²¹¹ *Id.* at 10.

²¹² *See* NV Energy's 11/01/17 original filings in PUCN Docket Nos. 17-11003 and 17-11004.

²¹³ 02/16/18 PUCN Regulatory Operations Staff Post-Workshop Comments at 11 (Appendix 1464).

²¹⁴ *Id.* at 11-12.

²¹⁵ *Id.* at 11.

²¹⁶ *Id.*

Irrespective of what path the Nevada State Legislature chooses, PUCN Regulatory Operations Staff believes that significant dollars are at issue for Nevada ratepayers. According to NV Energy, the estimated remaining obligations on the electricity contracts will be 6.737 billion dollars by December 31, 2022.²¹⁸ Proponents of the Energy Choice Initiative contend that NV Energy's numbers are inflated because 864 million dollars involving Hoover Dam contracts are improperly included in its figures, some of NV Energy's large-scale utility solar contracts are underperforming and could go into default, and Switch Station 1 and 2 could be taken over by Switch upon implementation, which means the 420 million dollars attributable to the long-term electricity contracts would not be a cost assigned to future Nevada ratepayers.²¹⁹

If all of these factors are correct and actually happen, PUCN Regulatory Operations Staff believes that NV Energy's total 6.737 billion-dollar figure may reasonably be reduced to approximately 4.1 billion dollars.²²⁰ PUCN Regulatory Operations Staff believes more robust cost data is needed, but, again, Proponents of the Energy Choice Initiative have not provided any.²²¹

Interwest Energy Alliance states the viability of existing long-term contracts will be vital to sustain consumer protections, reduce emissions, reliability and stable prices.²²² Nevada has benefitted from long-term contracts for renewable energy, which Interwest believes are necessary to finance projects and provide energy and capacity at low cost and stable prices for a period of years. Stable prices will enable residential and commercial customers to predict their energy prices and engage in long-term budget planning. Interwest states that Nevada should recognize the value of these assets, protecting and preserving them for Nevada's electricity consumers.²²³ Interwest states that predictable enforcement of contracts is a fundamental pillar of a strong economy. If the Energy Choice Initiative is approved, NV Energy's contracts should be assigned to a POLR without a disruption in terms.²²⁴

Calpine Corporation states the repeated assertion that the divestiture of NV Energy's existing generation assets and/or disposition of NV Energy's portfolio of long-term supply contracts would result in enormous transition costs is completely at odds with the even more frequently expressed view that NV Energy's resource portfolio is so low-cost that there would be few, if any, savings to be gained from implementing a competitive wholesale market and retail customer choice.²²⁵ If NV Energy has in fact assembled a supply portfolio representing the lowest possible costs available in the Western Interconnection, then Calpine states the transfer of that portfolio to other parties should not be expected to produce high transition costs. Conversely, Calpine states, if transferring the constituent elements of NV Energy's supply portfolio to other

²¹⁷ *Id.*

²¹⁸ *Id.*

²¹⁹ *Id.* at 12 and 01/26/18 PUCN Workshop Proceeding Transcript at 1093 (Appendix 2678).

²²⁰ 02/16/18 PUCN Regulatory Operations Staff Post-Workshop Comments at 12 (Appendix 1465).

²²¹ *Id.* at 12-13.

²²² 02/16/18 Interwest Post-Workshop Comments at 1-2 (Appendix 1352-1353).

²²³ *Id.* at 4.

²²⁴ *Id.*

²²⁵ 02/16/18 Calpine Post-Workshop Comments at 4 (Appendix 1374).

parties would result in high levels of transition costs associated with above-market resource costs, then it cannot also be claimed that NV Energy is providing energy at costs that competitors cannot beat.²²⁶

Calpine states the State of Nevada, not NV Energy, will control how the transition costs will be determined and how they will be recovered. The Energy Choice Initiative is silent as to whether the existing monopoly providers must exit by July 1, 2023. Calpine states that the Nevada State Legislature and PUCN are fully empowered to determine the terms and conditions under which NV Energy will exit, or even remain, in the wholesale and retail energy markets, so long as NV Energy's monopoly position in the generation sector is terminated and NV Energy is justly and reasonably compensated under principles of due process.²²⁷

Calpine states that it agrees with the general proposition that NV Energy and its suppliers should not be financially harmed by the transition to competitive energy markets. But Calpine strenuously disagrees with the notion that the PUCN must design the transition and suffer transition costs pursuant to paths so obviously designed to be artificially high-cost and raise false concerns.²²⁸

Calpine states that as competitive electricity markets have been introduced in other states, transition costs have been exposed. Calpine believes the PUCN should conduct an investigation aimed at identifying transition costs, adopting strategies and policies to minimize them, and determining the fair methods through which they should be allocated and amortized through special rates of limited duration. Calpine contends this has been done in other states in such a way so as not to invoke rate shocks to consumers while still protecting the utility investors from unfair financial losses.²²⁹

Valley Electric Association (VEA) states that cooperatives have long-term power purchase contracts for power from Hoover Dam, as well as other federal hydro resources.²³⁰ VEA also states that it is important that the Energy Choice Initiative be implemented in a manner that preserves the benefits of these contracts for members of the cooperative. Recent federal hydro contracts require that the benefits of hydropower be passed on to the customers of the entity purchasing the power.²³¹ For cooperatives, VEA states that this requirement can likely be satisfied by monetizing the value of the power and providing a distribution credit to their members. VEA's Hoover Dam contract specifically provides that Hoover Dam power may be sold into an organized market like the California Independent System Operation (CAISO) without violating the terms of the contract. VEA states that some older contracts may contain more restrictive provisions that could either be renegotiated or satisfied by requiring any customer exercising choice to take an allocation of hydropower electricity.²³²

Ormat Geothermal states it has approximately a dozen geothermal contracts with NV Energy that cannot be terminated or abrogated "without major litigation."²³³

²²⁶ *Id.*

²²⁷ *Id.* at 5.

²²⁸ *Id.*

²²⁹ 12/08/17 Calpine Initial Comments at 20 (Appendix 69).

²³⁰ 02/16/18 VEA Post-Workshop Comments at 3 (Appendix 1238).

²³¹ *Id.* at 10.

²³² *Id.* at 10-11.

²³³ 01/30/18 PUCN Workshop Proceeding Transcript at 1176-1179 (Appendix 2772-2775).

Colorado River Commission of Nevada (CRCN) states that preserving water and hydropower resources for the benefit of Nevada's consistent with CRCN's federal and state contracts is important. However, CRCN is unclear how the Energy Choice Initiative will affect wholesale utility customers or their hydropower contracts.²³⁴ With respect to NV Energy, CRCN states that NV Energy receives allocations of Hoover Power under Schedule A and Schedule B.²³⁵ If the Energy Choice Initiative is approved, NV Energy may seek to either return the hydropower to CRCN or seek approval to assign it to another entity. Currently, the economic benefit of Schedule B hydropower is passed to residential customers by NV Energy, but the future of this practice could become uncertain.²³⁶

Renewable Energy Companies (EDF Renewable Energy, Inc., Enel Green Power North America, First Solar, Pattern Energy Group, and Southern Company) express concern over potential divestiture of electricity contracts, which could adversely affect the cost of renewable energy in Nevada.²³⁷ The Renewable Energy Companies appreciate the concerns that NV Energy, as well as the counterparties to the electricity contracts must be protected and kept whole. If NV Energy must divest of these contracts, the Renewable Energy Companies state they should be sold or assigned to a counterparty under existing terms, and the State should support this process by requiring that the electricity contracts be backed by sufficient load going forward to adequately share costs.²³⁸

Abrogation or renegotiation of the electricity contracts will substantially injure the State's reputation as a renewable energy leader. Financial markets will be impacted both on a contract-specific basis, as well as in how renewable energy investment in Nevada are viewed going forward. The costs to consumers for renewable energy will likely increase and protracted litigation is highly likely.²³⁹ The Renewable Energy Companies do not agree with RESA that the sale of the electricity contracts into a newly-formed wholesale market is a simple or equitable approach.²⁴⁰ The Renewable Energy Companies are concerned about the legalities and appropriateness of the assignments of contracts to which they are a party, and that in a negotiated sale for the electricity contracts the agreements may be underappreciated in value.²⁴¹

Nevada Rural Electric Association (NREA) states that any stranded costs that might arise from divestiture should be borne by those whose needs were the predicate cause of those costs being incurred.²⁴² NREA state the member-owners of rural electric cooperatives should not be assessed any costs associated with the divestiture of NV Energy's electricity contracts because rural electric cooperatives do not utilize NV

²³⁴ 02/16/18 CRCN Post-Workshop Comments at 3-4 (Appendix 4625-4626).

²³⁵ *Id.* at 4.

²³⁶ *Id.*

²³⁷ 02/16/18 Renewable Energy Companies Post-Workshop Comments at 1-2 (Appendix 1269-1270).

²³⁸ *Id.* at 2.

²³⁹ *Id.* at 2-3.

²⁴⁰ *Id.* at 3.

²⁴¹ *Id.*

²⁴² 02/16/18 NREA Post-Workshop Comments at 6 (Appendix 3109).

Energy's energy supply services.²⁴³ NREA states that limiting the spreading of the burden of stranded costs to persons or entities for which they were incurred is a matter of fairness and due process.²⁴⁴

Analysis and Findings

Key Finding: Nevadans will likely be responsible for paying stranded costs associated with remaining obligations to pay for generation assets and long-term electricity contracts, *i.e.*, power purchase agreements. The cost estimates related to divestiture that the PUCN Workshop Proceeding participants presented ranged from the ridiculous amount of zero dollars up to the breathtaking amount of approximately 7 billion dollars (which is somewhere around the biennial budget for the entire State). No participant attempted to monetarily quantify the benefits. While claiming that NV Energy's analysis is "false," Proponents of the Energy Choice Initiative acknowledge that they have "no cost analysis" of their own.²⁴⁵ NV Energy hired J.P. Morgan and ICF International to verify its numbers. NV Energy's estimated range of likely stranded costs from 5.2 to 6.1 billion dollars does not appear unrealistic. But the inputs to these figures by NV Energy are unknown. As explained later in this Report, *infra* at 65-66, the PUCN estimates that this amount may reasonably be more in the area of approximately 4.074 billion dollars, including generating assets, long-term electricity contracts, and regulatory assets.

In reaching this finding, it is important to note that several presumptions inform this conclusion. First, it is unlikely that NV Energy will receive the original price paid (or the book value through depreciation) for its power plants. In addition to the plant sales that PUCN Regulatory Operations Staff mentioned as bench markers, two more recent developments also highlight the likelihood that NV Energy's gas plants will be sold for under their book value. Looking to Nevada's neighboring states as a guide, the demand for natural gas-fired power plants is decreasing. For example, the Arizona Corporation Commission (the Arizona version of the PUCN) recently issued a decision requiring utilities to obtain more renewable energy and less natural gas-fired power.²⁴⁶ It also placed a moratorium on new natural gas power plants of 150 megawatts or larger through the end of this year.²⁴⁷ As another example, in California, Calpine recently asked the California Public Utilities Commission (CPUC) to suspend its application for a new natural gas power plant (the 255-megawatt Mission Rock Energy Center) and cited a lack of energy demand and changes to state policies as the primary factors. "Calpine's decision to pull the plug on Mission Rock would echo a recent trend of fossil fuel plants shuttering or being canceled in California."²⁴⁸ Similarly, as previously discussed in this Report, *supra* at 45, the PUCN has also rejected the acquisition of a natural gas-fired plant.²⁴⁹ These examples highlight the waning demand for gas plants in the West. Expecting NV Energy to recoup all of the costs of its current natural gas-fired power plants in a forced market sale is unreasonable. Second, the idea that abrogating, transferring and/or reassigning NV Energy's long-term electricity contracts

²⁴³ *Id.* at 5-6.

²⁴⁴ *Id.*

²⁴⁵ 01/26/18 PUCN Workshop Proceeding Transcript at 1095 (Appendix 2680).

²⁴⁶ See *Arizona Regulators move to place gas plant moratorium on utilities*, Robert Walton, Utility Dive, (March 15, 2018) <https://www.utilitydive.com/> (Appendix 3981).

²⁴⁷ *Id.*

²⁴⁸ See *Calpine gets cold feet over proposed California gas plant*, Robert Walton, Utility Dive, (March 13, 2018) <https://www.utilitydive.com/> (Appendix 3984).

²⁴⁹ PUCN Docket No. 16-07001 (Chairman Reynolds, J. dissenting in December 23, 2016, Order) (Appendix 3988).

will be straightforward and cost neutral is equally unreasonable. Many of these contracts are “out of the money” and it is unlikely that investors or other businesses would want to assume them. Moreover, abrogating the contracts is not a legally-viable option. It is important to recognize that these contracts have been approved and ratified by a state entity—the PUCN—to meet state energy policies set forth in law by the Nevada State Legislature. The fact that renewable energy prices have significantly dropped and that NV Energy may be forced to transfer or cancel these contracts under deregulation, should not fall on NV Energy or its counterparties. Nevada ratepayers will be responsible for honoring these contracts, even if the Energy Choice Initiative passes, which will have upward pressure on electricity rates. Third, the PUCN shares the concerns of the Renewable Energy Companies and Ormat about the legalities and appropriateness of unilaterally reassigning any long-term electricity contracts to which they are a party. A forced and negotiated sale or transfer of any long-term electricity contracts will put the seller, *i.e.*, NV Energy, at a strategic disadvantage in any negotiation because they will lose the ability to just ‘walk away’ from the negotiation table because the sale will be forced. Fourth, as previous discussed in this Report, *supra* at 37, NV Energy will be legally entitled to reasonable compensation and recovery for any financial losses. Anything less will likely result in justifiable litigation against Nevada. Finally, market conditions regarding the costs of generating, transmitting, and delivering electricity are constantly changing. What may be a good price and value today, may be a bad price and poor investment a year from now. Estimates have been based upon the best-available data and expertise, but they are not perfect and could change with new information.

While Proponents of the Energy Choice Initiative proffer that NV Energy can sell its existing power plants and assign its contracts to someone else, this suggestion grossly overlooks the reality that current open market conditions for these obligations shows that they would likely be sold or assigned at a loss. No specific information regarding these costs has been provided by the Proponents of the Energy Choice Initiative.

NV Energy’s Remaining Regulatory Asset Debt

A regulatory asset is like money owed on a credit card. Its purpose is to acknowledge a potential liability for a utility’s ratepayers and to provide a type of safety net for utilities and investors. It has been explained:

Utility companies may incur large expenses in various ways—storm damages, installation of new facilities, increase taxes and so forth. These expenses, if passed immediately on to ratepayers, could create havoc. An immediate recovery of such expenses could cause sudden upward increases in rates, commonly termed ‘rate shock.’ In order to avoid rate shock, public utility commissions often will permit utility companies to recover their expenses from ratepayers on a deferred basis, listing the ratepayers’ debt as a ‘regulatory asset.’ A regulatory asset is, therefore, a future debt of the ratepayers²⁵⁰

Based on preliminary estimates and currently-available information, approximately 286 million dollars will be owed by Southern Nevada, *i.e.*, Nevada Power Company service territory, customers in regulatory assets.²⁵¹ Approximately 41 million dollars will be owed by Northern Nevada, *i.e.*, Sierra Pacific Power Company service territory, customers in regulatory assets.²⁵² These figures total approximately 327 million dollars in regulatory assets. It is important to note this debt is not the result of new costs directly caused by

²⁵⁰ *Office of Consumer Counsel v. Department of Public Utility Control*, 905 A.2d 1, Conn. 2006) (quoting *Office of Consumer Counsel v. Dept. of Public Utility Control*, 742 A.2d 1257, ___ (2000)).

²⁵¹ (Appendix 4171).

²⁵² (Appendix 4172).

the Energy Choice Initiative. It will not go away as a result of the Energy Choice initiative, and it will remain owed by Nevada ratepayers. Any financial benefit that could be realized by Nevadans through an open and competitive market will be offset by the continuing obligation to pay off these regulatory assets.²⁵³

Potential Impact to City Franchise Fees and Tax Revenue

NV Energy paid 232.5 million dollars in taxes and fees in the year 2016. Of this amount, approximately 143 million dollars was for franchise fees, utility fees, and business license fees.²⁵⁴ These taxes and fees are a significant source of funds for state, county, and city entities in Nevada.

According to NV Energy, the taxes and fees it pays to local government entities within Nevada will certainly be reduced as a result of the Energy Choice Initiative.²⁵⁵ The International Brotherhood of Electrical Workers (IBEW) echo concerns about the loss of these sources of public revenue.²⁵⁶

The City of Las Vegas has entered into a franchise agreement with NV Energy whereby the City of Las Vegas collects 5 percent of gross revenues from NV Energy calculated quarterly pursuant to Las Vegas Municipal Code, Title 6.67—Public Utilities. This franchise-fee agreement remains in effect until January 31, 2025, and is an important source of revenue for the City of Las Vegas. The City of Las Vegas strongly opposes any interpretation of the Energy Choice Initiative that will reduce or impede its ability to collect franchise fees. The City of Las Vegas wants to maintain authority to license and regulate any business activity within its jurisdiction.²⁵⁷ VEA agrees that franchise fees paid to local governments should be preserved.²⁵⁸

Key Finding: How the Energy Choice Initiative may impact the legal authority of state, county, and city entities in Nevada to collect franchise fees and tax revenue is unclear, especially given that the Energy Choice Initiative is an amendment to the Nevada State Constitution. Given that NV Energy will likely divest of its power plants and that its business model in Nevada will be altered pursuant to law by July 1, 2023, its existing franchise-fee agreement with the City of Las Vegas and other similar agreements with state, county, and city entities will likely be impaired and new agreements and/or mechanisms for collection of these fees and taxes will need to be explored and developed.

Unknown Costs to Nevada Rural Electric Cooperatives and Municipalities

As previously discussed in this Report, *supra* at 36, the Energy Choice Initiative will apply to Nevada rural electric cooperatives and municipalities and grant every member a new constitutional right to choose their own electric provider.

²⁵³ The data in the charts set forth in the Appendix was current as of December 2017. Information has been blocked-out in the charts and is confidential pursuant to NAC 703.5282 and NAC 703.5274. However, much of this data should become publically-available later in April 2018 in NV Energy's FERC Form 1 filings.

²⁵⁴ 01/26/18 PUCN Workshop Proceeding Transcript at 1066-1067 (Appendix 2651-2652).

²⁵⁵ 12/08/17 NV Energy Initial Comments at 18 (Appendix 497).

²⁵⁶ 01/26/18 PUCN Workshop Proceeding Transcript at 1065-1066 (Appendix 2650-2651) and 12/08/17 IBEW Initial Comments at 3 (Appendix 100).

²⁵⁷ 12/08/17 City of Las Vegas Initial Comments at 1-2 (Appendix 41-42).

²⁵⁸ 02/15/18 VEA Post-Workshop Comments at 10 (Appendix 1245).

Rural cooperatives and municipalities fulfill the energy needs of communities too sparsely populated to attract investor-owned utilities for electric service. Their member-owners live in remote areas of Nevada, often encompassing thousands of square miles. These entities are either member-owned associations or governmental entities. All operate in a democratic manner with elected governing bodies. These entities were formed to procure electricity for parts of Nevada that would not otherwise be served.

Summary of Participant Comments

International Brotherhood of Electrical Workers (IBEW) states that cooperative associations will be hit particularly hard by the Energy Choice Initiative.²⁵⁹ IBEW, for example, has significant members working at the Bonneville Power Administration in Oregon, which provides hydropower resources to Northern Nevada. If the Energy Choice Initiative is approved, Bonneville Power would no longer be able to provide this hydropower to rural cooperatives in Nevada. IBEW states that replacing this low-cost hydropower will create a major rate increase and will impact all aspects of operations in rural Nevada, including staffing.²⁶⁰

Valley Electric Association (VEA) states that the implementation of the Energy Choice Initiative could result in stranded costs.²⁶¹ To mitigate this risk, the PUCN should adopt the following new policy: Any cost recovery related to stranded assets should be paid for by the specific Nevada customers for whom the assets were acquired. In addition, the PUCN should investigate innovative strategies for cost recovery such as issuing bonds secured by distribution access charges.²⁶² VEA states that rural cooperatives should retain their historic authority ability to set rates and make decisions regarding resources and infrastructure. Public utilities have contractual and statutory rights to purchase federal hydropower from the Bonneville Power Administration and Western Area Power Administration. These rights provide economic benefits to ratepayers of public utilities and should be preserved in implementing the Energy Choice Initiative.²⁶³

Mt. Wheeler Power Company states it is very clear that transforming the current regulated environment into a “choice” market will be difficult both technically and operationally.²⁶⁴ Mt. Wheeler Power states that many of the stakeholders who erroneously believe this transition will be seamless or painless are ignorant to the challenges and risks it poses on rural Nevadans.²⁶⁵

Mt. Wheeler Power states the Energy Choice Initiative presupposes a level of infrastructure that does not exist in rural communities.²⁶⁶ For example, the opportunity to plug-in an electric car to provide services back to the grid to offset increased costs created by the Energy Choice Initiative does not exist in communities where ratepayers may be asked to read and report their own meters because internet and other services are not available. Mt. Wheeler Power states that the Energy-Choice-Initiative experience for a ratepayer in Clark County will likely be vastly different from the one experienced by a ratepayer in rural

²⁵⁹ 12/08/17 IBEW Initial Comments at 4 (Appendix 99).

²⁶⁰ *Id.*

²⁶¹ 12/08/17 VEA Initial Comments at 13 (Appendix 92).

²⁶² *Id.*

²⁶³ *Id.* at 11.

²⁶⁴ 02/16/18 Mt. Wheeler Post-Workshop Comments at 1 (Appendix 1249).

²⁶⁵ *Id.*

²⁶⁶ *Id.*

White Pine County, but costs may be shared equally. If the Energy Choice Initiative passes, rural communities in Nevada (and the electric utilities that serve them) will become collateral damage in a fight between an investor owned utility and its customers.²⁶⁷

Mt. Wheeler Power states that a detail that uniquely impacts rural utilities is interstate service to adjacent states and jurisdictions. Of the 15 public utilities that provide electric service to residents in Nevada, seven are interstate providers, *i.e.*, cross Nevada’s boundaries. Some of these providers principally operate and headquarter in states adjacent to Nevada: Will these Nevada customers be stranded with no provider?

Mt. Wheeler Power is also concerned how Nevada rural public utilities will continue serve their customers in other states. For example, Mt. Wheeler Power currently serves customers who live in Utah. Mt. Wheeler Power states that the Nevada State Legislature must have a solution for these potential problems with our neighboring states or the benefits of choice will be no benefits at all. This is just some of the collateral damage likely to follow that was never contemplated by the drafters of the Energy Choice Initiative.²⁶⁸

As a current transmission customer of NV Energy, Mt. Wheeler Power states that changing or amending its current contract for transmission service would negatively impact its members by increasing costs. Many arguments have been made as to the “true benefit” of the Energy Imbalance Market operated by CAISO. Yet, as a small public utility involved in that process, Mt. Wheeler Power is not impressed with any organization that takes up to 36 months to submit a settlement billing to a customer.

Mt. Wheeler Power states that many commenters provide suggestions and approaches on how costs associated with social programs may be recovered, if the Energy Choice Initiative passes. However, these commenters never contemplated the rural electric model in Nevada.²⁶⁹ Mt. Wheeler Power states that the rural electrics have always addressed these programs by developing their own programs through their own democratically-elected boards. Albeit well intended, Mt. Wheeler Power believes that the Energy Choice Initiative will not provide the stated promises to Nevadans with lower electricity costs. Legislative and regulatory burdens for rural cooperatives will be unnecessarily increased.²⁷⁰

Nevada Rural Electric Association (NREA) states that rural cooperatives are not “electric utilities.”²⁷¹ NREA states that Nevada’s rural cooperatives use the NV Energy transmission system and will be affected if NV Energy joins a Regional Transmission Organization (RTO). Regardless of the wholesale market operating structure pursued by the Nevada State Legislature, there are far-reaching implications for the transmission of electricity in Nevada. Currently, NV Energy operates Nevada’s transmission system and serves as the balancing authority for most of Nevada. If the Energy Choice Initiative passes, control of these functions could rest with an entirely different entity—even an out-of-state entity. This creates the potential for disruption to current transmission schemes and could create additional costs. Any restructuring of the current transmission construct needs to be done carefully with an emphasis on reliability and cost controls and should “grandfather” transmission contracts currently held by rural cooperatives.²⁷²

²⁶⁷ *Id.* at 1-2.

²⁶⁸ *Id.* at 2.

²⁶⁹ *Id.* at 3.

²⁷⁰ *Id.*

²⁷¹ 02/16/18 NREA’s Post-Workshop Comments at 3 (Appendix 1387).

²⁷² *Id.* at 4-5.

Analysis and Findings

Key Finding: Concerns exist that the Energy Choice Initiative will have a considerable negative financial impact to rural communities in Nevada. Yet, the extent of those financial impacts have not been sufficiently quantified and remain unknown. The general theme is that the Energy Choice Initiative overlooks rural cooperatives and did not account for their unique needs and business models. No discernable benefits to rural cooperatives or municipalities from the Energy Choice Initiative were presented.

Northern Nevada Natural Gas Customers Increased Costs

Often overlooked, Sierra Pacific Power Company (NV Energy) operates as both an electricity and natural gas provider for areas of Northern Nevada, *i.e.*, Reno/Sparks. Currently, Sierra Pacific Power merges its natural gas transportation capacity and costs with its natural gas-fired power plants. This practice spreads the cost of delivering natural gas from its supply basins between Sierra Pacific Power's power plants and its approximately 165,000 retail natural gas customers. These costs are currently allocated between electric and natural gas customers based on usage during a 12-month period. For the period ending October 31, 2017, approximately 22 million dollars of the costs were assigned to Sierra Pacific Power's natural gas customers and approximately 38 million dollars were assigned to its electricity customers.

Summary of Participant Comments

NV Energy states that while the natural gas portion of Sierra Pacific Power's operations are not the direct subject of the Energy Choice Initiative, Sierra Pacific Power's gas customers will pay higher costs as a result of a deregulated retail electric market for their natural gas service. Sierra Pacific Power customers would bear the full costs of the long-term gas transportation contracts that are currently shared with its electric customers, as well as full or increased allocation of other shared costs such as billing, customer service, and facilities. Sierra Pacific Power estimates the financial impact to its Northern Nevada natural gas customers for the first 5 years of the Energy Choice Initiative will range anywhere from 20.8 to 24.9 million dollars each year.²⁷³

PUCN Regulatory Operations Staff states that Sierra Pacific Power's natural gas customers jointly share the costs of transportation with Northern Nevada electricity customers. Sierra Pacific Power's natural gas system peaks in the winter months. Yet, its electric system peaks in the summer months. This balance allows its natural gas transportation contracts to be jointly shared. PUCN Regulatory Operations Staff states that, if Sierra Pacific Power is forced to divest its electricity generation, its natural gas customers could see a 20 to 25 million dollar increase in transportation costs.²⁷⁴ Sierra Pacific Power's natural gas customers will be financially harmed by passage of the Energy Choice Initiative.²⁷⁵

Analysis and Findings

Key Finding: The Energy Choice Initiative will cause Northern Nevada natural gas customers in the Reno/Sparks area to lose a rate-reducing benefit. Unlike other cost issues surrounding the Energy Choice Initiative, increased costs to Sierra Pacific Power's natural gas customers in the greater Reno/Sparks area

²⁷³ 12/08/17 NV Energy's Initial Comments TA-7 at 2 (Appendix 666).

²⁷⁴ 01/19/18 PUCN Workshop Proceeding Transcript at 677 (Appendix 2230).

²⁷⁵ 02/16/18 PUCN Regulatory Operations Staff Post-Workshop Comments at 18 (Appendix 1471).

will certainly occur—there is little room for speculation on this issue. Northern Nevada natural gas customers may see an additional overall increase in costs of approximately 20 to 25 million dollars per year.²⁷⁶ Monthly bills will go up, unless an intervening (and currently unknown) cost factor appears and reduces natural gas prices.

Nevada Jobs

Nevada currently leads the country in new job growth.²⁷⁷ By most measures, Nevada’s job market is booming. The Energy Choice Initiative does not mention jobs or job creation in its plain language. However, Proponents of the Energy Choice Initiative promote the narrative that it will create additional economic growth and bring new jobs to Nevada.²⁷⁸

Summary of Participant Comments

International Brotherhood of Electrical Workers (IBEW) states that it represents nearly 2,000 electric workers throughout Nevada and opposes the Energy Choice Initiative.²⁷⁹ As a result of the Energy Choice Initiative, IBEW state that approximately 400 union jobs will be lost, most of which are Nevadans. IBEW provides its members with middle-class jobs and full benefits.²⁸⁰

IBEW states that it knows of contractors, vendors, and service providers who directly support NV Energy’s power plants will also lose their jobs. IBEW states that the Energy Choice Initiative will also cause its members to lose jobs in the wholesale and retail markets. IBEW members in other states that have deregulated lost their jobs when the incumbent utility transitioned to a “wires company.” Based on current staffing levels, this job loss entails approximately 150 to 165 additional highly-trained Nevada workers. IBEW states that its members will suffer future job loss in new solar construction projects and new power plant construction projects in Nevada. It is hard to quantify how much money this will be or how many jobs may be lost, but these are usually very large construction projects in the 500 to 900 million dollar range.²⁸¹

NV Energy currently employs 2,465 Nevadans who live in communities throughout the State. Over half of these employees are represented by the IBEW. If NV Energy divests of its power plants, it would eliminate over 30 percent of its workforce.²⁸² While it will make every effort to absorb and transfer these employees into other positions at NV Energy (and assuming an aggressive attrition and retirement rate leading up to 2023), NV Energy still anticipates significant severance costs. These severance costs include a wages payment, 6 months of health care coverage, and a payment to use towards new-job placement services offered to any terminated employees.

²⁷⁶ For demonstrative purposes the chart set forth in the Appendix spread these costs across Northern Nevada electricity customers (Appendix 4169).

²⁷⁷ *Nevada leads US in job creation, new data shows*, Nicole Raz, Las Vegas Review Journal, (February 2, 2018), <https://www.reviewjournal.com/> (Appendix 3986-3987).

²⁷⁸ 01/16/18 PUCN Workshop Proceeding Transcript at 111-12 (Appendix 1633-1634).

²⁷⁹ See 12/08/17 IBEW Initial Comments (Appendix 95-103).

²⁸⁰ *Id.* at 3.

²⁸¹ *Id.*

²⁸² 12/08/17 NV Energy Initial Comments at 35 (Appendix 514).

NV Energy states its employees and the IBEW have serious concerns as to whether new owners of NV Energy's power plants would be required to assume the obligations of the collective bargaining agreements that have been in place for decades. While it is likely that any purchaser would have to recognize the IBEW as representing these employees, it is unclear whether the terms and conditions of the respective collective bargaining agreements would have to be assumed or honored.

In addition to impacts on its own workforce, NV Energy states that its contracts with local businesses who supply over 200 external employees to support energy efficiency and conservation programs will be hurt and no longer have employment from NV Energy as a result of the Energy Choice Initiative. NV Energy is also concerned that it will not be able to adequately staff critical positions to maintain core functions while transitioning to a deregulated market. NV Energy states it has identified over 100 positions that will likely require retention payments to keep these critical positions filled until 2023.²⁸³

RESA states that competition will benefit the Nevada economy in several important ways. By developing a desirable, stable, predictable, vibrant competitive market, Nevada will invite national companies with a global presence to introduce their products and services to Nevadans and to compete with each other for Nevada's consumers. These companies will positively support Nevada's economic growth to attract more employers and associated jobs. RESA believes some of these companies may elect to locate in Nevada.²⁸⁴

Proponents of the Energy Choice Initiative state that the Energy Choice Initiative will bring new opportunities for economic growth and diversity in Nevada. Proponents of the Energy Choice Initiative promise that it will create new jobs in Nevada, especially in the clean energy and construction sectors.²⁸⁵ Proponents of the Energy Choice Initiative state that Nevada jobs need to be protected.²⁸⁶ Proponents of the Energy Choice Initiative place the responsibility of ensuring economic growth and protecting Nevada jobs as a result of the Energy Choice Initiative on the Nevada State Legislature. Job growth can be accomplished by the State implementing new regulations or by creating paid training programs that will ensure good wages and continued opportunities for these highly-skilled Nevadans.²⁸⁷

Analysis and Findings

Key Finding: Nevada union jobs (and non-union jobs) will be lost as a result of the Energy Choice Initiative and it is unknown how many or what type of new jobs may be created.

Nevada's job sector is currently growing and leading the country. The Energy Choice Initiative will likely cause hundreds of Nevadans to lose their jobs. Up to 400 IBEW union jobs and several hundred other NV Energy jobs may be lost in Nevada due to passage and implementation of the Energy Choice Initiative. Several hundred more contractor or vendor jobs in Nevada currently related to electricity generation and renewable energy programs may also be lost or negatively impacted by the Energy Choice Initiative. Up to 100 additional NV Energy employees in critical-staff positions will be at risk of voluntarily leaving during a transition period over the next four years leading up to full implementation of the Energy Choice Initiative in 2023. All of these potential job losses are connected to real people who likely have spouses/partners,

²⁸³ *Id.* at 36.

²⁸⁴ 12/08/17 RESA Initial Comments at 12 (Appendix 182).

²⁸⁵ 2/16/18 Proponents of the Energy Choice Initiative Post-Workshop Comments at 3 (Appendix 1494).

²⁸⁶ *Id.*

²⁸⁷ *Id.* at 2-3.

children/dependents, and relationships in communities throughout Nevada. It will cost money for severance pay, health insurance, re-training, new job search or intra-company transfer services, and relocation expenses for negatively-impacted members of IBEW and employees of NV Energy.

No credible or specific information has been provided regarding what new jobs may be created in Nevada, where they may be located, or how much these newly-created jobs may pay as a direct or ancillary result of the Energy Choice Initiative. An open and competitive market will allow corporations with power plants and employees located in California, Arizona, Idaho, Montana, Oregon, Utah, Washington and other states outside of Nevada a new opportunity to generate and sell their electricity to Nevadans. No guarantee exists as to what will happen to NV Energy's Nevada-located power plants or its Nevada employees.

Job benefits from the Energy Choice Initiative remain undefined and appear 'wishful thinking' at this point. Yet, it is reasonably foreseeable that new energy-related jobs will be created and economic activity stirred by the Energy Choice Initiative. Some of these may help offset job losses by NV Energy employees and IBEW members (it is unknown whether those would be union jobs or not). It is foreseeable that new jobs in advertising and sales in Nevada may be created in the private sector. While the Energy Choice Initiative will eliminate certain government responsibilities and oversight, it will also create several new ones. Thus, it is foreseeable that new jobs in the public sector will be created to deal with legalities of implementation, monitoring the retail marketplace, and consumer protection issues. Lots of Nevada attorneys may also gain new work from the Energy Choice Initiative.

Unknown Costs of Regulatory Uncertainty

Regulatory uncertainty is generally bad for business. When a regulatory landscape is shifting, or even possibly shifting, in such a profound and untried manner in the form of an unprecedented amendment to Nevada's Constitution, it stifles the ability to move forward legislative and policy initiatives on other fronts. For example, a majority of the PUCN decided to invalidate a stipulated agreement and a 100 million dollar business transaction for NV Energy to purchase the South Point Generating Facility due, in part, to uncertainty about Nevada's energy future from the Energy Choice Initiative.²⁸⁸ Gubernatorial vetoes of Assembly Bill 206 (Nevada 2017),²⁸⁹ which sought to increase Nevada's Renewable Portfolio Standard, and Senate Bill 392 (Nevada 2017), which sought to establish community solar gardens, all cited to the uncertainty created by the Energy Choice Initiative as a reason for inaction.²⁹⁰

Recently, the Smart Energy Alliance cited the Energy Choice Initiative as a basis for objecting to NV Energy's request that the PUCN issue an advisory opinion authorizing NV Energy to expand its large-scale utility solar portfolio in Nevada under an alternative regulatory structure.²⁹¹ Passage of the Energy Choice Initiative may alleviate uncertainty in some respects, but it will likely exacerbate it in others.

If history is a guide to the future, then the future will likely hold significant state and federal court litigation for Nevada if the Energy Choice Initiative passes. Nevada's exploration into deregulation in the 1990s resulted in state and federal lawsuits. Litigation was commenced in state court before the First Judicial

²⁸⁸ PUCN Docket No. 16-07001 (Chairman Reynolds, J. dissenting in December 23, 2016, Order) (Appendix 3988).

²⁸⁹ Veto Message from Nevada Governor Brian Sandoval for Assembly Bill 206 (June 16, 2017) (Appendix 3501-3511).

²⁹⁰ Veto Message from Nevada Governor Brian Sandoval for Senate Bill 392 (June 16, 2017) (Appendix 3489-3495).

²⁹¹ See Comments by Smart Energy Alliance (SEA) filed on January 17, 2018, in PUCN Docket No. 17-12014.

District Court, State of Nevada in Carson City Case No. 00-00416A in the year 2000.²⁹² Litigation was also commenced in federal court in the United States District Court, District of Nevada Case No. CV-N-00-0157-DWH-VPC, in the year 2000, whereby Nevada Power Company and Sierra Pacific Power Company (NV Energy) sued the PUCN for injunctive and declaratory relief.²⁹³

In federal court, NV Energy raised, among other things, federal claims that Nevada violated NV Energy's rights under the United States Constitution and that actions to deregulate were superseded by federal laws and violated the Supremacy Clause, interfered with NV Energy's contracts and violated the Contracts Clause, failed to adequately consider evidence and violated the Due Process Clause, violated NV Energy's Civil Rights, and constituted a taking of property without just compensation and violated the Takings Clause. Deregulation caused NV Energy's stock value to fall and resulted in a loss of its revenue. The lawsuit was eventually settled. If the Energy Choice Initiative is approved by voters in 2018, state and federal litigation involving Nevada is reasonably foreseeable.

Unknown Legal Costs to Assign Long-Term Electricity Contracts

As previously discussed in this Report, *supra* at 41-50, NV Energy currently holds 61 long-term electricity contracts (power purchase agreements or PPAs) that may need to be reassigned as a result of its divestiture of generating assets pursuant to the Energy Choice Initiative. A cursory review of a few of these contracts reveals legal language that will allow for their reassignment by NV Energy to a new party without the consent of the other party if it is required by Nevada law and provided that certain conditions are present,²⁹⁴ such as the assignee having an adequate credit rating. Examples of these re-assignment provisions are found in two long-term electricity contracts below (one from 2007 and one from 2017).

One long-term electricity contract entered into in 2007 involving Nevada Solar One contains the following reassignment provisions:

Either Party may assign this Agreement or assign or delegate its rights and obligations under this Agreement, in whole or in part, without the other Party's consent, if such assignment is made (i) as necessary to comply with orders of the PUCN or (ii) as otherwise required by Law or (iii) to a Person whose Credit Rating, as published by either Relevant Rating Agency, is equal or superior to the Credit Rating of the assigning Party as of the time of assignment.²⁹⁵

Another (and more recent) long-term electricity contract entered into in 2017 involving Techren Solar contains similar, but more specific, reassignment provisions:

Buyer may assign this agreement or assign or delegate its rights and obligations under this Agreement, in whole or in part, without Supplier's consent, if such assignment is made to: (a) Nevada Power Company; (b) any successor to Buyer provided such successor is a public utility holding

²⁹² (Appendix 3375-3441).

²⁹³ (Appendix 3443-3487).

²⁹⁴ This analysis is notwithstanding potential violations of the Contracts Clause that may be raised by NV Energy or other parties pursuant to the United States Constitution.

²⁹⁵ PUCN Docket Nos. 07-01008 and 07-01009 Power Purchase Agreement (Nevada Solar One) between Sierra Pacific Power Company and Nevada Power Company at 28 (January 3, 2007) (Appendix 3549-3606).

a certificate of public convenience and necessity granted by the PUCN pursuant to NRS Chapter 704, where such assignment does not occur by operation of Law; (c) any entity providing retail electric service in Nevada; (d) a wholesale electric provider operating in Nevada which meets the Minimum Credit Rating; or (e) an entity as otherwise required by Law.

Buyer also may assign this Agreement, in whole or in part, without Supplier's consent, to a party or Person whose Credit Rating, as public by either Relevant Rating Agency, is equal or superior to the Minimum Credit Rating as of the time of assignment.²⁹⁶

Key Finding: The specific terms of the individual contracts will likely dictate the options for divestment. However, regardless of whether the contracts are assigned, sold, or otherwise managed, this process will likely require significant legal work. Nevadans will likely be responsible to NV Energy for any economic losses and/or legal costs it sustains from these forced changes resulting from the Energy Choice Initiative. These costs will likely be reflected in Nevadans' monthly electric bills.

PUCN Regulatory Proceedings and Increased Workload Costs

Likely, the PUCN will grow in size (not shrink),²⁹⁷ and have an increased workload for the foreseeable future, if the Energy Choice Initiative passes. Regulating a single, large vertically-integrated public utility subject to the PUCN's regulatory jurisdiction, like NV Energy, in many respects is more efficient than potentially monitoring and vetting numerous unregulated entities.

Several observations are noteworthy. First, it is foreseeable that PUCN vetting of new corporations seeking to sell electricity to Nevadans will be necessary to ensure they have the infrastructure, customer service, and financial capabilities to reliably and safely provide electricity to Nevadans pursuant to the terms they are offering. New businesses seeking to enter the Nevada marketplace may be relatively 'unknown' and, therefore, will require a level of diligent review by the PUCN to ensure they can do what they say they can do before being 'let loose' on Nevada customers. Second, it is foreseeable that the PUCN will take on new and expanded consumer protection responsibilities. Third, without a vertically-integrated utility to conduct load forecasting to ensure resource adequacy, the PUCN will likely perform this resource-intensive task. Finally, the Energy Choice Initiative does not impact the PUCN's current regulatory authority over railroads, telecommunications, certain water and sewer entities, and, most notably, natural gas—Southwest Gas is Nevada's second-largest public utility. Significant portions of the PUCN's current workload and responsibilities will remain all-the-while new responsibilities appear.

As previously discussed in this Report, *supra* at 39, 2,216 current Nevada statutes and regulations will warrant careful review if the Energy Choice Initiative passes. Many of these regulations are from the PUCN and may be voided and need complete repeal and replacement with newly-drafted regulations, and/or at least need to be amended. Proceedings involving the creation or abolition of regulations require public notice, comment, and hearings.

The PUCN reasonably estimates that it will incur approximately 4.4 million dollars in new costs for the biennium beginning July 1, 2023, as a result of the Energy Choice Initiative. A detailed fiscal analysis and

²⁹⁶ PUCN Docket Nos. 17-11003 and 17-11004, Long-Term Renewable Power Purchase Agreement for Qualifying Facilities (Techren Solar 4) between Sierra Pacific Power Company and Techren Solar IV LLC, at 57-59 (October 6, 2017) (Appendix 3607-3759).

²⁹⁷ Despite assertions from some to the contrary, PUCN Regulatory Operations Staff is not aware of any comparable state public utility commission that actually reduced or re-trained its staff after deregulating and moving to an open market. 02/16/18 PUCN Regulatory Operations Staff Post-Workshop Comments at 14-15 (Appendix 1467-1468).

cost breakdown was provided to the Legislative Counsel Bureau on August 10, 2016,²⁹⁸ and will be updated as this issue develops. This estimate may change depending on decisions made by the Nevada State Legislature on how to implement the Energy Choice Initiative, if it passes.

No funding source has been identified to pay for these costs. However, PUCN expenses are paid by Nevada ratepayers through an annual regulatory assessment or 'mill' assessment, *i.e.*, levy, tax, fee, added to monthly bills pursuant to NRS 704.033. It is likely these costs will increase.

Education and Consumer Outreach Costs

Education across all economic, social, and geographic demographics of Nevadans will be key to successful implementation of the Energy Choice Initiative. This consumer education will require considerable wide-spread outreach through a variety of mediums, *i.e.*, television, radio, internet, mail, state-sponsored events, consumer sessions, neighborhood visits, to inform Nevadans on their rights, responsibilities, and resources for assistance in navigating a new electricity retail marketplace in Nevada. Outreach and information should be tailored to communicate to and be responsive to the needs of the elderly, the disabled, and non-English speaking Nevadans, as well as those from the urban inner-city neighborhoods of Las Vegas to the alfalfa fields of Smith Valley and to the ranch lands of Elko. This effort should involve short- and long-term strategies and public-private partnerships. State entities, such as the PUCN, the Governor's Office of Energy, and the Office of the Attorney General's Bureau of Consumer Protection, will likely play key roles. New internet websites, telephone hotlines, and informational brochures will need to be created and an army of consumer representatives will need to be hired and trained. These efforts will create costs.

Summary of Participant Comments

Retail Electric Supply Association (RESA) states that new electric business will only have 1 chance to make a first impression with potential new customers in Nevada and they will need to be equipped at the time the market is opened to deliver products and services. RESA states that a successful consumer education campaign will enable and motivate consumers to make informed choices. As some consumers have never had the opportunity to shop for electricity before, RESA states that the PUCN should communicate basic background information to Nevada consumers on such things as restructuring, the components of electric service, and frequently asked questions. Before the electric industry is restructured, RESA states that the PUCN should share helpful information on its website for all Nevada consumers, including informing consumers about electric choice and the benefit of shopping for a competitive supplier. RESA states that weekly stories through state and local publications on electric choice may be helpful and updates on the process could stimulate interest in the new market experience.²⁹⁹

RESA believes that laws passed by the Nevada State Legislatures during deregulation efforts in the 1990s required the PUCN to spend up to 500,000 dollars from its reserve account on education and information.³⁰⁰ Yet, that amount is not enough.³⁰¹

RESA states that public utilities are well-positioned to impart information to consumers about a transition to a competitive market due to their historical relationship with consumers. Public utilities should be required to provide information directly to consumers *via* such mediums as bill inserts, email, telephone or

²⁹⁸ (Appendix 3517-3545).

²⁹⁹ 12/08/17 RESA Initial Comments at 19-23 (Appendix 189-193).

³⁰⁰ *Id.*

³⁰¹ *Id.* at 19

any other method in which the utility regularly communicates with consumers in advance of the market opening. Costs for such outreach and educational efforts in other states that have previously deregulated, such as Pennsylvania, were paid by new charges assessed to all consumers.³⁰² RESA states that a new retail electric market would require the State to establish a centralized-data management system to receive, verify, store, and distribute market transactions to market participants. This creates new costs.³⁰³

NV Energy states that Nevada consumers will need to be educated on the open market changes, their rights, and the steps they will need to take to receive new electricity service. Based on history and experience from other states, an unregulated market will cause confusion among consumers for a certain period of time due to their change in relationship with the prior public utility.³⁰⁴ Using Texas as an example, customers sent state regulators 17,250 complaints in 2002—the year after Texas first deregulated its electricity market. By comparison, there were only 684 complaints in Texas to those regulators in 1998. These statistics illustrate the confusion consumers experienced in having to shop for and transition to a new electricity provider, and the importance of a solid consumer education and awareness plan.³⁰⁵

NV Energy states that deregulation has not been initiated in any state in the country for more than a decade. It is therefore difficult to identify an exact outreach and education budget. Testimony offered before the Governor’s Committee on Energy Choice suggests that at least 25 million dollars would be required. While the initial outreach and education effort would need to be the most comprehensive and significant, the effort would have to be ongoing to properly help new residents moving to Nevada, as well as supporting any customer who has either been compelled to switch to another retail electric provider or who has decided to consider shopping for a different retail electric provider with different terms and conditions of service.³⁰⁶

New technology systems would need to be purchased if the Energy Choice Initiative passes, which include: some type of energy choice portal, a meter data portal, a market transaction management platform, and customer service systems to facilitate the secure transfer of data between the various market participants and customers. Costs to establish these systems may range from 49 to 95 million dollars, and the cost to operate and maintain these systems may range from 13 to 24 million dollars each year.³⁰⁷

PUCN Regulatory Operations Staff states that there will be costs associated with opening Nevada’s retail market and that believes the State can expect the following costs associated with opening up a retail market and consumer education. First, there will be new website costs. The State will likely incur new costs for a website that provides customers the opportunity to comparison shop between alternative retail suppliers. It is not entirely clear how much such a website may cost and the price will likely depend on functionality. Getting an accurate website for customer shopping could be expensive. Second, there will be costs for consumer outreach and education. There will be costs for education programs that provide customers with comprehensive information about restructuring in Nevada. The goal of such a program would be to fully educate customers about what choice means and how they might benefit from exercising choice options. Based on information PUCN Regulatory Operations Staff received from the Texas Commission personnel, Texas had a budget of 24 million dollars to educate customers during the first two years after their retail

³⁰² *Id.* at 20-21.

³⁰³ 12/08/17 RESA Initial Comments at 23 (Appendix 193).

³⁰⁴ 12/08/17 NV Energy Initial Comments at 36 (Appendix 515).

³⁰⁵ *Id.*

³⁰⁶ *Id.*

³⁰⁷ *Id.*

market opened. The ongoing annual budget in Texas for consumer outreach is 750,000 dollars per year. Pennsylvania spent 15.5 million dollars for customer education and outreach. Given the geographic size of Nevada and based on what other states have spent, PUCN Regulatory Operations Staff estimates that Nevada will need to spend at least 10 million dollars for its initial customer outreach and education.³⁰⁸ Third, there will be costs for new customer service representatives. Nevada is likely to incur costs for additional customer service representatives to address customer understanding and complaint resolutions related to a new retail marketplace in Nevada. Many deregulated states saw increases in customer complaints about bills, particularly after post-deregulation price caps are eliminated and residents experienced rate spikes in their monthly bills.³⁰⁹

PUCN Regulatory Operations Staff states that Pennsylvania's consumer hotline handled approximately 57,000 calls after it deregulated its electricity market. In Nevada, the PUCN currently handles over 6,500 complaints per year and has five customer service representatives. Fifteen years after deregulating, Texas is only now beginning to see a significant downturn in the number of customer complaints it receives. The Energy Choice Initiative will likely increase the volume of consumer complaints, at least in the short-term, and will require additional staffing and costs for the PUCN.³¹⁰

Analysis and Findings

Key Finding: Nevada may need to reasonably spend up to 10 million dollars on initial consumer outreach and education efforts to successfully transition to an open and competitive electricity market. Education and outreach funding should fall into the following two categories: (1) an initial higher 'up-front' cost for the years leading up to and immediately following implementation of the Energy Choice Initiative and (2) then a smaller 'ongoing maintenance' cost for at least a decade thereafter.

States such as Texas budgeted 24 million dollars and Pennsylvania budgeted 15.5 million dollars have higher populations than Nevada, so it is reasonable that their education costs would be higher too. Additionally, those states deregulated in 2002 and 1997, respectively—their education budgets are over two decades old. Nevada is geographically diverse, with wide-ranging demographics. By all accounts, education and outreach is a key component to successfully transitioning from a regulated to a deregulated electricity market structure. In addition to these education and outreach costs, new investments in information technology and data systems will be necessary. No credible dispute was raised to the validity of the 49 to 95 million dollar initial investment for new computer systems and the 13 to 24 million dollars each year for operation and maintenance estimates provided by NV Energy. Such expenditures will be necessary to facilitate the secure exchange of personal identifying information and customer usage data as NV Energy transitions out of the market and new entities enter it.

Potential Increased Costs to Maintain Electric Grid Reliability

A number of NV Energy's current generation assets are referred to as 'reliability-must-run,' which means these facilities are essential to maintain the reliability of Nevada's electric grid. If these generation assets were divested pursuant to the Energy Choice Initiative, NV Energy will likely have to either enter into contracts with the owners of these new power plants at rates approved by the Federal Energy Regulatory Commission (FERC) or significantly invest in upgrades to its distribution and transmission infrastructure to

³⁰⁸ 01/19/18 PUCN Workshop Proceeding Transcript at 593 (Appendix 2146).

³⁰⁹ 02/16/18 PUCN Regulatory Operations Staff Post-Workshop Comments at 14-15 (Appendix 1467-1468).

³¹⁰ *Id.* at 15-16.

maintain these ‘must-run’ resources. NV Energy estimates that this new infrastructure investment will total approximately 611 million dollars, with 425 million dollars for new infrastructure in Northern Nevada and 186 million dollars for new infrastructure in Southern Nevada.³¹¹

Key Finding: This type of expenditure would normally be vetted by the PUCN within the context of an integrated resource planning (IRP) proceeding or a general rate case (GRC) pursuant to NRS Chapter 704. If the Energy Choice Initiative passes, it will be up to the Nevada State Legislature as to whether these type of planning and rate proceedings will continue before the PUCN for NV Energy’s likely distribution-only service, *i.e.*, wires-only. Nevertheless, if NV Energy is forced to divest its ‘reliability-must-run’ generation assets pursuant to the Energy Choice Initiative, it may require 611 million dollars of new infrastructure investment by NV Energy to maintain Nevada’s electric grid reliability. If approved, these costs will likely be passed to Nevada ratepayers as an increase to the distribution component of their monthly electric bills.

Estimated New Startup Costs of the Energy Choice Initiative

The Energy Choice Initiative will create new costs for Nevada ratepayers: Presuming, for illustrative purposes, that the Nevada State Legislature determines to join the California Independent System Operator (CAISO), some of the known monetary costs will be borne by Nevada ratepayers will include one-time startup costs. Estimates of these costs include the following: up to 250,000 dollars for a third-party study of CAISO and other wholesale market options,³¹² up to 500,000 dollars to join CAISO,³¹³ between 10 to 20 million dollars for new software and computer system technology for NV Energy in a wholesale market operated by CAISO (with 15 million dollars being mid-range), and between 49 to 95 million dollars for new integrated computer system technology for NV Energy in a retail market (with 72 million dollars being mid-range),³¹⁴ up to 3.3 million dollars for updates to the open access transmission tariff overseen by FERC,³¹⁵ and up to 10 million dollars for initial outreach and education to Nevadans.³¹⁶

Key Finding: Adding up these new one-time estimated startup costs for the Energy Choice Initiative totals a little over approximately 101 million dollars.

Spreading these costs to ratepayers over a 10-year period shows that single-family residential customers in Southern Nevada could expect to see an increase of approximately \$0.50 in their average monthly bill, and large commercial customers in Southern Nevada could expect to see an increase of approximately \$3.47 in their average monthly bill. This represents a 0.4 percent increase for Southern Nevada based on NV Energy’s current rates. Single family residential customers in Northern Nevada could expect to see an increase of approximately \$0.39 in their average monthly bill, and large commercial customers could expect to see an increase of approximately \$12.07 in their average monthly bill. This represents a 0.5 percent increase for Northern Nevada based on NV Energy’s current rates. Again, if these costs were spread over a period longer

³¹¹ 12/08/17 NV Energy Initial Comments at 38 (Appendix 517) and 02/16/18 NV Energy Post-Workshop Comments at 17 (Appendix 1428).

³¹² 01/25/18 PUCN Workshop Proceeding Transcript at 891 (Appendix 2469).

³¹³ *Id.* at 883

³¹⁴ *See* 02/16/18 NV Energy Post-Workshop Comments at 18, 20 (Appendix 1429, 1431).

³¹⁵ *Id.* at 18 n. 24.

³¹⁶ 01/19/18 PUCN Workshop Proceeding Transcript at 593 (Appendix 2146).

than ten years, the average monthly impact would decrease; but the interest owed on those financial obligations would increase.³¹⁷ These costs would be in addition to any other costs paid for electricity service.

Estimated New Annual Maintenance Costs of the Energy Choice Initiative

In addition to the new startup costs, there will likely be new ongoing costs associated with maintaining the new systems created to implement the Energy Choice Initiative. Estimates of these costs include the following: between 21 and 27 million dollars (with 24 million dollars being mid-range) for an annual CAISO grid management charge,³¹⁸ between 13 and 24 million dollars for ongoing operation and maintenance by NV Energy (with 18.5 million dollars being mid-range),³¹⁹ approximately 1 million dollars for education,³²⁰ and 2.2 million dollars in increased PUCN regulatory costs.³²¹

As previously discussed in this Report, *supra* at 55, there is an additional estimated new cost of approximately 22.5 million dollars associated with service to Sierra Pacific Power Company's natural gas customers. This was included in the estimate for Sierra Pacific Power Company's electricity customers.

Key Finding: Adding up these yearly maintenance costs totals approximately 45.7 million dollars (without the additional Northern Nevada natural gas costs or approximately 68.2 million dollars with them).

Single-family residential customers in Southern Nevada could expect see an increase of approximately \$2.28 in their average monthly bill, and large commercial customers in Southern Nevada could expect to see an increase of approximately \$15.76 in their average monthly bill. This represents a 1.7 percent increase for Southern Nevada based on NV Energy's current rates. Single-family residential customers in Northern Nevada could expect to see an increase of approximately \$4.81 in their average monthly bill, and large commercial customers could expect to see an increase of approximately \$150.99 in their average monthly bill. This represents a 5.8 percent increase for Northern Nevada based on NV Energy's current rates.³²² These costs would be in addition to any other costs paid for electricity service.

Estimated Remaining Costs

As explained above in this Report, *supra* at 40, the Energy Choice Initiative will likely require NV Energy to divest of its generation assets, *i.e.*, power plants, and long-term electric contracts, *i.e.*, power purchase agreements. These are not new costs created *per se* by the Energy Choice Initiative. Rather, they are borne out of existing financial liabilities. These are costs that reflect the likelihood of NV Energy not receive the full remaining book value of its assets following their forced sale and/or assignment to new owners. Meaning, the Energy Choice Initiative may cause financial losses that will likely be the financial responsibility of Nevadans to pay.

³¹⁷ (Appendix 4168).

³¹⁸ 02/16/18 CAISO Post-Workshop Comments at 5 (Appendix 1334).

³¹⁹ 02/16/18 NV Energy Post-Workshop Comments at 20 (Appendix 1431).

³²⁰ No specific data was found in the record discussing ongoing education costs. This figure is simply a reasonable conservative estimate for demonstrative purposes based upon 10 percent of the startup education costs.

³²¹ (Appendix 3517-3545).

³²² (Appendix 4169).

Costs for regulatory assets can currently be reasonably estimated. As previously discussed in this Report, *supra* at 51, this totals approximately 327 million dollars.³²³ What is currently unknown are costs likely to arise from NV Energy's divestiture of generation assets and long-term power contracts. While Proponents of the Energy Choice Initiative proffer that NV Energy can sell its existing power plants and assign its contracts to someone else, this suggestion grossly overlooks the reality that current open market conditions for these obligations shows that they would likely be sold or assigned at a loss. No specific information regarding these costs has been provided by the Proponents of the Energy Choice Initiative. Based on rough estimates and today's market conditions, the PUCN conservatively estimates that these costs will total approximately 3.747 billion dollars.³²⁴

Totaling these costs equals approximately 4.074 billion dollars in combined regulatory and stranded asset costs. These costs could be spread over various amounts of time. Naturally, the longer the amount of time, the smaller their monthly impact will be on ratepayer bills. But the more our children and grandchildren and future Nevadans may be burdened.

Spreading these costs to ratepayers over a 10-year period shows that single-family residential customers in Southern Nevada could expect to see approximately \$24.91 added to their average monthly bill, and large commercial customers in Southern Nevada could expect to see approximately \$172.56 added to their average monthly bill. Single-family residential customers in Northern Nevada could expect to see an approximately \$6.52 added to their average monthly bill, and large commercial customers could expect to see approximately \$204.48 added to their average monthly bill. Again, if these costs were spread over a period longer than ten years, the average monthly impact would decrease; but the interest owed on those financial obligations would increase.³²⁵

NOTE: These remaining costs would be in addition to the estimated increases caused by new startup and yearly costs associated with the Energy Choice Initiative.³²⁶ Again, they are not "new" costs *per se* from the Energy Choice Initiative but these remaining costs will nevertheless likely be added to monthly bills.

³²³ This figure is offset by a reasonable estimate of regulatory liabilities, *i.e.*, money NV Energy owes ratepayers.

³²⁴ This figure is based on the difference between the estimated net book value per megawatt at mid-2023 and the average per-megawatt cost of the recent sales of the South Point Energy Center and the Gila River Power Station in Arizona. An additional 350 million dollars in capital maintenance required for the generating units between 2018 and mid-2023 was added to this estimate based on information provided by PUCN Regulatory Operation Staff. *See* 02/16/18 PUCN Regulatory Operations Staff Post-Workshop Comments at 11 (Appendix 1464). Remaining obligations were estimated using the currently-commercial renewable purchase power agreements minus the Colorado River Commission-Hoover contract and minus an estimated-market energy value based upon 2016 FERC Form 1 data for Nevada Power Company and Sierra Pacific Power Company. Pre-commercial renewable purchase power agreements, renewable portfolio energy credit agreements, and the Fort Churchill Solar Lease contract were excluded from the estimates, as these are presumed to be able to be assigned, sold, or otherwise transferred at full value. Three of the non-renewable power purchase contracts have also been excluded from estimates, as they appear to expire prior to mid-2023, or shortly thereafter. The Liberty (CalPeco) EBSA was included in the estimate analysis. The remaining balance of regulatory assets and regulatory liabilities as of January 1, 2023, is estimated based upon existing amortization schedules and prior general practice. Again, these are preliminary estimates only using the best-available and most-current information.

³²⁵ (Appendix 4170).

³²⁶ Very little has been presented during the course of this investigatory docket regarding Nevada-specific benefits that will likely come from the Energy Choice Initiative.

Likely Increase to Nevada’s Monthly Electric Bills

The total cost estimates discussed in this Report range from over a hundred million dollars in new costs to several billion dollars in remaining costs that will reasonably likely be added to Nevada’s monthly electric bills in an open and competitive market. These costs would be in addition to generation, distribution, and transmission costs, as well as any legislatively-imposed energy policy costs that the Nevada State Legislature may determine to impose. It is unreasonable for anyone to suggest that these costs will be nothing or will be immediately offset by new market electricity rates. Indeed, no reasonable basis exists to believe they will be, at least not in the short term, *i.e.*, the first 10 years.

What is relevant in providing these initial cost estimates is to begin a realistic dialogue about the financial consequences of the Energy Choice Initiative, and to temper the public’s expectations and avoid the regulatory principle of ‘rate shock.’³²⁷ Based on the above-cited information and reasonable presumptions, the Energy Choice Initiative will likely increase the average monthly bills across Nevada customer classes. Exactly how much of an increase this will be depends on several variables, including decisions by the Nevada State Legislature and the market for generation assets and power purchase agreements. If, for example, the Nevada State Legislature chooses a wholesale market operator other than CAISO, some of the above-cited cost estimates will certainly change.

The financial impact of the Energy Choice Initiative on the average monthly bills of Nevada families and businesses is a moving target. But under any scenario, no model or cost estimate the PUCN could reasonably contemplate in good-faith showed monthly electricity bills decreasing anytime soon as a result of the Energy Choice Initiative. This is largely because the long-term electricity contracts and power plants owned by NV Energy are ‘upside down’ given current market conditions. It is unrealistic to presume that NV Energy would receive a dollar-for-dollar return through a forced divestment sale and/or assignment—it is like a home loan that is greater than the market value of the home itself. There will likely be a loss.

Key Finding: The Energy Choice Initiative is reasonably likely to increase the average monthly electricity bill across customer classes. What decisions are made by the Nevada State Legislature will influence the ultimate costs borne by Nevada ratepayer. Perhaps the most important of the decision points that will influence costs is what wholesale market operator Nevada joins and/or creates.

WHOLESALE MARKET

A wholesale electricity market is a market that sells large or bulk quantities of electricity for resale to entities that provide service at a retail to entities that provide service level directly to customers.³²⁸ Think of it as a grain silo where harvested wheat is bought and sold in bulk, *i.e.*, the wholesale market, to bakers who turn the wheat into bread and sell it to people in a store-front shop, *i.e.*, the retail market. Wholesale markets are the organized market structure resulting from the services of a grid operator, which is often managed by a governing entity or body.

There are two general types of entities that oversee wholesale markets: Independent System Operators (ISOs) and Regional Transmission Operators (RTOs). NV Energy currently participates in a bi-lateral market, which allows open-access transmission over its service territory.

³²⁷ See Bonbright, James C.; Daniels, Albert L.; Kamerschen, David R., *Principles of Public Utility Rates*, 383-384 (1988).

³²⁸ See <https://www.merriam-webster.com/dictionary/wholesale> (March 25, 2018).

If the Energy Choice Initiative passes, Nevada will need to consider its wholesale market. Three realistic or semi-realistic options regarding a wholesale market for Nevada currently appear available. These are: (1) become a member of the California Independent System Operator (CAISO); (2) build a new Nevada-only wholesale market organization; or (3) join an existing wholesale market overseen by an already-established and known organization. Ultimately, success of electric deregulation depends on the competitiveness and dynamics of the wholesale market. It is essential to get right. Most commenters recognize this but, often, ‘getting it right’ is usually code for ‘do it my way.’

Is a Wholesale Market Necessary?

Some commenters believe that having Nevada joining a wholesale market prior to establishing a retail market is unnecessary.³²⁹ Yet, every state in the country that has deregulated in whole or part and established a retail market has done so only *after* joining or forming a wholesale market. Wholesale markets provide transparently-priced generation and transmission electricity costs.³³⁰

General consensus from experts and stakeholders is that Nevada needs to join or create a properly-structured wholesale market *before* establishing a retail electricity market as required by the Energy Choice Initiative.³³¹ Retail Energy Supply Association (RESA) states that the goal for the creation of a wholesale market should be as follows: “Design a wholesale market structure that ensures liquidity and simplicity which incentivizes the most knowledgeable companies from around the world to bring their electricity products and services to Nevada.”³³² While it is not expressly required in the language of the Energy Choice Initiative, establishing or joining a wholesale market first appears a reasonable and common-sense step.

Federal Government Oversight

As a threshold matter, and as previously discussed in this Report, *supra* at 10, it is important to recognize that the Federal Energy Regulatory Commission (FERC) has authority over the interstate transmission of electricity and, subsequently, wholesale markets.³³³ The Energy Choice Initiative will eliminate Nevada’s regulatory authority over essential components of electricity bills and resource adequacy planning,³³⁴ which, invariably will increase the influence of FERC—federal government regulators (based in Washington D.C.)—over Nevada’s rates and resource adequacy planning, as no Nevada-based regulatory mechanism will exist to counteract federal missteps or policy objectives.³³⁵ If the State is no longer setting retail rates, the FERC rate would be the only rate that NV Energy would be authorized to charge for the remaining transmission component of a customer’s monthly bill.³³⁶ How much control may be ceded to FERC depends on the structure of the wholesale market.

³²⁹ 01/25/18 PUCN Workshop Proceeding Transcript at 963-966 (Appendix 2541-2544).

³³⁰ 02/16/18 PUCN Regulatory Operation Staff Post-Workshop Comments at 23 (Appendix 1476).

³³¹ 12/08/17 NV Energy Initial Comments at 37 (Appendix 516) and 12/11/17 Proponents of the Energy Choice Initiative Comments at 7 (Appendix 1208).

³³² 12/08/17 RESA Initial Comments at 33 (Appendix 203).

³³³ *FERC v. Electric Power Supply Association*, ___ U.S. ___, ___, 136 S.Ct. 760, 767 (2016).

³³⁴ 02/16/18 NV Energy Post-Workshop Comments at 5 (Appendix 1416).

³³⁵ 01/17/18 PUCN Workshop Proceeding Transcript at 261-262 (Appendix 1795-1796).

³³⁶ 02/16/18 NV Energy’s Post-Workshop Comments at 6 (Appendix 1417).

Criteria for Selecting the Best Wholesale Market Option

A lot of opinions exist about the wholesale market options before Nevada. However, the full range of theoretical options must be invariably limited by the ‘going live’ deadline of July 1, 2023, as set forth in the Energy Choice Initiative and that only three 120-day regular sessions of the Nevada State Legislature exist between now and then.

Prior to determining what would be the best option for Nevada regarding a wholesale market, it is necessary to first establish a baseline of policies as to what Nevada may be looking for in one.

Summary of Participant Comments

Views by entities such as Smart Energy Alliance (SEA) express a need for independent governance, FERC oversight, incorporation of Nevada-state policies into planning, and a ‘liquid’ market that allows day-ahead and real-time transactions.³³⁷ Others, such as the National Energy Marketers Association (NEMA), stress a desire for independence with minimal government interference.³³⁸ Proponents of the Energy Choice Initiative support the PUCN immediately taking steps to fully assess realistic and achievable options for joining or creating an organized wholesale market that is FERC-regulated: Nevada’s best option for participation in an organized wholesale market is to join an existing organization, but only if Nevada retains certain rights to protect its interests.³³⁹ Barrick Mines states that, before joining a wholesale market, Nevadans must be assured that the interests of Nevada are protected and Nevada authority and autonomy are maintained.³⁴⁰

Retail Energy Suppliers Association (RESA) asserts that the creation of an independent wholesale market is a crucial step in the development of a retail market. Important factors include the following:

- (1) create transparent and liquid markets for energy and associated products (such as real-time energy balancing);
- (2) establish clearing prices and dispatch generation units based upon least-cost-dispatch principles;
- (3) manage and operate the wholesale transmission network;
- (4) plan and incentivize the continued development of the generation and transmission systems to assure reliability;
- (5) operate the wholesale market for power in the most predictable, market-driven way possible; and
- (6) provide data and information to an independent market monitor that is able to review and monitor these new markets.³⁴¹

RESA states that an appropriate organization should be able to create a workable wholesale day-ahead and real-time energy market with procedures to encourage adequate generation resources and equitable wholesale delivery systems. It should be able to develop and operate an electronic market trading system, and assume responsibility for statewide planning and reliability, which may include planning reserves and integrated resource planning. RESA also states that it should be required to establish a process to set

³³⁷ 12/08/17 SEA Initial Comments at 5 (Appendix 1040).

³³⁸ 12/07/17 NEMA Initial Comments at 7 (Appendix 26).

³³⁹ 12/11/17 Proponents of the Energy Choice Initiative Initial Comments at 7 (Appendix 1208).

³⁴⁰ 12/29/17 Barrick Mines Reply Comments at 5 (Appendix 2832).

³⁴¹ 12/08/17 RESA Initial Comments at 35 (Appendix 205).

transmission pricing, rules and regulations and to establish fair and non-discriminatory access to all wholesale transmission services.³⁴²

PUCN Regulatory Operations Staff provides a list of lessons learned and things to consider regarding setting up a wholesale market: (1) make sure all stakeholders are represented; (2) make sure the budget is vetted and transparent; (3) make sure clear divisions are established between state and federal jurisdiction; (4) make sure there is decision-making and enforcement authority; and (5) make sure it has flexibility. On this point, PUCN Regulatory Operations Staff cautions against putting too much of the deregulation market processes into law, as opposed to the more easily modified vehicles of regulations and policy.³⁴³

Analysis and Findings

Key Finding: Nevada should make some basic policy decisions about wholesale market preferences, and then the various participants will work to implement the decisions.³⁴⁴ Considering the various perspectives, the following common themes emerge: independence, transparency, flexibility, incorporation of Nevada state policy goals, technical ability, diverse energy resource availability, clear market rules and boundaries, open access, and reliability/stability.

California Independent System Operator (CAISO)

The California Independent System Operator (CAISO) is a nonprofit, public benefit corporation chartered under the laws of California. It is regulated by the FERC. CAISO operates a day-ahead and real-time wholesale energy and ancillary services market to manage the high-voltage transmission system that has been placed under its control. CAISO identifies the electricity industry sectors as utilities, private power plant owners, state and federal agencies, and other stakeholders. CAISO has no financial interest in any individual sector. This ensures fair and transparent access to the transmission and market transactions.³⁴⁵

Summary of Participant Comments

NV Energy states that both California and Nevada have solar resources and are in the Pacific Time Zone which results in similar daily load patterns.³⁴⁶ If Nevada decides to join CAISO, there will need to be capital investment costs for Nevada transmission and market participants such as further investments in telecommunications and software associated with market bidding, settlement, forecasting, and scheduling and tagging.³⁴⁷ NV Energy states that Nevada's electric consumers would also incur costs for NV Energy to revise its open access transmission tariff and transmission revenue requirement to reflect the new scope of its operations. These costs could be as much as 3.3 million dollars.

³⁴² *Id.* at 35-37.

³⁴³ 12/08/17 PUCN Regulatory Operations Staff Initial Comments at 23-24 (Appendix 800-801).

³⁴⁴ 01/17/18 PUCN Workshop Proceeding Transcript at 967-968 (Appendix 2545-2546).

³⁴⁵ 12/08/17 CAISO Initial Comments at 2 (Appendix 445).

³⁴⁶ 02/16/18 NV Energy Post-Workshop Comments at 10 (Appendix 1421).

³⁴⁷ *Id.* at 8-9.

In addition, NV Energy states that Nevadans would pay a share of CAISO's ongoing annual operating expenses, which are currently budgeted at approximately 200 million dollars. Joining CAISO may not significantly change electricity transportation rates at the outset, but how CAISO allocates transportation rates across its service territory is uncertain, and the relevant formula or inputs for both existing and future transmission facilities could change after Nevada joins.

NV Energy states that CAISO does not yet have the legislative change needed to facilitate restructuring its governance structure.³⁴⁸ More specifically, integrating with CAISO depends on whether the Nevada State Legislature and the California State Legislature both pass legislation signed by each state's respective Governor to make the necessary changes to CAISO's governance structure.³⁴⁹

NV Energy notes that issues regarding possible changes to CAISO's governance structure were considered in the years 2015 and 2016 by the electricity utility PacifiCorp (a Berkshire Hathaway corporation). CAISO and PacifiCorp were unable to reach a final consensus. After nearly a year and a half of 'rolling up its sleeves' and trying to work with CAISO, PacifiCorp saw little progress and gave up.³⁵⁰

Assuming governance issues can be resolved, NV Energy believes it will take approximately five years for Nevada to fully join and integrate with CAISO. Integrating operations and computer systems between NV Energy and CAISO would take approximately from two to three years, and would require FERC approval. Assuming the Nevada State Legislature acts during the 2019 legislative session, the earliest full integration could occur would be mid-2024.³⁵¹ Much of the work associated with integrating the Nevada system with CAISO system has already occurred as part of Nevada's participation in the Energy Imbalance Market (EIM).³⁵² However, if Nevada were to join CAISO other capital investments would be needed such as telecommunications and software for market bidding, settlement, forecasting, scheduling and tagging. NV Energy adds that the ongoing costs of participating in CAISO market through what is called a 'Grid Management Charge' that electricity loads pay to CAISO will initially be 10 million dollars or more. While the transmission rate may not change at the outset, the costs of new regional lines would be allocated to each region and need to be determined.³⁵³

PUCN Regulatory Operations Staff states that the CAISO operates a competitive wholesale electricity market and ensures transmission grid reliability in most of California and a part of Nevada. CAISO's governing body is appointed by the Governor of California. Its public policy objectives are determined by the California State Legislature, the California Energy Commission, and the California Public Utilities Commission (CPUC).

³⁴⁸ 02/16/18 NV Energy Post-Workshop Comments at 18 n.24 (Appendix 1429).

³⁴⁹ *Id.* at 4.

³⁵⁰ 01/17/18 PUCN Workshop Proceeding Transcript at 923-924 (Appendix 2501-2502).

³⁵¹ 12/08/17 NV Energy Initial Comment at 28 (Appendix 507).

³⁵² The Energy Imbalance Market (EIM) is a real-time bulk electricity trading market, which allows participants the ability to buy and sell electricity close to the time it is needed and consumed. EIM software balances fluctuations in supply and demand by automatically finding low-cost resources from across its region. See <https://www.westerneim.com/>.

³⁵³ 12/08/18 NV Energy Initial Comments at 28 (Appendix 507) and 02/16/18 NV Energy Post-Workshop Comments at 18 (Appendix 1429).

CAISO operates the largest Independent System Operator (ISO) in the world. It has over 100 members. It serves over 30 million customers. It has a state-of-the-art infrastructure to support its operations. Some transmission infrastructure is already in place for NV Energy to connect Nevada to CAISO. CAISO also has an independent Market Monitoring Department that is responsible for overseeing the market and ensuring that the market is operating efficiently.³⁵⁴

PUCN Regulatory Operations Staff remains concerned about CAISO's governance structure. While many potential entrants have expressed support for an independent governing body, the California State Legislature has not yielded any control. Of note, in 2007, a bill was introduced before the California State Legislature to promote a regional electricity market, but it was later withdrawn.³⁵⁵

PUCN Regulatory Operations Staff states participants in the CAISO market have open and non-discriminatory access. CAISO uses Locational Marginal Pricing (LMP), where the price of electricity closely reflects the cost of procuring electricity at different geographical locations within the system. During peak times, buyers of electricity are required to pay transmission congestion charges.³⁵⁶

California Independent System Operator (CAISO) states that its electricity system and that of Nevada share unique synergies due to strong transmission interconnections, generation resource diversity, and differing load profiles. These factors could provide additional benefits if Nevada were to pursue further wholesale market services from CAISO.³⁵⁷

CAISO states that Nevada's power plants currently have more natural gas resources on a proportional basis than CAISO, but that Nevada has significant renewable contributions from solar and geothermal resources. California, on the other hand, is less reliant on natural gas than Nevada with significant hydropower, wind, and solar resources. If these resources were pooled into a common bi-state portfolio, the increased diversity would result in a greater ability to react to changing grid conditions.³⁵⁸

CAISO states that California and Nevada load profiles are notably different. These differences provide opportunities to better optimize resource dispatch and reduce combined system capacity requirements.³⁵⁹ Combining the CAISO and Nevada systems would "smooth" the impact of weather-related variations, which would minimize the challenge to reliable and efficient operations. Diversity of the electricity loads of the 2 systems means that the combined system peak load is less than the sum of the individual peaks. The reduced combined peak would result in a reduction in the total needed generation capacity.³⁶⁰ There are excellent synergies between California and Nevada. When California is 'long on renewables' during the middle of the day, there is an opportunity for Nevada to take advantage of very low energy prices.³⁶¹

³⁵⁴ 12/08/17 PUCN Regulatory Operations Staff Initial Comments at 16-17 (Appendix 793-794).

³⁵⁵ *Id.* at 17 (referring to California Assembly Bill 726 (California 2017)).

³⁵⁶ *Id.* at 19.

³⁵⁷ 12/08/17 CAISO Initial Comments at 3 (Appendix 446).

³⁵⁸ *Id.* at 6.

³⁵⁹ *Id.* at 7.

³⁶⁰ *Id.* at 9.

³⁶¹ 01/17/18 PUCN Workshop Proceeding Transcript at 221-222 (Appendix 1755-1756).

CAISO states that it offers real-time and day-ahead energy markets. The real-time market is a spot market from which California utilities can purchase power to meet the last few increments of demand not in their day-ahead schedules. The real-time market is also the market from which incremental energy reserves are secured for CAISO to use if needed and from where the energy needed to regulate transmission line stability is obtained. The day-ahead market is where suppliers submit energy not under contract and where buyers procure additional energy economically.³⁶²

CAISO is also a balancing authority. Some of the primary responsibilities of a balancing authority are balancing load and resources in real-time, ensuring electric flows are within equipment ratings, maintaining system voltage and dispatching contingency reserves.³⁶³

CAISO maintains oversight of its wholesale markets, and has a market monitor that operates independently from CAISO. The key functions of the market monitor include the following: (1) monitoring market performance; (2) identifying ineffective market rules or operational practices and recommending changes; (3) conducting market analysis; (4) evaluating the effectiveness of the markets in signaling needed investment in generation, transmission and demand response and identifying potential barriers to needed investments; (5) referring market violations to FERC; and (6) providing independent advice to the CAISO Chief Executive Officer and CAISO Board of Governors on market related matters.³⁶⁴

CAISO states that its stakeholder process is fundamental to its business model. The purpose of its stakeholder process is to gather input during policy and tariff development for initiatives. An extensive process is undertaken during which proposals are reviewed and vetted. The process is designed to be open and transparent and to give stakeholders a voice.³⁶⁵

CAISO describes its transmission planning process as being designed to identify the need for new transmission facilities based on three main categories: (1) reliability, (2) public policy, and (3) economics. Reliability projects are identified based on applicable transmission planning standards, such as those developed by North American Electricity Reliability Corporation (NERC)³⁶⁶ and Western Electricity Coordinating Council (WECC).³⁶⁷

Public policy projects are based on policy requirements issued by the state or local regulatory agencies. Economic transmission projects are identified based on their ability to reduce production or congestion costs, transmission losses, capacity needs or other electric supply costs. Non-transmission alternatives are also considered. While CAISO cannot approve non-transmission projects, they can be identified as the preferred

³⁶² 12/08/17 CAISO Initial Comments at 12 (Appendix 455).

³⁶³ *Id.* at 13.

³⁶⁴ *Id.* at 13-14.

³⁶⁵ *Id.* at 14-15.

³⁶⁶ NERC is a non-profit international regulatory authority that assures the effective and efficient reduction of risks to the reliability and security of the grid. It includes the United States, Canada, and parts of Mexico. <https://www.nerc.com/>.

³⁶⁷ WECC is a western sub region of NERC. It includes: Alberta (Canada), British Columbia (Canada), Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, and Washington.

mitigation in the same manner as operational solutions. CAISO states that resource interconnections are mostly handled through studies.³⁶⁸

CAISO's governing body is comprised of five members appointed by the Governor of California and confirmed by the California State Senate. This structure is the product of California state law. The CAISO states that the structure meets the FERC requirements for independence.³⁶⁹ Each of the 5 members of the board must meet the FERC criteria for independence. They do not have any financial interests in market participants.³⁷⁰ Since the statute does not require board members be from California, they could be from any state.³⁷¹ CAISO understands it would need to work with Nevada to find an equitable governance structure to support Nevada's participation.³⁷²

CAISO explains that California policies drive California rates. California's rates are driven by state policies made with regard to generation procurement and transmission. Nevada may see cost advantages in the generation piece through more efficient energy procurement costs. CAISO has laid out a framework that would need to be finalized if it were to move forward with a regional market. The basic principle of the framework is that the embedded costs of the transmission system stay with the entities within that system.³⁷³

With respect to cheap solar flooding Nevada from California, CAISO believes it is important to distinguish 'cheap energy' from 'cheap renewable energy.' When California is exporting surplus energy during its solar peak, the Renewable Portfolio Standard (RPS) from those solar facilities remains with the load-serving entities. When the ultimate aim of building solar is to meet an RPS obligation, CAISO does not see cheap energy coming across the border as undermining that because there is no renewable energy credit associated with that energy—it is just energy.³⁷⁴ To the extent Nevada is driving the building of solar through its RPS, the regional market should not prohibit that. As California moves toward 100 percent RPS, if there are power plants that can be connected to the CAISO system from Nevada and counted for RPS credit, it will help California meet its RPS goal. There will be a strong opportunity to have more solar and storage. Nevada's geothermal resources will also have an opportunity to fill that gap.³⁷⁵

There is no entry fee for joining CAISO. CAISO recovers its costs through a Grid Management Charge levied against participants.³⁷⁶ There are different charges for different types of services, *e.g.*, a charge for the load-serving entity's participation, the generator's participation. NV Energy has identified

³⁶⁸ 12/08/17 CAISO Initial Comments at 15-16 (Appendix 458-459).

³⁶⁹ 01/03/18 CAISO Reply Comments at 3 (citing to *California Indep. Sys. Operator Corp. v. F.E.R.C.*, 372 F.3d 395 (D.C. Cir. 2004)) (Appendix 3008).

³⁷⁰ 01/17/18 PUCN Workshop Proceeding Transcript at 223 (Appendix 1757).

³⁷¹ 01/17/18 PUCN Workshop Proceeding Transcript at 223-224 (Appendix 1757-1758).

³⁷² *Id.* at 230-232.

³⁷³ *Id.* at 265-266.

³⁷⁴ *Id.* at 286-287.

³⁷⁵ *Id.* at 290.

³⁷⁶ *Id.* at 271-272, 294.

implementation costs in the form of transmission upgrades to its system.³⁷⁷ There may be incremental upgrade costs as well.³⁷⁸ After the benefit analysis is complete, there will be policy issues that need to be resolved. These would include transmission cost allocation and specific rules for resource adequacy.³⁷⁹ If Nevada were to join CAISO and needed new transmission lines, Nevada would need to obtain approval to build the new transmission lines from CAISO.³⁸⁰

CAISO provided information on the costs of Nevada joining CAISO. Nevada already participates in the Energy Imbalance Market (EIM), so that is a cost that has already been incurred. The annual cost of participating in the EIM is less than 1 million dollars per year. It would probably cost less than 500,000 dollars to implement a newly Nevada-included CAISO. Full participation in the CAISO would require payment of the Grid Management Charge, which would be between 21 and 27 million dollars per year for Nevada.³⁸¹ A study to examine the benefits of joining the CAISO would probably cost 250,000 dollars depending on the number of scenarios and sensitivities conducted.³⁸²

Software modifications would be needed, and Nevada would need to make a decision to allow NV Energy to turn its transmission assets over to be placed under CAISO's operational control.³⁸³ Implementation charges are estimated to be less than 500,000 dollars to upgrade systems and software.³⁸⁴

CAISO states that it continues to monitor and support discussions on the CAISO governance structure at the California legislature where there are 2 active Assembly Bills (AB 726 and AB 813).³⁸⁵ If NV Energy were to join CAISO, a stakeholder process would be used to work from a draft framework proposal for allocating and collecting Transmission Access Charge in a regional CAISO. In a combined system, new transmission projects would be identified through the CAISO's transmission planning process and costs would be allocated depending on the classification of the transmission facility and the benefits it provides to customers within each sub-region.³⁸⁶

CAISO supports further study of wholesale market options for Nevada. During the course of this proceeding, CAISO outlined the financial benefits that NV Energy's ratepayers have already experienced through participation in the EIM with CAISO. Participation by Nevada in the EIM has delivered approximately 40 million dollars in benefits to NV Energy and Nevadans since implementation in 2015.³⁸⁷ These benefits exceed estimates calculated prior to implementation and they continue to grow.

³⁷⁷ *Id.* at 294.

³⁷⁸ *Id.* at 296.

³⁷⁹ *Id.* at 300.

³⁸⁰ *Id.* at 328.

³⁸¹ 01/25/18 PUCN Workshop Proceeding Transcript at 882-883 (Appendix 2460-2461).

³⁸² *Id.* at 891.

³⁸³ *Id.* at 919.

³⁸⁴ 02/16/18 CAISO Post-Workshop Comments at 4 (Appendix 1333).

³⁸⁵ *Id.* at 3.

³⁸⁶ *Id.* at 5-7.

CAISO believes that participation by Nevada in CAISO would allow Nevada to capitalize on the strong transmission interconnections, generation resource diversity, and load diversity that it has with CAISO.³⁸⁸ Unlocking synergies between California and Nevada electric systems would allow for greater economic dispatch of generation units, optimize resource planning, and reduce reserve requirements. According to CAISO, it would take approximately 24-26 months for Nevada to join; but that other activities outside of the CAISO's control could impact the timeline. CAISO also expects that implementation, modeling, and market simulation processes would take another 12-18 months.³⁸⁹

Calpine Corporation states that Nevada should integrate its transmission system with the CAISO; but, it notes that Nevada has a legitimate interest in reforming the CAISO governance structure to reflect the new multi-state character portended by Nevada's entry. If the important issues and preconditions that would need to be addressed and resolved prior to effecting this union cannot be met to the satisfaction of Nevada policy makers, joining the Southwest Power Pool (SPP) would still be a more preferential outcome than a Nevada-only organization.³⁹⁰

Calpine states that integration with CAISO will allow Nevada to capture greater economic benefits by facilitating greater levels of energy and capacity exports, particularly from renewable resources, from the enormous regional load centers located in California.³⁹¹ CAISO is adjacent to and directly interconnected with the Nevada transmission network and CAISO already manages and schedules cross-border transactions and exchanges between California and Nevada. Nevada market participants are familiar with CAISO, and CAISO operators have a working knowledge of the Nevada grid. Since the CAISO operates a diverse, liquid and transparent market, there is simply no reason "for Nevada to attempt to reinvent the . . . wheel."³⁹² Calpine acknowledges that the CAISO model would need to be enhanced to integrate and reflect the configuration of Nevada's transmission network and the operating characteristics of Nevada's generation: "[T]he devils would be in the details."³⁹³

Mt. Wheeler Power states that Nevada should carefully scrutinize CAISO as a possible operator. Mt. Wheeler is a transmission customer of NV Energy and changing its current contract for transmission service could negatively impact its members with additional expenses. Mt. Wheeler also questions the benefits of the Energy Imbalance Market (EIM) operated by CAISO. It has stated: "As a small utility involved in that process, we are not impressed in any organization that provides themselves up to 36-months to submit a settlement billing to a customer."³⁹⁴

³⁸⁷ *Id.* at 2.

³⁸⁸ *Id.*

³⁸⁹ *Id.* at 10-11.

³⁹⁰ 12/07/17 Calpine Corporation Initial Comments at 10 (Appendix 59).

³⁹¹ *Id.* at 8.

³⁹² *Id.* at 9.

³⁹³ *Id.* at 10.

³⁹⁴ 02/16/18 Mt. Wheeler Power Post-Workshop Comments at 3 (Appendix 1252).

Natural Resources Defense Council (NRDC) states that expansion into an organized wholesale market, such as that provided by CAISO, would provide additional benefits to Nevada, so long as Nevada does not cede its resource adequacy planning and it is “done correctly.”³⁹⁵ CAISO manages resource adequacy planning in collaboration with the California Public Utilities Commission (CPUC), which involves detailed analysis of system reliability needs and implementation of a procurement program to assure resource availability.³⁹⁶

NRDC believes Nevada’s best wholesale market option is CAISO. Nevada has already helped shape the Energy Imbalance Market (EIM) in cooperation with CAISO. Other options would require duplicative and additional investments without the benefit of the connectivity afforded to the utility systems in the Western Interconnection. While it may take time for CAISO to reorganize to a regional platform, it is worth it.³⁹⁷

NRDC believes that linking Nevada’s electricity grid to neighboring grids like that of CAISO and allowing power plants to be economically dispatched over a wider geographic area with bigger and more diverse loads would likely produce large benefits, including benefits for renewable energy development. Joining an expanded western grid would allow Nevada to become a hub of low-cost solar, and potentially, geothermal energy. NRDC notes that, critically, this additional renewable generation comes from hooking up low-cost renewable electricity to a large-load grid system, not from retail competition.³⁹⁸

Valley Electric Association (VEA) joined CAISO in 2013.³⁹⁹ VEA states that a major component of CAISO is its integrated forward market, which analyzes the active transmission and generation resources using a full network model to find the least cost energy to serve demand. Individual nodes or locations show the cost of producing and delivering energy.⁴⁰⁰ VEA agrees that issues related to CAISO governance and ensuring preservation of Nevada state-policy goals should be addressed. CAISO must implement an unbiased regional governance structure. Implementation of the Energy Choice Initiative should ensure that the Nevada State Legislature, the PUCN, and other state institutions play a vital role in setting CAISO policies for reliability, resource adequacy, and renewable energy development.⁴⁰¹

Environmental Defense Fund states that the PUCN has a “no regrets” opportunity to investigate existing or future products and services available through the CAISO.⁴⁰² Smart Energy Alliance (SEA) believes that CAISO could satisfy its criteria if it is willing to become a regional market within the Western Interconnection.⁴⁰³ Proponents of the Energy Choice Initiative agree that CAISO looks “very attractive.”⁴⁰⁴

³⁹⁵ 12/11/17 NRDC Initial Comments at 22 (Appendix 1178).

³⁹⁶ *Id.* at 23.

³⁹⁷ *Id.* at 27-28.

³⁹⁸ 01/03/18 NRDC Reply Comments at 2-3 (Appendix 2937-2941).

³⁹⁹ 12/08/17 VEA Initial Comments at 2 (Appendix 81).

⁴⁰⁰ *Id.* at 4.

⁴⁰¹ 01/03/18 VEA Reply Comments at 4 (Appendix 2903).

⁴⁰² 12/08/17 EDF Initial Comments at 2 (Appendix 1193).

⁴⁰³ 12/08/17 SEA Initial Comments at 5 (Appendix 1040).

⁴⁰⁴ 01/25/18 PUCN Workshop Proceeding Transcript at 934 (Appendix 2512).

Analysis and Findings

Key Finding: CAISO has the infrastructure, ability, capacity, reliability, and experience to satisfy Nevada's needs and goals in a wholesale market, if the Energy Choice Initiative passes. It is the most realistic and viable option for Nevada given cost and time limitations.

By all accounts, CAISO can do the job. It already has established relationships with a Nevada-based electricity providers, such as Valley Electric Association (VEA) and NV Energy. Nevada and CAISO already work together in the Energy Imbalance Market (EIM).

Joining CAISO will strengthen financial and energy ties between Nevada and our sister state, California. California is leading the country with an ambitious Renewable Portfolio Standard (RPS), which is not inconsistent with Nevada's long-term renewable energy goals.

The major obstacle for Nevada joining CAISO will likely be in negotiating and agreeing on amendments to its overall governance structure to ensure that Nevada's voice is adequately and fairly represented, and Nevada will not lose control over its own policies and self-determination. Achieving this objective will require changes to each state's respective laws, *i.e.*, legislative action by the Nevada State Legislature and the California State Legislature.

It will also require acquiescence by the Governor of Nevada and the Governor of California, as well as significant coordination between NV Energy, CAISO, the California Public Utilities Commission (CPUC), the California Energy Commission, and the PUCN. If there are reasonable people on both sides (and a willingness to get it done), it is achievable. Joining CAISO is not impossible. Yet, politics may get in the way. So may a shortage of time and financial resources. A new piece of legislation—Assembly Bill 813—was recently introduced in the California State Legislature and is currently being considered.

If the Energy Choice Initiative passes, and the Nevada State Legislature decides that it is in Nevada's best interest to join CAISO, Nevada will need to act quickly. Negotiating an adequate governance structure will be a process that may take time and outreach. Plus FERC approval will be required, which will take an additional unknown amount of time. Estimates of the amount of time necessary for NV Energy's computer and infrastructure systems to be integrated with CAISO range from 24-26 months, and additional market simulation processes will likely take another 12-18 months.

Accomplishing all of the tasks necessary for Nevada to join and be fully integrated with CAISO pursuant to the Energy Choice Initiative's constitutionally-effective deadline of July 1, 2023, will be difficult under even the best-case scenario that everything goes smoothly on all fronts. Importantly, in order for Nevada to join CAISO, the California State Legislature may need to pass legislation permitting Nevada to join, as well as other necessary structural changes.

Reasonable costs that will be borne by Nevadans for joining CAISO will include one-time transition costs and annual ongoing costs previously discussed in this Report, *supra* at 64-65. These costs are reasonable estimates and should be viewed as fluid, as they may increase (or decrease) as more information becomes available. Decisions by FERC will also influence these costs, and it is unknown what FERC will do. As explained later in this Report, *infra* at 83, further study on the costs and benefits of CAISO is prudent.

Creating a Nevada-Only Independent System Operator

Instead of joining CAISO, Nevada could create a Nevada-only Independent System Operator (ISO) to oversee a wholesale market.

Summary of Participant Comments

Proponents of the Energy Choice Initiative agree with other participants that there would be significant costs to creating a Nevada-only ISO. There might be some real legal hurdles to such an approach, as there are no other ISOs where the ISO, *i.e.*, NV Energy, would also own the distribution and transmission infrastructure. FERC may object to the idea because distribution and transmission owners are considered to be market participants and NV Energy would not have the requisite independence.⁴⁰⁵

NV Energy states that a Nevada-only ISO might be unacceptable based on Nevada's overall small size in comparison to a larger western regional option. On the other hand, pursuing a Nevada-only option while preserving the possibility of expansion to a regional footprint may prove a faster way to get a day-ahead wholesale energy market. Nevada would not have the governance issues of CAISO to sort out or have to wait for the California State Legislature to act.⁴⁰⁶

NV Energy states that significant investment would be required to create a Nevada-only ISO. If Nevada selects a new entity other than NV Energy to operate the new market, additional investment would be required to establish primary and backup control centers, grid operations, telecommunications, and other necessary infrastructure. Building a new wholesale market from scratch, whether Nevada-only or regionally, will require studies, expert consultants, and significant proceedings before the PUCN.

NV Energy states that a Nevada-only ISO would have new operational and administrative costs that would be paid by all Nevadans.⁴⁰⁷ NV Energy estimates that it would cost approximately 100 million dollars in new investment for NV Energy to set up a Nevada-only ISO wholesale market. This estimate does not include ongoing annual costs to operate the wholesale market.⁴⁰⁸

A Nevada-only ISO would allow the Nevada State Legislature and the PUCN to continue to have exclusive influence over resource planning. However, Nevada might have challenges in procuring or developing these resources because of the demand for renewable resources in California and the fact that California has vertically integrated utilities willing to sign long-term contracts.⁴⁰⁹ A Nevada-only ISO would offer a single multilateral market in which load and supply would come together simultaneously. A Nevada-only market would also have unopposed authority to design the market to meet the needs of Nevadans. Again, however, NV Energy cautions that the small size of the market might undermine its effectiveness.⁴¹⁰

NV Energy estimates it will take 6 to 10 years to fully establish a Nevada-only ISO. This estimate is based on Nevada stakeholders needing one year or more to establish governance and a process to identify a market

⁴⁰⁵ *Id.* at 931-933.

⁴⁰⁶ 12/08/17 NV Energy Initial Comments TA-4 at 11 (Appendix 586).

⁴⁰⁷ *Id.* at 37.

⁴⁰⁸ 01/25/18 PUCN Workshop Proceeding Transcript at 926-927 (Appendix 2504-2505).

⁴⁰⁹ 12/08/17 NV Energy Initial Comments TA-3 at 13 (Appendix 588).

⁴¹⁰ *Id.* at 14.

operator. This step could be shortened in the Nevada State Legislature designates NV Energy to perform the system and market operator functions. Thereafter, two to three years would be needed for a stakeholder process to establish the complex tariff for rules, price formation, and settlement formulas needed for the wholesale market operation systems. Like Nevada joining CAISO, FERC approval would be necessary. Then the market operator would need to build the new market operations system and integrate it with the NV Energy transmission system. This would likely take up to three years, depending on how much existing infrastructure is utilized. Utilizing NV Energy as the market operator might save time, but it could potentially prolong the FERC regulatory process.⁴¹¹

If NV Energy was to operate an organized market it would need to be able to maintain reliability. If forced to divest of its power plants, NV Energy would be left without the ability to maintain reliability, voltage control, or balance of a Nevada-only system. NV Energy would need resources to balance resource suppliers and electricity loads and pass feasibility tests.⁴¹² NV Energy believes it may be prohibited from providing wholesale market functions based upon its legal interpretation of the Energy Choice Initiative. NV Energy intends to be at the table having a conversation with everyone, including the PUCN, the Nevada State Legislature and the various stakeholders.⁴¹³

PUCN Regulatory Operations Staff states that examples of single-state ISOs are New York and Texas. New York has a single-state, unbundled electricity market. The New York Independent System Operator (NYISO) is the non-profit administrator of New York's wholesale electricity market and high-voltage transmission grid. Texas, for the most part, is an electrical island. It is overseen by the Energy Reliability Council of Texas (ERCOT), which serves as a Texas-based ISO responsible for operating a wholesale electricity market and transmission grid. More specifically, in 1995, the Texas State Legislature passed legislation to deregulate the wholesale market and ERCOT restructured itself as a not-for-profit Independent System Operator (ISO).⁴¹⁴

Interwest Energy Alliance states that it does not have a specific recommendation for a wholesale market, but it discourages a Nevada-only ISO formed within state boundaries because it would eliminate some of the potential savings of a broader wholesale market. It may also be more costly for customers.⁴¹⁵

Analysis and Findings

Key Finding: Creating a Nevada-only ISO warrants consideration because it is achievable and allows Nevada to control the entire process and policy objectives. While it would depend on FERC approval, unlike CAISO, a Nevada-only ISO has no governance issues to resolve—the Nevada State Legislature and PUCN could implement it. However, NV Energy estimates it may cost up to 100 million dollars in new investment to establish and get up and running. It may also take anywhere from six to ten years to fully achieve, which is well-past the deadline of July 1, 2023, set forth in the Energy Choice Initiative.

⁴¹¹ *Id.* at 16-17.

⁴¹² 01/17/18 PUCN Workshop Proceeding Transcript at 311-312 (Appendix 1845-1846).

⁴¹³ *Id.* at 321-322.

⁴¹⁴ 12/08/17 PUCN Regulatory Operations Staff's Initial Comments at 12 (Appendix 789).

⁴¹⁵ 12/08/17 Interwest Initial Comments at 3 (Appendix 110).

Southwest Power Pool (SPP)

In addition to joining CAISO or establishing a Nevada-only ISO, other options for a wholesale market for Nevada are worth discussing. The Southwest Power Pool (SPP) is linked to states east of Nevada, and currently includes parts of Arkansas, Iowa, Kansas, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, and the Texas Panhandle.⁴¹⁶

PUCN Regulatory Operations Staff states that the SPP operates a wholesale, energy-only market, which includes a day-ahead energy market, a real-time energy market and a co-optimized ancillary services and reserves market. The SPP has existed since 1941. While the SPP is likely to expand in the next several years, it currently has limited transmission interconnection with NV Energy.⁴¹⁷

Colorado River Commission of Nevada (CRCN) states that the following entities are considering joining the SPP: the Western Area Power Administration; the Colorado River Storage Project Management Center (which administers the Salt Lake City Area Integrated Project hydropower contract); the Desert Southwest Region (which administers the Hoover and Parker-Davis contracts); and the Mountain West Transmission Group (which includes parts of Arizona, Colorado, Montana, Nebraska, New Mexico, and Wyoming). The CRCN states that the SPP may be a viable option as a regional wholesale market operator for Nevada. It notes that the SPP has been in existence for several years and has worked through the governance issues with numerous states.⁴¹⁸

Western Resources Advocates states that the SPP operates as a FERC-approved Regional Transmission Organization (RTO) with 50 members that serves more than 5 million customers.⁴¹⁹ WRA notes that the SPP touts its member-driven culture. Membership fees and exit fees are required regardless of whether a member is a utility or not. State consumer advocates and non-profit public interest organizations are required to pay a 6,000 dollar annual fee to join and a penalty of approximately 769,000 dollars to withdraw. WRA state that membership is important because only members can elect members of the SPP Board. Only members can be appointed to SPP committees and working groups. Only members can vote on SPP initiatives. And only members can requests changes to the SPP stakeholder process.⁴²⁰

Key Finding: Nevada is in the Western Interconnection, and has little-to-no connection with the SPP or energy issues east of the Rockies. The SPP did not participate in these proceedings and the PUCN is aware of no outreach or interest by the SPP in Nevada. It is unclear whether it is a viable option for Nevada at this time. Outreach by Nevada to the SPP should occur to begin a dialogue and learn more.

Peak Reliability-PJM Connex

Peak Reliability-PJM Connex is a recently-formed new business entity (established on December 7, 2017) that is based in Vancouver, Washington, and intends to explore reliability services and energy markets in

⁴¹⁶ 12/14/17CRCN Initial Comments at 11-12 (Appendix 1225-1226).

⁴¹⁷ 12/08/17 PUCN Regulatory Operations Staff Initial Comments at 22 (Appendix 799).

⁴¹⁸ 12/14/17 CRCN Initial Comments at 11-12 (Appendix 1225-1226).

⁴¹⁹ 12/08/17 WRA Initial Comments at 14 (Appendix 1077).

⁴²⁰ *Id.* at 15.

the Western United States. It is a wholly-owned, non-regulated subsidiary of PJM Interconnection, which is the largest electricity wholesale market operator in the world.⁴²¹

Peak Reliability-PJM Connex states that the western region is at a point where wholesale markets are wanted by many entities. Such markets create economic opportunities for participants and lower costs for businesses and consumers. Peak Reliability-PJM Connex believes there will be multiple organized markets in the West and all will have to work closely and create interregional efficiencies consistent with FERC policy.⁴²²

Peak Reliability-PJM Connex states that it will publish a business case for a proposed reliability and market services competitive offering by the end of March 2018. It will include start-up and ongoing cost estimates and expense ranges for the proposed reliability and market services, including a West-wide day ahead and real-time electric energy market. Peak Reliability-PJM Connex recommends that the PUCN take time to carefully consider all aspects of the potential alternatives for wholesale markets as a component to the implementation timeline for the Energy Choice Initiative.⁴²³

Calpine Corporation believes CAISO is the best option for Nevada's wholesale market, but also believes that Peak Reliability-PJM Connex should be evaluated.⁴²⁴ Western Resource Advocates (WRA) believes the Peak Reliability-PJM Connex is a potential option for exploration of potential services in the West.⁴²⁵ NV Energy states that the Peak Reliability-PJM Connex proposal to provide wholesale market services to Nevada could significantly reduce time and expense.⁴²⁶

Key Finding: Peak Reliability-PJM Connex is in the very early stages of forming its business. No cost or Nevada-specific information is available.

Western Regional Transmission Organization (RTO)

When Nevada looked at deregulation in the 1990s, *i.e.*, the Mountain West, Nevada tried unsuccessfully for years to establish a Western Regional Transmission Organization (RTO). This effort failed. NV Energy estimates that efforts to establish a Western RTO with other states and/or entities could take even longer than establishing a Nevada-only ISO.⁴²⁷ There is currently no reason to believe that Nevada would be any more successful in its efforts to establish a Western RTO than it was in the 1990s. Costs are unknown, and it is unrealistic to expect it could be achieved by the July 1, 2023, deadline set forth in the Energy Choice Initiative. A new Western RTO is not a viable option at this time.⁴²⁸

⁴²¹ See <https://www.peakrc.com/>.

⁴²² 02/16/18 Peak Reliability and PJM Connex Post-Workshop Comments at 2 (Appendix 1349).

⁴²³ *Id.* at 3.

⁴²⁴ 02/16/18 Calpine Post-Workshop Comments at 2-3 (Appendix 1372-1373).

⁴²⁵ 12/08/17 WRA Initial Comments at 10 (Appendix 1073).

⁴²⁶ 02/16/18 NV Energy Post-Workshop Comments at 10 (Appendix 1421).

⁴²⁷ 12/08/17 NV Energy Initial Comments TA-4 at 21-23 (Appendix 596-598).

⁴²⁸ Retail Energy Supply Association (RESA) recommends that the PUCN oversee a process creating an interim electric grid operator, similar to what Nevada contemplated in the 1990s. Whether this interim operator would be eventually made into a stand-alone entity, merged into an existing ISO/RTO, or form the cornerstone of a larger organization is a

Need for Third-Party Wholesale Market Study

A third-party study of how to resolve the issue of Nevada's participation in an organized wholesale market structure is needed.

Western Resources Associates recommends the PUCN request more information about what services the CAISO can provide short of full participation and should consider full participation if and when California authorizes an appropriate change in governance.⁴²⁹ Vote Solar concurs with the recommendations of SEA, NRDC, EDF, and WRA that the PUCN should take steps to assess realistic and achievable options for joining an organized wholesale market such as the one managed by the CAISO. Vote Solar states the PUCN should direct NV Energy to study and identify what market products and services are available (or could be developed) to optimize generation and transmission assets in Nevada and California for the mutual benefit of residents in both states.⁴³⁰ Interwest Energy Alliance does not urge Nevada to follow any particular path regarding the establishment of a wholesale market other than to perform studies about the costs and benefits of available options in the near term. Interwest notes that joining a wholesale market is a "no regrets" scenario for Nevada, whether or not Nevadans approve retail choice.⁴³¹ American Association of Retired Persons (AARP) states that any study of the costs and benefits of joining or creating an RTO should include all RTO-imposed costs and fees, including the costs of subsidizing the construction of new high voltage transmission lines for the benefit of another state.⁴³² Smart Energy Alliance (SEA) recommends the PUCN immediately issue a request to CAISO, Peak Reliability-PJM Connex and others to provide information demonstrating that they meet the threshold requirements for Nevada and how such a market could overcome any issues posed by geographical distance.⁴³³ Proponents of the Energy Choice Initiative recommends the PUCN request the CAISO conduct a Nevada-specific benefit study.⁴³⁴

NV Energy agrees with other comments that cost benefit studies of the CAISO and other options should be done. With respect to the study, NV Energy suggests that Nevada may benefit from stakeholder input to determine the most pertinent issues to be evaluated, which include the following: (1) cost to establish; (2) cost of continued participation; (3) factors such as efficient unit commitment and dispatch, peak capacity needs, renewable and intermittent resource management; (4) environmental impacts; (5) reliable operations; (6) transparent and liquid pricing of wholesale energy; (7) resource adequacy program; (8) public policy programs; (9) governance structure; (10) sufficient transfer capability; (11) transmission planning process; (12) impact on Nevada jobs and revenue; and (13) timeline for implementation.⁴³⁵

question to be answered after study. RESA proposes funding be obtained through a monthly fee on all electric bills. 12/08/17 RESA Initial Comments at 35-38 (Appendix 205-208).

⁴²⁹ 12/08/17 WRA Initial Comments at 12-14 (Appendix 1075-1077).

⁴³⁰ 01/03/18 Vote Solar Reply Comments at 8-9 (Appendix 2889-2890).

⁴³¹ 02/16/18 Interwest Post-Workshop Comments at 4-5, 8 (Appendix 1355-1356, 1359).

⁴³² 12/04/17 AARP Initial Comments at 3 (Appendix 10).

⁴³³ 12/08/17 SEA Initial Comments at 6 (Appendix 1041).

⁴³⁴ 02/16/18 Proponents of Energy Choice Initiative Post-Workshop Comments at 10 (Appendix 1501).

⁴³⁵ 02/16/18 NV Energy Post-Workshop Comments at 8-9 (Appendix 1419-1420).

CAISO agrees that a study is needed to quantify benefits. The kinds of benefits that should be studied include transmission interconnectivity, generation diversity and load diversity. The benefits to Nevada specifically would need to be quantified.⁴³⁶ CAISO recommends a “no regrets” strategy to study the benefits of participating in a market.⁴³⁷ CAISO estimates that a Nevada study and quantification of the potential benefits of regionalization would cost 250,000 dollars with the understanding that this figure is highly dependent on the scope of the study and number of sensitivities included. CAISO recommends that Nevada study and quantify these potential benefits now, so that the Nevada State Legislature can take action during the 2019 Legislative Session on a wholesale market. CAISO has engaged in similar studies of regionalization benefits and has some insight into potential costs of such a study.⁴³⁸

Key Finding: An independent third-party should be contracted to further study wholesale market options for Nevada, if the Energy Choice Initiative passes. The study should address CAISO as an option, but should consider other wholesale market options for Nevada as well, including a Nevada-only ISO, Peak Reliability-PJM Connex, and SPP. Yet, the Energy Choice Initiative has not passed and the PUCN has no funds to pay for such a study. CAISO estimates that an appropriate study may cost up to 250,000 dollars (or more), depending on its scope. No source of taxpayer funds to pay for a study has been identified or readily exists, and this decision will have to reside with the Nevada State Legislature for any financial appropriation or further action.

RETAIL MARKET

Retail is defined as the sale of goods to ultimate consumers.⁴³⁹ In the case of retail markets for electricity, a retail sale occurs when an end-user purchases electricity from a commodity merchant of electricity. NV Energy, rural electric cooperatives, NRS 704B providers of new electric resources, municipal electricity providers, general improvement districts, and special power districts are the retailers of electricity in Nevada. The end-users of electricity in Nevada are broken down geographically and by customer class, *e.g.*, single-family residential, commercial, industrial. They range from family homeowners in Carson City to businesses in Midtown Reno to retirees in Las Vegas to ranchers in Lincoln County. It’s nearly everyone.

Overview of the 1990s

During Nevada’s 1990s deregulation attempt, Nevada relied on its distribution utility to provide default and provider of last resort (POLR) services. The Legislature directed the PUCN to designate NV Energy as the default and POLR service provider. Assembly Bill 366 (Nevada 1997) allowed NV Energy cost-of-service recovery for the provision of default service.⁴⁴⁰ The Nevada State Legislature also prescribed the method to transition customers away from the distribution utility’s default service once a competitive market was established. A licensed competitive supplier could submit an offer to the PUCN to provide POLR service. The offer had to contain a request to serve at least 10 percent of the total POLR load, guarantee that the

⁴³⁶ 01/17/18 PUCN Workshop Proceeding Transcript at 283-284 (Appendix 1817-1818).

⁴³⁷ *Id.* at 243.

⁴³⁸ 02/16/18 CAISO Post-Workshop Comments 1-2 (Appendix 1329-1331) and 01/25/18 PUCN Workshop Proceeding Transcript at 891 (Appendix 2469).

⁴³⁹ <https://www.merriam-webster.com/dictionary/retail/> (March 27, 2018).

⁴⁴⁰ *See* Assembly Bill 366, Sec. 45 (Nevada 1997).

competitive supplier would serve more than one class of customers, and provide a 5 percent discount off the then-current cost of service default rate. Once the PUCN received such an offer, it had an option of conducting an auction at which any licensed alternative sellers or affiliates of the distribution utility could participate.⁴⁴¹ In the 1990s, Nevada auctioned off the right to be a POLR—Shell Energy Services and Enron submitted the winning bids.⁴⁴² Every participant that has addressed the default service provider or POLR agrees that default service providers and POLRs perform functions essential to a competitive retail market.⁴⁴³

Default Service Provider

A default service provider is a concept related to a POLR. A default service provider is an entity that provides electric service to customers who fail to select a competitive supplier at the onset of a competitive market. Similar to a POLR, a default provider's role is to ensure that every consumer has access to electric service. Often, a default provider subsequently serves as a POLR. In all restructured jurisdictions, except Texas and Maine, incumbent utilities function as default and POLR providers with varying levels of involvement from their state public utilities commissions in the energy procurement.⁴⁴⁴

Summary of Participant Comments

NV Energy has announced its intent to exit the electric commodity merchant function and remain a wires-only company should the Energy Choice Initiative pass.⁴⁴⁵ Under that scenario, Nevada will not have the option of NV Energy serving as either a default provider or a POLR. Taking into account NV Energy's intent to cease being a provider of electricity, the Retail Energy Supply Association (RESA) proposes implementing a 90-day transition period during which customers must select a competitive supplier. If, upon the conclusion of the period, a customer has not transitioned to a competitive supplier, the customer would be assigned by the utility on a rotating basis to a default service competitive supplier. RESA proposes that default suppliers would be those competitive suppliers serving at least 5 percent of the retail customers in Nevada at that time or the ten largest suppliers by market share, or other criteria developed by the PUCN. Under RESA's proposal, the PUCN would set rates for default service. Defaulted customers would receive a month-to-month variable price product and would be able to switch to another competitive supplier, or choose a non-default service plan from their then-current competitive supplier, with no penalty.⁴⁴⁶

Calpine Corporation advocates for a similar approach. Calpine proposes that incumbent Nevada utilities continue to provide default service for some predetermined and limited transition period at a Commission-

⁴⁴¹ See Senate Bill 438, Sec. 6 (Nevada 1999).

⁴⁴² 01/18/18 PUCN Workshop Proceeding Transcript at 407 (Appendix 1951).

⁴⁴³ These include the following commenters: American Association Retired Persons (AARP), Calpine Corporation, City of Las Vegas, Colorado River Commission of Nevada (CRCN), Drift, Infinite Energy, Interwest Energy Alliance, National Energy Marketers Association (NEMA), NV Energy, Retail Energy Supply Association (RESA), PUCN Regulatory Operations Staff, and Valley Electric Association (VEA).

⁴⁴⁴ 12/08/17 PUCN Regulatory Operations Staffs Initial Comments at 27 (Appendix 804) and NV Energy's 12/08/17 NV Energy's Initial Comments TA-6 at 11-13 (Appendix 657-659).

⁴⁴⁵ NV Energy CEO Mr. Paul Caudill's statement at a meeting of the Governor's Committee on Energy Choice (May 10, 2017), at <http://energy.nv.gov/> and 12/08/17 NV Energy's Initial Comments at 22 (Appendix 501).

⁴⁴⁶ 12/08/17 RESA Initial Comments at 56-57 (Appendix 226-227).

approved cost plus “standard offer service” rate. Once the transition period ends, all residential and small commercial customers that have not signed up with a competitive supplier would be allocated to PUCN-qualified competitive suppliers certified as POLRs. At the same time, larger commercial, industrial, and governmental users that have failed to sign up for competitive service will remain with the utilities. The utilities will bill these larger customers at hourly real-time market costs, plus an administrative fee reflecting the utilities’ market and non-market costs related to providing this service, plus an additional “incentive” fee set at a level that would encourage the larger customers to migrate to competitive service. Calpine stresses that the default option should not be structured as an economic and competitive choice.⁴⁴⁷

The approaches proposed by RESA and Calpine resemble the path selected by Texas. Infinite Energy also generally advocates for the adoption of the Texas retail market model.⁴⁴⁸ As of the opening of the market, incumbent Texas utilities moved all customers to affiliated energy suppliers. This means that as of day 1 of the retail market opening, all customers technically switched to a retail provider. To encourage further customer migration to competitive suppliers, Texas mandated these affiliated retail energy suppliers limit their offers to an administratively-set “price to beat” that was higher than the market rate. By January 2015, at least 90 percent of each customer class in Texas had switched to a competitive supplier.⁴⁴⁹

Without the “price to beat” or a similar discriminatory-price mechanism designed to force customers to migrate to competitive suppliers, a large portion of residential customers tends to remain with their default service providers. For example, in Maine, 17 years after the launch of its competitive market, only 16 percent of all customers are being served by competitive suppliers.⁴⁵⁰ Notably, having peaked at 28.4 percent in 2013, the number of customers served by competitive suppliers has been steadily declining since.⁴⁵¹ The market participation level is much higher among large industrial users and has remained above 80 percent in recent years. Although the percentage of customers who switched remains low, the percentage of electric load that has switched is significant.⁴⁵² These dynamics are present in other deregulated jurisdictions.⁴⁵³

RESA-supplied graphs in the same section help illuminate the wide discrepancy in migration rates to competitive suppliers between residential and industrial customers. Between 2008 and 2016, *residential rates in deregulated states increased 0.84 percent*; whereas, industrial rates dropped by more than 20 percent during the same period.⁴⁵⁴ This shows the potential for savings is much greater for larger, industrial or commercial electricity users.

⁴⁴⁷ 12/07/17 Calpine Corporation Initial Comments at 16-17 (Appendix 65-66).

⁴⁴⁸ 12/08/17 Infinite Energy Initial Comments at 5-8 (Appendix 152-155).

⁴⁴⁹ 12/08/17 NV Energy Initial Comments TA-6 at 6-7 (Appendix 652-653).

⁴⁵⁰ See Office of the Maine Public Utilities Commission, Migration Statistics at <http://www.maine.gov/mpuc/> (Appendix 3997-4012).

⁴⁵¹ *Id.*

⁴⁵² *Id.*

⁴⁵³ See 12/08/17 NV Energy Initial Comments TA-6 at 2-7 (Appendix 648-653) and 12/08/17 RESA Initial Comments, Appendix 3 at 15-16 (Appendix 251-252).

⁴⁵⁴ 12/08/17 RESA Initial Comments, Appendix. 3 at 15-17 (Appendix 251-253).

Interwest Energy Alliance also generally observes that competitive markets create benefits for large customers while, for many customers, the benefits are less clear.⁴⁵⁵ PUCN Regulatory Operations Staff and its analysis of the ‘winners and losers’ in deregulated markets reaches the same conclusion—large industrial and commercial customers benefit in restructured environments, all-the-while the financial benefits for residential customers are far more elusive.⁴⁵⁶

AARP notes that the New York Public Service Commission found that New Yorkers who had signed up with a competitive supplier had paid nearly 820 million dollars more for their power than if they had stayed with their local utility company during the 30-month period ending June 30, 2016. Specifically, in the Con Edison service territory in New York, customers overpaid by \$164 per customer between January 1, 2015, and June 30, 2016.⁴⁵⁷ AARP states that Illinois has had similar experience to New York and has seen a drop in the number of customers taking service from a competitive supplier because the incumbent utilities’ default rates are now equal to or below rates offered by competitive suppliers.⁴⁵⁸ In general, these statistics show that, given the choice of staying with the incumbent utility, residential customers are not that enthusiastic about seeking out competitive supplier services.

Valley Electric Association echoes these concerns: “[C]ustomers will not exercise choice and a competitive market will not develop, if there is no opportunity to save money.”⁴⁵⁹

Even when a competitive market fails to deliver savings to residential customers, an undeveloped competitive market with a high population of default service customers could present even further challenges. Based on its members’ experience in restructured jurisdictions, RESA states that defaulted customers are more likely to complain about their electric service because their experience in a deregulated market is worse than the experience of the customers who actually selected a competitive provider.⁴⁶⁰

PUCN Regulatory Operations Staff also acknowledges that customers not switching to a competitive supplier is a big problem. In the United Kingdom, customers who did not migrate to a competitive supplier ended up paying more for electricity than the customers who did – as much as \$417 more per year. Notably, customers who did not make the switch were those least able to afford to pay more for electricity.⁴⁶¹

Naturally, if NV Energy were to choose to remain a provider of electricity, NV Energy could perform the default service provider function charging customers default service rates set by the PUCN until these customers elect to take service from a competitive supplier. Under that scenario, Nevada customers would have the choice not to choose a competitive supplier. The City of Las Vegas states that NV Energy should act as the default service provider subject to the provisions of a negotiated franchise agreement with

⁴⁵⁵ 02/16/18 Interwest Post-Workshop Comments at 9 (Appendix 1360).

⁴⁵⁶ 02/16/18 PUCN Regulatory Operations Staff Post-Workshop Comments at 18-22 (Appendix 1471-1475).

⁴⁵⁷ 12/04/17 AARP Initial Comments at 2 (Appendix 9).

⁴⁵⁸ *Id.* at 3.

⁴⁵⁹ 02/16/18 VEA Post-Workshop Comments at 9 (Appendix 1244).

⁴⁶⁰ 01/18/18 PUCN Workshop Proceedings Transcript at 496-497 (Appendix 2040-2041).

⁴⁶¹ *Id.* at 507-510.

individual municipalities at least until a new qualified provider can step in its shoes.⁴⁶² However, the Office of the Attorney General, Bureau of Consumer Protection (BCP), believes it remains an open question whether NV Energy can be compelled to perform the default provider or POLR function against its will.⁴⁶³

AARP supports NV Energy (and other Nevada public utilities) providing default service as a customer protection measure.⁴⁶⁴ Although this scenario allows customers to continue with their existing utility, rather than being forced to select a competitive supplier during an arbitrary-set transition period, deregulated states that have relied on incumbent utilities to provide default service saw low customer migration rates.⁴⁶⁵

Analysis and Findings

Nevada may be unable to replicate the Texas approach to incentivize customer migration through the “price to beat” or a similar discriminatory-price mechanism. The proposed constitutional amendment requires that the Nevada State Legislature establish protections “that entitle customers to ... competitively priced electricity, including, but not limited to, provisions that reduce costs to customers ...” A legislative provision or a PUCN order that administratively establishes an above-market electric rate charged to customers in a competitive environment would likely violate the constitutional mandates of “competitively priced electricity” and “provisions that reduce costs to customers.” Therefore, in light of NV Energy’s decision not to provide bundled retail service in the deregulated environment, the “price-to-beat” mechanism employed in Texas would not be possible in Nevada.⁴⁶⁶

Without a mechanism to encourage customer migration to competitive suppliers of their choice, Nevada risks having a large portion of its electric customers remain with default providers. If this outcome occurs, it would severely undermine the stated purpose behind the proposed constitutional amendment. Neither proponent of the Texas transition model (RESA or Calpine) offers a non-price-based solution to encourage customer migration to competitive suppliers.

Alternatively, if NV Energy elects to remain an electricity supplier, Nevada can implement a much longer transition period by requiring NV Energy to provide standard-offer electric service at a regulated capped rate for a number of years before terminating the program. This approach would give customers an adequate adjustment period and, at the same time, force them to eventually migrate to a competitive supplier. However, as previously discussed in this Report, *supra* at 31, this approach may conflict with the proposed constitutional mandate set forth in the Energy Choice Initiative to establish an open and competitive market: a truly ‘open and competitive market’ is philosophically incompatible with governmentally-imposed rates.

⁴⁶² 12/07/17 City of Las Vegas Initial Comments at 4 (Appendix 45).

⁴⁶³ 02/16/18 BCP Post-Workshop Comments at 3 (Appendix 1445).

⁴⁶⁴ 12/04/17 AARP Initial Comments at 1. AARP notes that all deregulated states, except Texas, have the option of an incumbent utility providing default service. AARP further states, “because this option is in many cases lower than the alternative supplier offer, it begs the question as to why we are [deregulating the electricity market].” (Appendix 7).

⁴⁶⁵ 12/08/17 NV Energy Initial Comments TA-6 at 5 (Appendix 651).

⁴⁶⁶ 01/18/18 PUCN Workshop Proceeding Transcript at 495-497 (Appendix 2039-2041).

Provider of Last Resort (POLR)

An electric provider of last resort (or POLR) is an entity that provides electric service to customers who, for one reason or another, are unable to receive electric service from a competitive supplier. A POLR acts as a safety net that guarantees every consumer access to electric service. In a competitive market, a POLR can step in when a customer cannot obtain service from a competitive supplier, *e.g.*, due to a customer's bad credit or when a competitive supplier exits the market without assigning its customers to another supplier.

The most common method of providing POLR service is through a distribution utility under a special rate schedule approved by a state's public utilities commission. Within that method, various frameworks exist that differ in the level of state involvement in the power procurement process and whether power is procured through an RFP or an auction. It is relevant to examine the different approaches by various states.

On the one end of the spectrum, the Illinois Power Agency (IPA) procures energy for residential and small commercial customers of the state's utilities for subsequent retail sale by the utilities.⁴⁶⁷ Similarly, the Maine Public Utilities Commission (MPUC) issues distribution utility-specific RFPs to solicit competitive bids to supply all or a portion of one or more of the three customer classes of the distribution utility. While competitive suppliers provide energy, the MPUC sets the POLR rates, based on the suppliers' winning bids, and the distribution utility handles the billing and collection.

On the other end of the spectrum (and similar to other deregulated jurisdictions), New Jersey has adopted a more *laissez faire* approach to energy procurement and merely supervises energy procurement by the distribution utilities operating in the state. The state's four distribution utilities procure electricity via an annual statewide auction. The auction invites potential suppliers to bid on the number of blocks they are willing to provide at a specified price. The auction is broken into two concurrent procurement segments--one for residential and smaller commercial customers and one for larger commercial and industrial customers. New Jersey's Board of Public Utilities reviews and approves the utilities' procurement. Suppliers are responsible for fulfilling all the requirements of a PJM load-serving entity to deliver to their scheduled load and assume any customer migration risk.

Uniformly, the utilities have relied on market procurement to obtain part or all supply for POLR, and default, service customers. In that respect, New England's Eversource is somewhat of an anomaly. Eversource, previously operated in New Hampshire as the Public Service Company of New Hampshire, provides POLR service in New Hampshire by traditional cost-of-service regulation and serves 70 percent of customers in the state. Eversource uses its own generating facilities along with supplemental market purchases to provide POLR service and receives cost-based compensation through a default service rate administratively set in the course of an annual rate case before the New Hampshire Public Utilities Commission.⁴⁶⁸

Texas's model is an outlier and does not involve distribution utilities in the POLR service. The POLR rule in Texas requires that the Public Utilities Commission of Texas establish POLR supply and rates through a competitive process that solicits bids from competitive suppliers. The initial competitive process yielded mixed results and forced the commission to adopt an alternative approach—appoint a competitive supplier

⁴⁶⁷ 12/08/17 PUCN Regulatory Operations Staff Initial Comments at Attachment 4 (Appendix 903) and 12/08/17 NV Energy Initial Comments at 8 (Appendix 487).

⁴⁶⁸ 12/08/17 PUCN Regulatory Operations Staff Initial Comments at Attachment 4 (Appendix 903) and 12/08/17 NV Energy Initial Comments TA-6 at 13 (Appendix 659).

servicing a customer class in an area to serve as the POLR for that customer class in that area.⁴⁶⁹ The commission has negotiated POLR rates and terms of service with the appointed POLR providers. Texas designed its POLR service to be relatively high-priced due to the costs associated with planning and the risk of servicing an uncertain number of customers with uncertain electricity loads. Texas intended the POLR service to be temporary and used only under rare circumstances—when a competitive supplier exits the market and is unable to provide service or when a customer requests POLR service.⁴⁷⁰ If a competitive supplier ranks among the top 15 sellers of energy in Texas, it automatically is designated as a POLR.⁴⁷¹

Summary of Participant Comments

Retail Electric Supply Association (RESA) proposes a POLR mechanism for Nevada similar to the Texas model. Under RESA’s proposal, the PUCN is to establish a customer assignment processes that, in the event of an exit by a competitive supplier, enables a different competitive supplier to continue to serve the customers under the existing contracts of the exiting competitive supplier. The POLR is to offer a transitional supply product—the customers must be free to elect a different competitive product without penalty. RESA proposes that the POLR rates not be attractively priced—the POLR would serve the customers on a month-to-month basis, charging an indexed price plus a modest premium that is linked to current wholesale prices. In addition to incentivizing the customer to move, the premium would cover the cost to administer what might be a considerable number of customers unexpectedly and the effect of out-of-cycle energy purchases trading at a higher cost. RESA contends that the premium will incentivize competitive suppliers to participate as a POLR.⁴⁷²

RESA’s proposal may prove to be unconstitutional because setting higher POLR rates potentially conflicts with the proposed constitutional mandate to enact provisions that ensure “competitively priced electricity” and “reduce costs to customers.”⁴⁷³ Without the ability to charge the POLR premium, Nevada may face even a greater obstacle than Texas in attracting competitive suppliers to perform the POLR function (Texas had the flexibility to set above-market rates for POLR service). One solution may be to condition licensing of every competitive supplier on a guarantee that it will perform the POLR function should the PUCN appoint it for such a role.

Similarly to Texas, the PUCN would then designate a competitive supplier as a POLR in the area and for the customer class that the competitive supplier already serves. If multiple competitive suppliers serve an area and a customer class within the area, the PUCN can designate more than one competitive supplier as a POLR and assign customers needing POLR service to such competitive suppliers on a rotating basis. Alternatively, the PUCN can designate competitive suppliers as POLRs for a limited period of time to spread the burdens of providing POLR service among a number of competitive suppliers. For instance, Texas limits involuntary POLR service to two-year terms.⁴⁷⁴

⁴⁶⁹ 12/08/17 NV Energy Initial Comments TA-6 at 14 (Appendix 660).

⁴⁷⁰ *Id.* at 15.

⁴⁷¹ 01/18/18 PUCN Workshop Proceeding Transcript at 433-434 (Appendix 1977-1978).

⁴⁷² 12/08/17 RESA Initial Comments at 58-59 (Appendix 228-229).

⁴⁷³ 01/18/18 PUCN Workshop Proceeding Transcript at 454-458 (Appendix 1998-2000).

⁴⁷⁴ *See* 16 Texas Administrative Code, Sec. 25.43(g)(2).

PUCN Regulatory Operations Staff points out that, as an option, Nevada can create a POLR tariff that would be offered by all competitive suppliers licensed in the state. A POLR tariff would be the worst deal a competitive supplier can offer.⁴⁷⁵ Residential and small commercial customers may be subject to POLR rates that are different than the rates charged large commercial and industrial customers.⁴⁷⁶

Similar to RESA's proposal to establish a POLR premium, adoption of PUCN Regulatory Operations Staff's POLR proposal may face a constitutional challenge because establishing an unattractive POLR rate conflicts with the proposed constitutional mandates to enact provisions that reduce costs and ensure competitively-priced electricity. However, unlike RESA's market price premium proposal, PUCN Regulatory Operation Staff's proposal does not necessarily contemplate a higher price for POLR service. POLR service can be limited to just basic electric service offerings without any value-added options.

For instance, in Texas, POLR service is limited to basic firm service, call center facilities available for customer inquiries, and access to low-income benefits.⁴⁷⁷ Basic firm service is defined as electric service not subject to interruption for economic reasons that does not include value-added options offered in the competitive market. Basic firm service excludes, among other competitively offered options, emergency or back-up service, and stand-by service.⁴⁷⁸

NV Energy believes that POLR models adopted in Illinois, Texas, and Maine could be the right fit for Nevada.⁴⁷⁹ In each of the three models, the distribution utilities are not involved in the power procurement process. In Illinois and Maine, state agencies procure energy on the open market for distribution through the states' utilities. Both the Illinois and Maine models have no apparent conflicts with the proposed constitutional amendment.

NV Energy states that no other state has deregulated its electric system through a constitutional amendment that mandates lower costs to customers. NV Energy states that, in fact, the proponents stated that the constitutional amendment does not guarantee reduced prices,⁴⁸⁰ and that "competitive" does not mean lowest cost but "priced by competitive forces."⁴⁸¹ NV Energy states that while a provider of last resort may have some control over the rates they charge (but for the most part would be dependent on wholesale market forces), they cannot control the amount of energy consumed.⁴⁸² NV Energy state that without a regulated utility, Nevada would have to determine how to establish or select an entity to provide this service without creating a monopoly or exclusive franchise for generation.

⁴⁷⁵ 01/18/18 PUCN Workshop Proceeding Transcript at 404-405 (Appendix 1948-1949).

⁴⁷⁶ 12/08/17 PUCN Regulatory Operations Staff Initial Comments at 27 (Appendix 804).

⁴⁷⁷ See 16 Texas Administrative Code, Sec. 25.43(d)(4).

⁴⁷⁸ *Id.* at Sec. 25.43(c)(2).

⁴⁷⁹ 12/08/17 NV Energy Initial Comments TA-6 at 15-16 (Appendix 661-662).

⁴⁸⁰ 01/16/18 PUCN Workshop Proceeding Transcript at 82 (Appendix 1604).

⁴⁸¹ 01/24/18 PUCN Workshop Proceeding Transcript at 733 (Appendix 2295).

⁴⁸² 02/16/18 NV Energy Post-Workshop Comments at 11-12 (Appendix 1422-1423).

Moreover, it is unclear what entity could establish a sustainable and reliable business model to provide this service, considering the unpredictable load service obligations, and the possibility that energy sales would remain a pass-through to consumers, *i.e.*, providing no means for profit.⁴⁸³

Valley Electric Association (VEA) is currently the only entity that has expressed an interest in serving as a POLR in Nevada. VEA intends to provide statewide electric services, including POLR services, through its for-profit affiliate—Valley Electric Energy Services, LLC.⁴⁸⁴ VEA contends that the POLR for NV Energy's service territory should be determined via a competitive process. VEA envisions a scenario where multiple POLRs serve different geographical areas and customer classes.⁴⁸⁵

Analysis and Findings

To effectuate a POLR model similar to those adopted in Illinois and Maine, Nevada would need to either (1) task the PUCN with procuring energy or soliciting bids from competitive suppliers for POLR service; or (2) establish a separate entity specifically dedicated to energy procurement on the open market. The energy the state entity or the PUCN procures would then serve the POLR load through the distribution utility, *i.e.*, NV Energy. Similar to the practices employed in Illinois and Maine, the distribution utility would then bill POLR customers.⁴⁸⁶

Alternatively, Nevada could adopt the Texas model and designate competitive suppliers as POLRs with the caveat that, unlike in Texas, these competitive suppliers would not be permitted to charge customers above-market rates for their POLR service. VEA's proposal mirrors Texas's original approach to POLR service. However, this approach failed due to limited interest from qualified competitive suppliers, and Texas resorted to appointing POLRs. It would be unreasonable for Nevada to expect high interest from qualified competitive suppliers to provide POLR service on account of the proposed constitutional amendment's language that likely prohibits above-market electricity pricing, which is a tool that was available in Texas.

VEA states that the governing bodies of current rural cooperatives and public utilities in Nevada should determine who can serve as a POLR and the rates and terms for POLR service.⁴⁸⁷ Yet, this proposal raises a concern that a market participant, *i.e.*, a rural cooperative, will also be the market regulator setting market participation rules. This suggestion does not appear workable due to this conflict.

Key Finding: VEA is the only entity that has offered to become the POLR for Nevada residents and serve current NV Energy customers, if the Energy Choice Initiative is approved. This is a real problem, as VEA does not currently have the resources to be the POLR for the entire state.

Consistent with PUCN Regulatory Operation Staff's proposal (and Texas's experience), Nevada may be able to limit POLR service to basic electric service offerings without any above-market price premiums and still be consistent with the constitutional provisions of the Energy Choice Initiative. Yet, this remains uncertain because the Energy Choice Initiative establishes a new 'right to sell' electricity in an 'open and

⁴⁸³ *Id.* at 12.

⁴⁸⁴ 12/08/17 VEA Initial Comments at 9-10 (Appendix 88-89) and 01/03/18 VEA Reply Comments at 4 (Appendix 2903) and 02/15/18 VEA Post-Workshop Comments at 3, 7 (Appendix 1238, 1242).

⁴⁸⁵ 02/16/18 VEA Post-Workshop Comments at 7 (Appendix 1242).

⁴⁸⁶ *Id.* at 13 and 01/18/18 PUCN Workshop Proceeding Transcript at 510-513 (Appendix 2054).

⁴⁸⁷ 02/16/18 VEA Post-Workshop Comments at 3, 8 (Appendix 1238, 1243).

competitive' market. Low-income and rural Nevadans in hard-to-serve geographic areas or with limited credit/ financial resources will likely be more negatively affected than other customers because they will be less profitable to serve and will need a POLR the most.

Likely Consequences of Unbundling Retail Rates

Currently, NV Energy recovers the costs of providing electric service through a single volumetric Electric Consumption rate and a flat monthly Basic Service Charge.⁴⁸⁸ The Basic Service Charge is a flat monthly fee that reimburses the utility specifically for customer-related expenses, *i.e.*, the cost of providing customer service, and the utility's investment in the meter equipment and other distribution infrastructure not recovered through the Electric Consumption Rate.

Unlike the costs recovered through the Electric Consumption Rate, expenses recovered through the Basic Service Charge do not vary with electricity usage (this is also referred to as a Volumetric Charge). The Electric Consumption Rate recovers the following: (1) the costs of NV Energy's infrastructure investment, including power plants and transmission/distribution wires and substations; (2) the costs of NV Energy's fuel purchases to run its fossil-fuel-based power plants; (3) the costs of NV Energy's power purchases from independent market participants; and (4) NV Energy's capital costs, including interest expense on debt and return on equity to its shareholders. As previously discussed in this Report, *supra* at 29, NV Energy recovers the costs of production/acquisition and delivery/distribution of power through a bundled retail rate.

In a deregulated environment, where the electricity-commodity supplier function is separated from the distribution/ delivery function, a single bundled rate does not exist. Instead, distribution costs are recovered through an electric delivery charge, and costs of electricity used by a customer are recovered through an electric supply charge.⁴⁸⁹ The competitive retail energy market envisioned in the proposed constitutional amendment requires unbundling of Nevada's volumetric retail rates. Under the proposed amendment language, the incumbent distribution utilities will continue to maintain and build the wire infrastructure necessary to deliver electricity to end-users while competitive suppliers will procure electricity by producing it themselves or through open market purchases for sale to end-users. Accordingly, Nevada end-users will pay their distribution utilities for the electricity delivered and will pay their competitive suppliers for the energy consumed. Being a non-competitive service, distribution of electricity will continue to be cost-based and rate-regulated.⁴⁹⁰ The competitive market, however, will determine the price for the commodity of electricity.

Net Energy Metering (NEM)

As previously discussed in this Report, *supra* at 33, Nevada's current Net Energy Metering (NEM) paradigm is based on excess energy valued at the applicable bundled retail rate. A NEM customer taking service from NV Energy under Schedule NMR-G (a so-called grandfathered customer) receives credit equal to the applicable full Electric Consumption Rate for each kilowatt-hour of electricity sent to the grid.⁴⁹¹

⁴⁸⁸ A sample NV Energy bill with charge descriptions can be found at <https://www.nvenergy.com/>

⁴⁸⁹ A sample Pennsylvania bill with charge descriptions can be found at <https://www.peco.com/>.

⁴⁹⁰ See, *e.g.*, RESA's 01/03/18 RESA Reply Comments at 15 (Appendix 2867) and 12/08/17 NV Energy's Initial Comments at 23 (Appendix 502).

⁴⁹¹ See PUCN Docket Nos. 16-07028 and 16-07029.

A NEM customer taking service under Schedule NMR-405 receives a credit equal to the applicable full Electric Consumption rate for each kilowatt-hour sent to the grid up to the number of kilowatt-hours received from NV Energy during the billing cycle.⁴⁹² For any kilowatt hour sent to the grid in excess of the number of kilowatt-hours received from the utility during the billing cycle, a NEM customer receives credit equal to a predetermined percentage of the applicable Electric Consumption Rate, which is currently 95 percent.⁴⁹³

Due to the sizing limitations on NEM systems prescribed by NRS 704.771(2) (a NEM system cannot have a generating capacity that exceeds 100 percent of the NEM customer's annual requirements for electricity), a properly-sized NEM system rarely produces significant amounts of net excess generation. Therefore, Nevada NEM customers on either NMR-G or NMR-405 Schedules generally receive a credit equal to the full bundled retail rate for every kilowatt-hour sent back to the grid.

Nevada currently has almost 25,000 NEM customers with close to 250 megawatts of installed NEM capacity.⁴⁹⁴ Both the number of NEM customers and installed NEM capacity have been actively growing since the PUCN implemented Assembly Bill 405 in Docket No. 17-07026 in September of 2017. With most states having deregulated in the late 1990s/early 2000s, and the burgeoning growth of NEM being a more recent development, if the Energy Choice Initiative is approved, Nevada may be the first state to deregulate with a significant existing population of NEM customers.

Section 28.7 of Assembly Bill 405 imposes a mandate on future competitive suppliers to provide retail price-based compensation to NEM customers for energy they send to the grid. Additionally, this Section requires competitive suppliers to treat NEM customers identically to the full-requirement customers in the corresponding rate class. In a deregulated environment, a competitive supplier operating in Nevada would have to compensate its NEM customers for their energy production at essentially the retail price the competitive supplier charges for electricity supply. This will likely be a money-losing proposition.

With regard to the NEM customers currently taking service under Schedule NMR-G (grandfathered NEM customers), NV Energy's obligation to provide retail price-based excess energy compensation in a deregulated environment is even more tenuous. The only legal basis underlying Schedule NMR-G excess energy compensation exists within the PUCN's Order in Docket Nos. 16-07028 and 16-07029. The Order obligated NV Energy, as a vertically-integrated utility with exclusive service territories, to provide excess energy compensation equal to NV Energy's bundled retail rate. Once the Nevada electric market is deregulated and electric rates unbundled, NV Energy cannot possibly abide by the terms of the Order.

It remains unclear whether competitive suppliers will be interested in serving 25,000-plus Nevada NEM customers. Looking to other states, Texas, which has often been portrayed as a model for deregulation for Nevada, does not have a statewide NEM program and, with a population of nearly ten times that of Nevada, has only 19,000 NEM customers.⁴⁹⁵ New Jersey, which also has been offered as an example of NEM implementation in a deregulated market, has full retail NEM compensation and requires all energy providers in the state to offer NEM. However, New Jersey's NEM program has a soft cap of 2.9 percent, while Nevada has uncapped retail-rate NEM.⁴⁹⁶ Connecticut appears to be the only deregulated state with uncapped NEM

⁴⁹² See PUCN Docket No. 17-07026.

⁴⁹³ Assembly Bill 405, Sec. 28.3.

⁴⁹⁴ 12/08/17 NV Energy Initial Comments at 40 (Appendix 519).

⁴⁹⁵ 01/18/18 PUCN Workshop Proceeding Transcript at 396-397 (Appendix 1940-1941) and 12/08/17 NV Energy Initial Comments TA-8 at 11 (Appendix 679).

and could serve as a model for Nevada's transition. However, NEM in Connecticut is in a state of flux. The Connecticut Department of Energy and Environmental Protection recently issued a Comprehensive Energy Strategy where it found that "[a] more cost-contained, sustainable model that still promotes growth in distributed generation is urgently needed."⁴⁹⁷

Additionally, Connecticut did not deregulate through an amendment to its state constitution such as the Energy Choice Initiative proposes, and its state legislature retained tools to remedy NEM concerns that may no longer be available in Nevada.

Key Finding: In a deregulated market, NV Energy will no longer be responsible for energy supply and, accordingly, will not be under a legal mandate to provide NEM options. Section 28.3 of Assembly Bill 405 sets excess energy compensation with a reference to kilowatt-hours of excess electricity governed by NRS 704.775(2)(c). Given that NV Energy will no longer be performing the electricity supply function in a deregulated environment, no clear legal basis will exist mandating that NV Energy provide retail distribution rate compensation to NEM customers. Moreover, and as previously discussed in this Report, *supra* at 33, it remains unclear, and appears unlikely, that the Nevada State Legislature could compel new electric service providers to pay rates of compensation to rooftop solar customers in an open and competitive market pursuant to the constitutional mandates of the Energy Choice Initiative. Assembly Bill 405/NEM is unlikely to survive in its current form.

Alleged Interclass Subsidy

As previously discussed in this Report, *supra* at 29, unbundling retail rates, which is a prerequisite to the establishment of an open and competitive market, will result in the elimination of an alleged interclass subsidy. There is evidence demonstrating that single-family residential customers in Southern Nevada benefit from an interclass subsidy of approximately 54 million dollars per year. Elimination of this alleged subsidy alone will likely cause electricity prices for single-family residential consumers to increase. While the very existence of the interclass subsidy is still being debated, multiple parties submitted evidence during the PUCN's latest Nevada Power Company general rate case in Docket Nos. 17-06003 and 17-06004 attempting to demonstrate the existence of the subsidy and/or argued for elimination or reduction of the subsidy as it applies to them. These parties included Walmart, Wynn Resorts, Southern Nevada Gaming Group, and Smart Energy Alliance (SEA).⁴⁹⁸

NV Energy's January 23, 2018, compliance filing suggests that a 53.9 million dollar interclass subsidy benefiting single-family residential customers exists. According to NV Energy's filing, multi-family residential customers, as well as commercial and industrial customers, including large distribution-only (DOS) customers, *i.e.*, NRS Chapter 704B entities, are funding the subsidy.⁴⁹⁹ Assuming a subsidy exists, large commercial customers will be under no obligation to subsidize other customers' cost of service.

⁴⁹⁶ See Senate Bill 2420 (New Jersey 2015).

⁴⁹⁷ *Comprehensive Energy Strategy*, Connecticut Department of Energy and Environment, 35 (February 8, 2018) (Appendix 4013-4085).

⁴⁹⁸ See PUCN December 29, 2017, Order in Docket Nos. 17-06003 and 17-06004 at paragraphs 597-612.

⁴⁹⁹ See NV Energy Attachment B, Statement O Excerpts at 1 of 24 in PUCN Docket Nos. 17-06003 and 17-06004.

Key Finding: Single-family residential customers will be hit by the elimination of this alleged interclass subsidy the hardest, and it will likely cause their monthly bills to increase, while reducing, *i.e.*, benefiting, the bills of multi-family residential, commercial, and industrial customers.

Need for Resource Adequacy Planning

Resource adequacy is currently achieved through rigorous resource planning over a 20-year planning horizon. Nevada's utilities file comprehensive resource plans that forecast loads, assess demand reduction measures and determine the resources needed to meet loads and the transmission required to deliver those resources. The costs of various alternatives are thereafter compared by the PUCN, whereby available resources are matched with Nevada's projected electricity needs and public policy goals.

Summary of Participant Comments

Nevada was one of the first states to adopt integrated resource planning. The statutory framework established in the 1980s requires that NV Energy file and seek PUCN approval of a load forecast and the resources required to meet the forecasted load. The integrated resource planning process is a means to accomplish resource adequacy. It remains unclear how resource adequacy for Nevada will be met in a deregulated market.

NV Energy states that divestiture of its generation assets will cause it to cease performing these functions. Load-serving entities will be responsible for their own optimizations based on their individual mix of longer-term and shorter-term contracts and owned resources.⁵⁰⁰ NV Energy currently provides balancing for loads and resources and ancillary services for all customers in Nevada. NV Energy achieves resource adequacy through an integrated resource plan that integrates the transmission plan with the supply plan.⁵⁰¹

Nevada will need a different resource adequacy program in order to incent new-build for generation to meet supply needs and economic growth. Resource adequacy programs are FERC-jurisdictional once they are part of a wholesale market.⁵⁰² NV Energy states that if Nevada joins an ISO, the PUCN's current role in overseeing the Integrated Resource Planning process would likely diminish, as certain elements of resource adequacy would be determined by the federal government (FERC) as part of its expanded influence in the Nevada marketplace. How much control would be ceded would depend on the structure of the wholesale market. Nevada would be subject to a single transmission planning authority and FERC-approved cost allocation methodologies.⁵⁰³ Whether Nevada is in an ISO or not, RPS requirements that provide an in-state preference would be subject to a challenge under the Dormant Commerce Clause.⁵⁰⁴

PUCN Regulatory Operations Staff states that NV Energy implements a resource adequacy standard unique to Nevada and transitioning away from the current model raises concerns because it is such a complicated issue. If Nevada were to look to a new Western RTO, it would likely be the only participating state without

⁵⁰⁰ 12/08/17 NV Energy Initial Comments at 30 (Appendix 509).

⁵⁰¹ 01/17/18 PUCN Transcript Workshop Proceeding at 211-212 (Appendix 1745-1746).

⁵⁰² *Id.* at 262.

⁵⁰³ 02/20/18 NV Energy Post-Workshop Comments at 5-7 (Appendix 1416-1418).

⁵⁰⁴ *Id.* at 6.

vertically integrated public utilities (because Nevada would be without NV Energy), which would pose similar resource planning issues as those faced with CAISO and SPP.⁵⁰⁵

California Independent System Operator (CAISO) notes the vast majority of Nevada's electric resource planning activities are conducted through triennial resource plans. This process mandates that the utilities show the capacity of existing and planned resources designed to reliably operate the system. If ECI is approved, Nevada will need to address what economic signals or regulatory requirements should be put in place to ensure short-term and long-term electric reliability. Currently, utilities are required to provide load forecasts in their resource plans. CAISO states that the load forecast provides the fundamental building block in the state's resource planning process by establishing both long and short-term system needs. The CAISO notes that if retail choice is implemented, Nevada will have to consider who will prepare its load forecast and how it will be used in any resource planning process. CAISO explains that in California, the California Energy Commission prepares a ten-year load forecast for the state, which the California Public Utilities Commission (CPUC), in turn, uses for resource planning and procurement purposes. CAISO states it uses the forecast for transmission planning.⁵⁰⁶

California's resource adequacy framework is largely overseen by the CPUC. The CPUC has jurisdiction over load-serving entities. Resource adequacy rules require load-serving entities to procure resources to meet the needs of the system at the system level as well as in the local areas on a year-ahead basis. CAISO has complementary rules in its tariff about how these requirements are determined.⁵⁰⁷

If Nevada joined CAISO, CAISO would allow state agencies, such as the PUCN, to oversee individual load-serving entity forecasting, retain established processes and provide input into load forecast development and the coincident factor methodologies their jurisdictional load-serving entities utilize. Framework proposals would incorporate feedback from Nevada stakeholders to ensure that Nevada is treated fairly.⁵⁰⁸ Once a framework is agreed upon, an application to amend the CAISO tariff would be filed with FERC.⁵⁰⁹

Calpine Corporation states that the adequacy of resources to meet loads upon demand, including reserves for grid stability and demand-supply balances under emergency conditions, are important aspects of RTO operations. Calpine states that the CAISO has resource adequacy rules, but the PUCN should determine whether these rules should be amended to accommodate market conditions or the grid configurations unique to Nevada. Calpine suggests that this can be done in an upcoming resource planning docket, whether initiated by a utility or by the PUCN in a rulemaking.⁵¹⁰ Calpine notes that CAISO relies heavily on the CPUC to ensure all load-serving entities have procured and can deliver to CAISO sufficient resources and reserves to meet their load obligations. Calpine also states that a load-serving entity that fails to make periodic demonstrations that it is "resource-adequate" is subject to fines and other penalties.⁵¹¹

⁵⁰⁵ 01/03/18 PUCN Regulatory Operation Staff Reply Comments at 6 (Appendix 2913).

⁵⁰⁶ 12/08/17 CAISO Initial Comments at 21 (Appendix 464).

⁵⁰⁷ 01/17/18 PUCN Workshop Proceeding Transcript at 277-278 (Appendix 1811-1812).

⁵⁰⁸ 02/16/18 CAISO Post-Workshop Comments at 8-9 (Appendix 1337-1338).

⁵⁰⁹ *Id.* at 10 (Appendix 1339).

⁵¹⁰ 12/07/17 Calpine Initial Comments at 11 (Appendix 60).

⁵¹¹ *Id.*

Calpine states that proceedings to address resource adequacy should be coordinated with the RTO, which will have its own obligations to meet FERC resource-adequacy and planning requirements.

It is of vital importance that Nevada adopt a resource-adequacy structure that provides market price signals on a forward basis and far enough into the future that it will incentivize generation investment to occur at the right times and be located in the right places so that it provides Nevada the level of electrical reliability it has come to expect.⁵¹²

Calpine states that the PUCN should be confident that that the State will have the ongoing jurisdiction to design and supervise a resource-adequacy regime tailored to meet state policies addressing system reliability, environmental quality and renewable-energy standards. Calpine states that whatever path Nevada takes in determining how its wholesale market is organized or structured, it will have ongoing jurisdiction to design and supervise a resource adequacy program.⁵¹³

International Brotherhood of Electrical Workers (IBEW) states that in a deregulated market there is no means of maintaining a reserve margin or the flexible capacity necessary to meet unexpected rise in demand or drop in supply. This means that Nevada will have to establish a resource adequacy market to ensure there is enough power to meet peak demand or customers will suffer rolling blackouts.

In addition, Nevada will have to establish a flexible capacity requirement so that plants that are available can ramp up and down frequently to balance the ups and downs of solar and wind generation.⁵¹⁴

Interwest Energy Alliance states that a wholesale market should allow for and preserve individual state interests regarding resource planning, RPS and state and federal environmental policies. Additionally, Nevada can preserve its robust economic development activity through renewable energy development and strong competitive business practices. Interwest asserts that a market should recognize the contributions of all types of supply and demand resources when calculating resource adequacy and provide value for these contributions. Interwest recommends the PUCN take note of which markets are on the leading edge regarding integration of increasing penetration of variable energy resources.⁵¹⁵

Natural Resources Defense Council (NRDC) highlights the issue of long-term electricity contracting with renewable energy providers by retail competition. NRDC notes that retail providers will not have the confidence of vertically integrated utilities in the size of their future loads. Because they will have no idea how much load they will serve in the future, it will be risky for them to make long-term agreements.⁵¹⁶ NRDC describes the weaknesses in current capacity market designs which tend to suffer from a rigid, one-size-fits all set of criteria that undermines the ability of load-serving entities to procure diverse resource portfolios. NRDC states that Nevada can avoid the problems posed by the eastern capacity markets by managing resource adequacy through a state-regulated process.⁵¹⁷ This can be done by respecting FERC's

⁵¹² *Id.*

⁵¹³ 02/16/18 Calpine Post-Workshop Comments at 3 (Appendix 1373).

⁵¹⁴ 12/08/18 IBEW Initial Comments at 6-7 (Appendix 102-103).

⁵¹⁵ 12/08/17 Interwest Initial Comments at 5-6 (Appendix 112-113).

⁵¹⁶ 12/08/17 NRDC Initial Comments at 11 (Appendix 1167).

⁵¹⁷ *Id.* at 25.

jurisdiction over wholesale power sales for resale through the use of FERC-regulated bilateral contracts to procure any necessary capacity. The capacity products would be defined by the PUCN or another state agency. The risks of over- and under-procuring capacity would be borne by the individual retailers. NRDC states that it is important for Nevada to set the contours for a state-directed capacity process.⁵¹⁸

Smart Energy Alliance (SEA) contends that if Nevada creates wholesale and retail markets, it should consider having the PUCN set statewide resource adequacy goals based on its own targets and data, and that the current integrated resource planning (IRP) will be replaced by new planning processes, but the state's ultimate responsibility will not.⁵¹⁹

Solar Energy Industries Association (SEIA) states the most prevalent approach to RPS compliance in a competitive market is to require load-serving entities to procure renewables to meet the RPS. An alternative is to require load-serving entities to hold the RPS obligation but have incumbent utilities contract for the renewable energy. Another alternative is to have load-serving entities hold the obligation but to centralize the responsibility for procuring renewable energy with a state agency.⁵²⁰

Valley Electric Association (VEA) provides information about how resource adequacy is handled by the CAISO. VEA states that CAISO has the following seven basic elements: (1) a procedure for forecasting system conditions relating to demand, including the forecast of peak demand; (2) a specified reserve margin; (3) a requirement that capacity needed to meet the demand forecast and the reserve margin is not constrained by transmission limitations; (4) criteria for determining eligible resources and the amount of capacity able to satisfy the reserve margin; (5) a plan developed by load serving entities to identify how they have met their resource adequacy requirements; (6) rules under which the resources identified in the plans are available to CAISO to balance supply and demand; and (7) a compliance plan that ensures load serving entities comply with the resource adequacy program established by the local regulatory authority.⁵²¹

Vote Solar states it is essential that the distributed resource planning proceedings currently before the PUCN pursuant to Senate Bill 146 (Nevada 2017) continue unimpeded. Senate Bill 146 amends state law related to resource planning to establish requirements for distributed resource planning.⁵²²

Analysis and Findings

Key Finding: Resource adequacy planning must remain within the authority of Nevada, and the PUCN, regardless of which wholesale and retail markets are joined and/or created. Nevada should incorporate this authority into any new market structure created by the Energy Choice Initiative.

Establishment of Standard Industry Protocols

With rates unbundled and the distribution service function being separate from the energy supply function, questions arise as to who would do the billing, who would do the metering, and how these different types of players interact with each other.

⁵¹⁸ *Id.*

⁵¹⁹ 12/08/17 SEIA Initial Comments at 7 (Appendix 1117).

⁵²⁰ *Id.* at 4-5.

⁵²¹ 12/08/17 VEA Initial Comments at 7 (Appendix 86).

⁵²² 02/16/18 Vote Solar Reply Comments at 4 (Appendix 2885).

Retail Energy Supply Association (RESA) calls for common business protocols and standard communication protocols to facilitate communications between distribution utilities, such as NV Energy, and new competitive suppliers that may enter Nevada. RESA provides a list of the following transactions that can occur between utilities and competitive suppliers: customer enrollment, account maintenance, billing, payments, and sharing of customer usage information.⁵²³

RESA recommends creating a working group charged with developing technical standards associated with implementation of retail competition as soon as possible. RESA points to Pennsylvania, where the Electronic Data Exchange Working Group (EDEWG) designs common business processes and standard communication protocols to facilitate effective utility-supplier interactions. The Pennsylvania Public Utilities Commission coordinates the work group, which is co-chaired by representatives from both competitive suppliers and utilities. RESA state that Texas has a similar collaborative working group, which is coordinated through ERCOT.

RESA recommends that Nevada select a standard internet communications transfer protocol to facilitate efficient exchange of information across the deregulated industry. The Electronic Data Interchange (EDI) is one of the options.⁵²⁴ EDI is a computer-to-computer exchange of documents in standard, machine-readable formats between business partners. EDI is a tool of general applicability and was not designed specifically for the electric industry. The purpose behind EDI is to simply replace the old-fashioned paper-based method of exchange of business documents, *e.g.*, invoice generation and mailing to a client.⁵²⁵ RESA states that EDI has been adopted in Pennsylvania, New Jersey, Delaware, and Maryland, with adjustments for each jurisdiction. RESA further states that, currently, utilities and competitive suppliers in Pennsylvania use more than 20 different EDI standards. Billing, energy usage, enrollment, service drops requests, and service reinstatement transactions are the types of information exchanged through EDI.⁵²⁶ Similarly to Pennsylvania, the Ohio Public Utilities Commission established a working group, which develops EDI transaction standards and procedures for electric customer choice in Ohio.⁵²⁷ New Jersey, Pennsylvania, Maryland, and Delaware created a uniform set of EDI documents.⁵²⁸

Key Finding: Nevada should heed RESA's recommendation and, if the Energy Choice Initiative passes, establish a working group charged with developing and selecting technical protocols associated with an effective functioning of a competitive retail market, including reviewing the costs and benefits of EDI.

Information Exchange and Consumer Privacy

The ease of access to information by competitive suppliers is often in conflict with consumer privacy interests. Retail Energy Supply Association (RESA) advocates for easy and fast access to consumer information. RESA states that a competitive supplier must be given access to customer information, including prospective customer's meter data. RESA states that an independent third-party entity should

⁵²³ 12/08/17 RESA Initial Comments at 41 (Appendix 211).

⁵²⁴ *Id.* at 45-46.

⁵²⁵ See EDI Basics at <https://www.edibasics.com/>.

⁵²⁶ 12/08/17 RESA Initial Comments at 45 (Appendix 215).

⁵²⁷ See Ohio Public Utilities Commission at <https://www.puco.ohio.gov/>.

⁵²⁸ See New Jersey Board of Public Utilities at <http://www.state.nj.us/bpu/>.

provide access to such data on an automated basis and that “[p]roperly licensed and registered competitive suppliers requesting data should be assumed to have the proper authorization from the customer.” Delayed access to customer information, specifically, prospective customer’s meter data, may discourage competitive supplier from entering a newly-established retail market in Nevada.⁵²⁹

RESA’s recommendations for Nevada appear at odds with the practices in Texas (the state often portrayed by RESA as the model for deregulation).⁵³⁰ RESA has stated that competitive suppliers in Texas do not generally have access to customer information from the customer’s previous electricity supplier.⁵³¹ Indeed, Texas law forbids such disclosure without the customer’s approval.⁵³² It follows then that an unfettered access by a competitive supplier to a prospective customer’s data, including meter data, is not a necessary condition to creating a vibrant competitive market. Similar to the practice adopted in Texas, if a competitive supplier seeks to advertise to a prospective customer, the competitive supplier can request the customer usage data from the local distribution utility upon receipt of a written authorization from the customer.⁵³³

Key Finding: Nevada will need to strike a balance between customer privacy and business expediency. Undoubtedly, easy access through a centralized database to customer usage and payment history would facilitate the highest number of competitive offers from suppliers, but this economic interest would have to be weighed against customer privacy interest. Furthermore, as noted by a concerned Nevada resident, as the data is exchanged more frequently, the risk of unintended disclosure increases.⁵³⁴

Billing and Metering

Currently, NV Energy owns and reads the electric meters and provides a single bundled bill each month. If the Energy Choice Initiative passes, these functions may remain with NV Energy, may become the responsibility of the new electricity suppliers, or get outsourced to a third-party entity. This means that Nevada ratepayers may begin receiving a separate bill from each service provider or a consolidated bill that contains charges for both services. In the consolidated bill scenario, coordination between the two types of service providers, or a third-party, becomes crucial.

With respect to billing, near consensus has emerged that new electricity suppliers would perform consolidated billing and the distribution utilities would meter customer usage. Retail Energy Supply Association (RESA) and Drift both support Nevada adopting a supplier-consolidated billing approach.⁵³⁵ However, National Energy Marketers Association (NEMA) supports a single consolidated bill, regardless of whether it is a supplier consolidated bill or a utility consolidated bill.⁵³⁶

⁵²⁹ 12/08/17 RESA Initial Comments at 41-43 (Appendix 211-213).

⁵³⁰ See, e.g., 12/07/17 NEMA Initial Comments at 14 (NEMA reports that Texas's process for providing suppliers with access to data is the best in the industry) (Appendix 33).

⁵³¹ 01/18/18 PUCN Workshop Proceeding Transcript at 482-483 (Appendix 2026-2027)

⁵³² 16 Texas Administrative Code, Sec. 25.472(b).

⁵³³ *Id.*

⁵³⁴ 01/18/18 PUCN Workshop Proceeding Transcript at 478 (Appendix 2022).

⁵³⁵ 12/08/17 RESA Initial Comments at 48-51 (Appendix 218-221) and 01/03/18 Drift Reply Comments at 5 (Appendix 2841).

RESA contends that supplier consolidated billing allows competitive suppliers to build their brand, establish a relationship with their customers, create goodwill, and sell related products.⁵³⁷ RESA states that, as with all other consumer products and services, the billing relationship needs to be between the customer and the supplier of the product being selected in the competitive market. RESA argues that utility consolidated billing confuses customers because they have selected a competitive supplier, yet they continue to receive a bill from the utility for all charges.⁵³⁸

NV Energy states that customers will want to continue receiving a single bill and will prefer that bill to come from their new electricity supplier.⁵³⁹ NV Energy offered to collect and transmit customer usage to a centralized clearing house and send a bill for regulated utility services it provides to the new electricity providers. PUCN Regulatory Operations Staff notes that customer privacy would be better safeguarded if utilities, such as NV Energy, retained the billing function. This would maximize privacy protections and continuity, especially when a ratepayer decides to switch his or her provider.⁵⁴⁰

With respect to metering, NV Energy states that the 1990s deregulation concept of making metering a competitive service preceded the widespread installation of smart meters.⁵⁴¹ NV Energy contends that, in light of the deployment of Advanced Metering Infrastructure throughout NV Energy's service territories, NV Energy should continue to own, operate, and maintain the network and meters. NV Energy warns against moving customers from its single network to multiple provider networks as the cost per customer would increase with fewer customers per network. Integration of non-NV Energy meter assets into the existing network would greatly increase cyber-security risks. Many large customers are metered using special equipment that NV Energy will continue to own, which will present security and system integrity issues in the event of access by others.⁵⁴² Leaving metering within the utilities' sphere of responsibilities addresses customer privacy concerns and allows utilities to promptly respond to outages.⁵⁴³ Valley Electric Association (VEA) also states that it uses its metering equipment for outage management and supports continued ownership of metering equipment by the distribution utilities.⁵⁴⁴

Key Finding: Whether NV Energy or new electricity providers provide billing services to customers (or a combination of both) may best be resolved through an incremental approach, whereby NV Energy initially retains this service while the retail marketplace and new electricity providers and its participants stabilize in Nevada. No objections have been raised to the continued metering services provided by NV Energy, and other utilities.

⁵³⁶ 12/07/17 NEMA Initial Comments at 14 (Appendix 33).

⁵³⁷ 12/08/17 RESA Initial Comments at 48-51 (Appendix 218-221) and 01/18/18 PUCN Workshop Proceeding Transcript at 371-373 (Appendix 1915-1917).

⁵³⁸ 12/08/17 RESA Initial Comments at 48-50 (Appendix 218-220).

⁵³⁹ 12/08/17 NV Energy Initial Comments at 33 (Appendix 512).

⁵⁴⁰ 01/18/18 PUCN Workshop Proceeding Transcript at 373-374 (Appendix 1918-1919).

⁵⁴¹ *Id.* at 464.

⁵⁴² 12/08/17 NV Energy Initial Comments at 32 (Appendix 511).

⁵⁴³ 01/18/18 PUCN Workshop Proceeding Transcript at 465-466 (Appendix 2009-2010).

⁵⁴⁴ *Id.* at 474-75 and 02/15/18 VEA Post-Workshop Comments at 7 (Appendix 1242).

Licensing

In most jurisdictions, a business wanting to enter a competitive retail market must still be licensed. Invariably, a more stringent licensing regime will limit the number of market participants, but provide greater consumer protections; a more relaxed licensing regime may lead to a more robust marketplace, but may also allow more unscrupulous businesses in the door.

PUCN Regulatory Operations Staff states that licensure of competitive suppliers can ensure a safe and reliable provision of electric service, provide consumer protections without unduly burdening potential market participants, and ensure compliance with Nevada's energy policies.⁵⁴⁵ Nevada should impose ongoing reporting requirements and achievement assessments on competitive suppliers, as many deregulated states have done, and establish consequences for failure to maintain the standards. PUCN Regulatory Operations Staff recommends establishing a nimble regulatory mechanism to allow the quick enactment of new rules when necessary.⁵⁴⁶

Legislative Counsel Bureau File No. R171-99 contains competitive supplier licensing regulations from Nevada's previous attempt at deregulation in the 1990s.⁵⁴⁷ In line with the licensing principles articulated above, the regulations were meant to ensure the following: (1) the financial stability of a licensee through a demonstration of an adequate credit rating and the ability to deliver at least 250,000 dollar initial security deposit; (2) good moral character of key employees and corporate officers and owners; (3) a demonstrated ability to perform the services applied for, including through prior experience and through proof of possession of applicable certificates and licenses; and (4) a demonstrated ability to conduct business in Nevada through the delivery of a copy of the state business license and through the disclosure of the name and address of the registered agent in Nevada.⁵⁴⁸

Drift recommends requiring initial application fee in the \$100 to \$500 range. Drift asserts that this amount is in line with the application fees charged in other deregulated states. As an initial security, Drift recommends a performance bond between 1 and 5 million dollars. For managerial and technical requirements, Drift encourages the PUCN to implement requirements that do not unfairly benefit larger, more established companies. Drift also urges the PUCN to differentiate between the licensing requirements depending on the customer class an applicant intends to serve. For example, Drift notes that Pennsylvania requires applicants to identify what types of customers they intend to serve, even though it does not separate licensing requirements by customer class.⁵⁴⁹

Smart Energy Alliance (SEA) recommends enhanced licensing requirements for POLRs. SEA proposes that a competitive POLR must demonstrate the following: (1) an established record of providing retail energy services, *i.e.*, a minimum of five years, (2) a strong balance sheet and indicators of financial stability, and (3) the ability to serve additional and fluctuating load.⁵⁵⁰

⁵⁴⁵ 12/08/17 PUCN Regulatory Operations Staff Initial Comments at 30 (Appendix 807).

⁵⁴⁶ 01/19/18 PUCN Workshop Proceeding Transcript at 516-517 (Appendix 2060-2061).

⁵⁴⁷ 12/08/17 PUCN Regulatory Operations Staff Initial Comments at Attachment 5 (Appendix 906).

⁵⁴⁸ LCB File No. R171-99, Sec. 3, Sub-sections 4, 9, 11, 14, 16, 17, and 20 (Appendix 4078-4085).

⁵⁴⁹ 12/08/17 Drift Initial Comments at 5-6 (Appendix 125-126).

⁵⁵⁰ 12/08/17 SEA Initial Comments at 10 (Appendix 1045).

Key Finding: Proper licensing of competitive suppliers will lead to a dynamic retail market in Nevada. Responsible businesses generally embrace robust licensing requirements. Proper investigation and review of a potential new electric provider in Nevada will protect ratepayers and identify illegitimate businesses *before* problems arise. There appears little reason for Nevada to depart from the criteria set forth in Legislative Counsel Bureau File No. R171-99, which was considered in the 1990s, as a guidepost.

Combating Improper Retail Market Influence

Multiple new electricity providers participating in a robust retail market help to ensure that the market remains healthy. No single business should be able to exercise improper market influence. PUCN Regulatory Operations Staff proposes the following measures to prevent abuse of market power: (1) all competitive new electricity providers should be held to the same regulatory and licensing requirements; (2) Nevada must charge a state entity charged with detecting and addressing abuses of market power; (3) the PUCN should establish standards of conduct that identify activities that are inconsistent with a competitive electric retail market and establish penalties for such activities; and (4) the PUCN should examine whether to impose pro-competitive limitations on the ownership, operation, and control of assets.⁵⁵¹

Valley Electric Association (VEA) believes that rural cooperative boards should be permitted to certify new electricity providers operating in cooperatives' areas on account of the PUCN's limited oversight over cooperatives.⁵⁵² Yet, VEA itself is a market participant. Therefore, it would be a conflict of interest for VEA to regulate other market participants providing competitive services within its service territory.

Key Finding: PUCN Regulatory Operation Staff's proposals to curb improper retail market influence appear appropriate. New funding will be necessary for this new oversight. No funding source has been identified.

Consumer Protections

The participants are in agreement that a transition from a bundled service monopoly model to a competitive retail market requires a new set of consumer protection measures. The participants also agree that one of the best ways to safeguard customers and to implement a competitive market is through customer education.

Nevada law entrusts the Office of the Attorney General's Bureau of Consumer Protection (BCP) with the responsibility to advocate for the public interests before the PUCN.⁵⁵³ The Energy Choice Initiative presents, perhaps, the most important consumer protection issue of the century for Nevada. It is relevant to note the BCP has been unengaged and provided little-to-no guidance on what is best for Nevada ratepayers in these proceedings. When asked to help during the Workshop Proceedings, BCP responded that it did not have a "specific position,"⁵⁵⁴ and "[o]ur office hasn't gotten that far in discussing it,"⁵⁵⁵ and "it hasn't been discussed internally at this point."⁵⁵⁶ This is concerning, as the need for strong consumer advocacy and protections will certainly increase with the Energy Choice Initiative. A robust, independent, and fully-engaged

⁵⁵¹ 12/08/17 PUCN Regulatory Operations Staff Initial Comments at 30-31 (Appendix 807-808).

⁵⁵² 02/15/18 VEA Post-Workshop Comments at 7 (Appendix 1242).

⁵⁵³ See NRS 228.308 and NRS 228.360.

⁵⁵⁴ 01/18/18 PUNC Workshop Proceeding Transcript at 481 (Appendix 2025).

⁵⁵⁵ 01/17/18 PUNC Workshop Proceeding Transcript at 251 (Appendix 1785).

⁵⁵⁶ 01/23/18 PUNC Workshop Proceeding Transcript at 746 (Appendix 2308).

consumer advocate is necessary to protect the public interest and for adversarial proceedings before the PUCN to properly work.

National Energy Marketers Association (NEMA) and Drift state that Nevada should adopt a Consumer Bill of Rights proposed by them.⁵⁵⁷ Importantly, Nevada already has its own Consumer Bill of Rights appearing in NAC 704.302-.390, inclusive. Nevada's Consumer Bill of Rights contains provisions governing termination of service, refusal to provide service, return of deposits, a program for equalized billing for service, and a program for deferred payment of a delinquent bill among others. Separately, NRS Chapter 598 provides penalties for deceptive trade practices and even protections against aggressive door-to-door sales tactics. Both provisions will need to be updated to include new electricity providers.

PUCN Regulatory Operations Staff recognizes that, in a competitive retail market, the protections currently listed in Nevada's Consumer Bill of Rights are insufficient and need to be augmented. PUCN Regulatory Operations Staff recommends amendments to the Nevada Consumer Bill of Rights similar to the mandates placed in the Solar Bill of Rights set forth in Assembly Bill 405. PUCN Regulatory Operations Staff propose that all marketing materials distributed by competitive suppliers include such things as: (1) a website and a toll-free number to request additional information on offerings; (2) a clear statement that selecting a new electricity provider is not mandatory; (3) the supplier's active service territory; (4) a time period in which the introductory rate is applicable; (5) a cancellation grace period. Additionally, Staff proposes that a competitive supplier's agents must leave the premises when requested and leave or send electronically documentation of all information discussed with a potential customer.

PUCN Regulatory Operations Staff also recommends that telemarketing should include a third-party verification system, where a new electricity provider is not present and is not exerting pressure upon a prospective customer. With respect to variable rate contracts, PUCN Regulatory Operations Staff recommends protections that allow customers to set a price cap in which they are notified if the variable rate ever increases to that level.⁵⁵⁸

American Association of Retired Persons (AARP) states that its policy on retail choice is that states that have not introduced retail competition should refrain from doing so. AARP urges adoption of the following consumer protections: (1) provide a utility standard offer service or default service; (2) address unfair terms and conditions in service provision and marketing; (3) prohibit variable rate contracts; (4) prohibit subsidies or the bail out of generation facilities; (5) report regularly the experience of residential customers; and (6) provide 'apples-to-apples' price comparisons. AARP has seen many problems with customers in deregulated markets being offered low teaser rates, which quickly jump when the initial offer expires.⁵⁵⁹

Key Finding: Ensuring that Nevadans have the most engaged and robust consumer protection laws and regulations possible, as well as enforcement, will protect Nevadans. The Nevada State Legislature should amend and strengthen Nevada's existing Consumer Bill of Rights, and increase the consumer protection authority and financial resources for both the PUCN and the BCP. Particular deference should be given to the concerns of advocacy groups, such as AARP, who represent communities who are most vulnerable to predatory practices.

⁵⁵⁷ 12/07/17 NEMA Initial Comments at 12-13 (Appendix 31-32) and 01/03/18 Drift Reply Comments at 4 (Appendix 2840).

⁵⁵⁸ 12/08/17 PUCN Regulatory Operations Staff Initial Comments at 34-37 (Appendix 811-814).

⁵⁵⁹ 12/04/17 AARP Initial Comments at 1-2 (Appendix 7-8).

Customer Switching

A customer switching to a new electricity provider is an important aspect of both customer choice and consumer protection. It is fundamentally the act of exercising the “choice” in the Energy Choice Initiative.⁵⁶⁰

National Energy Marketing Association (NEMA) states that switching energy suppliers should be as easy as switching cell phone providers, which can be effectuated through a phone call.⁵⁶¹ Retail Energy Supply Association (RESA) advocates for an independent third-party entity that would facilitate retail switching, who would inform both the utility and the customer’s current competitive supplier of the pending switch.⁵⁶²

Key Finding: A clear process and regulations governing how a customer switches to a new electricity provider must be established and penalties for any business engaged in ‘slamming’ or other fraudulent practices must be swift and severe. No funding source has been identified to facilitate this activity by either a state government entity or a third party.

Education

As previously discussed in this Report, *supra* at 61-63, extensive and properly-funded customer education is going to be a critical component of any successful competitive market launch. National Energy Marketers Association (NEMA) states that consumer education is a critical component of a well-functioning retail market. Consumer education should be a joint effort by competitive suppliers, distribution utilities, and the PUCN. A robust consumer shopping website is an excellent education tool.⁵⁶³ Retail Energy Supply Association (RESA) states that customer education will help with the transition by informing customers how to seek out resources and locate providers. RESA also contends that consumer education should be funded through electric rates.⁵⁶⁴

Key Finding: Education is essential to successful implementation of the Energy Choice Initiative and must be properly funded. Again, the PUCN estimates that initial funding for consumer outreach and education may reasonably amount to 10 million dollars.

Community Choice Aggregation as a Choice

LEAN (Local Energy Aggregation Network) Energy U.S. encourages the PUCN to explore and consider the Community Choice Aggregation model as a successful approach to achieving consumer energy choice.⁵⁶⁵ Under the community choice aggregation model, a local entity, most frequently a municipality, amasses consumers residing within its jurisdiction and procures energy on the open market to serve the combined electric load.

⁵⁶⁰ “Slamming” is the illegal practice of switching a consumer’s electric provider without his or her consent, *see* <https://www.fcc.gov/>, and it is a concern in competitive retail markets.

⁵⁶¹ 12/07/17 NEMA Initial Comments at 13-14 (Appendix 32-33).

⁵⁶² 12/08/17 RESA Initial Comments at 42 (Appendix 212).

⁵⁶³ 12/7/17 NEMA Initial Comments at 11-12 (Appendix 30-31).

⁵⁶⁴ 01/23/18 PUCN Workshop Proceeding Transcript at 497-499 (Appendix 2041-2043).

⁵⁶⁵ 02/16/18 LEAN Post-Hearing Comments at 1 (Appendix 1291).

Plain language of the Energy Choice Initiative permits electric service provided by community choice aggregation. Specifically, the Energy Choice Initiative provides that every political subdivision of Nevada has the right to choose the provider of its electric utility service and that nothing “herein shall be construed as limiting such persons’ or entities’ rights to sell, trade or otherwise dispose of electricity.” However, dissolving the current regulatory model, which the Energy Choice Initiative does, to simply allow a Community Choice Aggregator to step in the place of NV Energy appears at odds with the purpose of the Energy Choice Initiative to provide an individual right to choose an electricity provider “from a competitive retail electric market.”

Key Finding: Community choice aggregation needs further exploration as a possible model, if the Energy Choice Initiative is approved. Several states have community choice aggregation policies.⁵⁶⁶

TIMELINE: A ROADMAP FORWARD

Almost all of the PUCN Workshop Proceeding participants proffered potential timelines for implementing the Energy Choice Initiative, and most agreed on the major steps that need to be taken.

The Energy Choice Initiative has a constitutionally-imposed deadline of July 1, 2023, for implementation. The fact that the Nevada State Legislature meets for 120 days every two years complicates the process. Given that the average time for a state to deregulate is 5.5 years,⁵⁶⁷ Nevada will start deregulation under a time crunch. It is therefore imperative that Nevada be prepared to ‘hit the ground running’ should the Energy Choice Initiative be approved in 2018. When Nevada previously attempted to deregulate in the 1990s, the process started in 1995 and seven years later was still incomplete.⁵⁶⁸ The Energy Choice Initiative expressly states that “any laws, regulations, regulatory orders or other provisions which conflict with this Act will be void” on July 1, 2023. Failure to launch in time—when the clock strikes midnight—could result in legal chaos.

If the Energy Choice Initiative passes, decision-making authority will rest with the Nevada State Legislature on how to move forward. The PUCN may only take regulatory action pursuant to legislative authorization and direction. These next steps are merely provided to offer guidance and facilitate dialogue.

Logical and reasonable next steps include the following. First, the Nevada State Legislature should outline its policies and priorities, consistent with the limitations of the Energy Choice Initiative, as a guidepost for further decisions for all state entities. Second, immediate (and simultaneous) actions should be taken regarding Nevada’s wholesale market decision. The Nevada State Legislature and/or the Governor need to designate a point of contact for Nevada for outreach to CAISO/California to initiate a serious conversation regarding changes to CAISO’s governance structure. Third, while this outreach is occurring, the Nevada State Legislature should also fund a study for wholesale market options and appropriate 250,000 dollars. The study should be commissioned by either the PUCN or the Nevada State Legislature, and the scope of the study should be set pursuant to analysis set forth in this Report, *supra* at 83. Fourth, a core working group should be established, consisting of members of the Nevada State Legislature, the PUCN, and other entities, such as the Governor’s Office of Energy, the Governor’s Office of Economic Development, the Governor’s Office of Finance, the BCP, NV Energy, and other appropriate stakeholders to oversee the deregulation process and to draft parameters of transitioning to a retail market.

⁵⁶⁶ See National Conference of State Legislatures, Community Choice Aggregation Policies at <http://www.ncsl.org/>.

⁵⁶⁷ See 02/16/18 PUCN Regulatory Operations Staff Post-Workshop Comments at Exhibit A (Appendix 1480).

⁵⁶⁸ See Timeline for Nevada deregulation from 1995 to 2001 (Appendix 4086).

This working group should include designated personnel for administrative support, be fully independent from any stakeholder that has a pecuniary interest in its outcome, and report to the Nevada State Legislature. This working group should also have the funds and authority to contract with and retain outside expert consultants to advise Nevada throughout the deregulation process. Fifth, independent outside counsel and/or a law firm should be retained to work with NV Energy to review stranded assets and long-term electricity contracts and report to the Nevada State Legislature and the PUCN by the beginning of the 2021 Legislative Session. Sixth, a bill draft request (BDR) should be introduced increasing the authorized mill assessment that the PUCN may levy pursuant to NRS 704.033 to immediately begin funding an education account and transition costs necessary for the Energy Choice Initiative. Finally, budgeting analysis and discussion must occur regarding the financial expenditures that will be necessary to implement the Energy Choice Initiative.

Every state that has deregulated has done so through its respective public utilities commission. If the Energy Choice Initiative is passed and our state constitution amended, the PUCN will eagerly work with the Nevada State Legislature to ensure that it is fully realized and implemented in the years to come.

Conclusion

The Energy Choice Initiative will cause Nevada to abolish its control over a key component of electric rates, and change the way Nevada has generated, bought, and sold electricity for over 100 years. No state has ever done it this way before, and it will likely create “winners and losers.”

If history and experience are any type of guide, commercial and industrial customers, will fare far better, at least initially, than the average Nevada residential family through this proposed change. Large commercial customers who currently cannot depart bundled electricity service pursuant to NRS Chapter 704B may financially benefit the most, as they cannot currently access a competitive open marketplace that may offer benefits to high-volume electricity users. Monthly bills are reasonably likely to increase in the short term. Immediate Nevada-specific benefits to single-family residential customers, and low-income customers, remain “elusive” and difficult to quantify.⁵⁶⁹ Indeed, a recent case-study on Pennsylvania’s deregulated market found the following:

After examining statewide average annual figures, it is clear that retail restructuring has provided an opportunity for cost savings benefits to the commercial and industrial customer classes through retail shopping. However, the same conclusion can’t be drawn from these data for the residential sector.⁵⁷⁰

The Attorney General of Massachusetts recently called for an end to the deregulated electricity market, finding aggressive sales tactics, false promises of cheaper monthly electric bills, and the improper targeting of low-income, elderly, and minority residents had occurred.⁵⁷¹ It also found that deregulation actually cost Massachusetts residents more money than if they had stayed in a regulated system.

⁵⁶⁹ *Electricity Market Restructuring: Where Are We Now?*, Johannes Pfiefenberger of The Brattle Group, NCSL Energy Policy Forum 2016, at 10 (December 6, 2016) (Appendix 4089).

⁵⁷⁰ *A Case Study of Electric Competition Results in Pennsylvania*, Christina Simeone and John Hanger, Kleinman Center for Energy Policy, University of Pennsylvania, at 31 (October 28, 2016) <https://kleinmanenergy.upenn.edu/> (Appendix 4109).

⁵⁷¹ *AG Healey Calls for Shut Down of Individual Residential Competitive Supply Industry to Protect Electric Customers*, Maura Healey, Office of the Massachusetts Attorney General (March 29, 2018) <https://www.mass.gov/news/ag> (Appendix 4163).

The facts and analysis revealed through this investigation by the PUCN lead to the reasonable conclusion that if the Energy Choice Initiative is approved by voters, how it is implemented, and whether Nevada is willing to invest the necessary time and money, will be the most significant factors contributing to its success or failure.