

**MINUTES OF THE MEETING
OF THE
ASSEMBLY COMMITTEE ON COMMERCE AND LABOR
SUBCOMMITTEE ON ENERGY**

**Seventy-Ninth Session
February 20, 2017**

The Committee on Commerce and Labor Subcommittee on Energy was called to order by Chair Chris Brooks at 4:06 p.m. on Monday, February 20, 2017, in Room 4100 of the Legislative Building, 401 South Carson Street, Carson City, Nevada. The meeting was videoconferenced to Room 4406 of the Grant Sawyer State Office Building, 555 East Washington Avenue, Las Vegas, Nevada. Copies of the minutes, including the Agenda ([Exhibit A](#)), the Attendance Roster ([Exhibit B](#)), and other substantive exhibits, are available and on file in the Research Library of the Legislative Counsel Bureau and on the Nevada Legislature's website at www.leg.state.nv.us/App/NELIS/REL/79th2017. In addition, copies of the audio or video of the meeting may be purchased, for personal use only, through the Legislative Counsel Bureau's Publications Office (email: publications@lcb.state.nv.us; telephone: 775-684-6835).

COMMITTEE MEMBERS PRESENT:

Assemblyman Chris Brooks, Chair
Assemblywoman Irene Bustamante Adams, Vice Chair
Assemblyman Nelson Araujo
Assemblywoman Maggie Carlton
Assemblywoman Sandra Jauregui
Assemblyman Jim Marchant

COMMITTEE MEMBERS ABSENT:

Assemblyman Paul Anderson (excused)

GUEST LEGISLATORS PRESENT:

None

STAFF MEMBERS PRESENT:

Marji Paslov Thomas, Committee Policy Analyst
Wil Keane, Committee Counsel
Earlene Miller, Committee Secretary
Olivia Lloyd, Committee Assistant



OTHERS PRESENT:

Joseph C. Reynolds, Chair, Public Utilities Commission of Nevada
Stephanie Mullen, Executive Director, Public Utilities Commission of Nevada
Eric Witkoski, Chief Deputy Attorney General and Consumer's Advocate, Bureau of
Consumer Protection, Office of the Attorney General
Jayne Harkins, Executive Director, Colorado River Commission of Nevada
Gail Bates, Assistant Director of Energy Services, Colorado River Commission of
Nevada
Angela Dykema, Director, Governor's Office of Energy, Office of the Governor
Fred Voltz, Private Citizen, Carson City, Nevada

Chair Brooks:

[Roll was called. Committee rules and protocol were explained.] The past few meetings, members of the Committee have received an overview on energy policy in Nevada and information from various utilities operating in our state. As many of you know, electric and natural gas utilities that deliver retail services to consumers are regulated by federal, state, and local agencies. These agencies govern the prices they charge, the terms of their service to consumers, their budgets and construction plans, and their programs for energy efficiency and other services. Regulation is intended to protect the public interest. Utilities are expected to offer services to anyone who requests it and who can pay for it at the regulator's approved prices.

Investor-owned utilities are primarily regulated at the state level where the Public Utilities Commission of Nevada (PUCN) is responsible for overseeing the authority investment decisions, authorizing investment decisions, operations, and customers' rates. Many governmental agencies other than the PUCN have proceedings that affect utilities.

This afternoon, we will hear from the PUCN; the Bureau of Consumer Protection (Consumer's Advocate), Office of the Attorney General; the Colorado River Commission of Nevada; and the Governor's Office of Energy, Office of the Governor. First, we will hear from Joe Reynolds, who is the chairman of the Public Utilities Commission of Nevada.

Joseph C. Reynolds, Chair, Public Utilities Commission of Nevada:

It is a privilege to be here before the Subcommittee today. I have a presentation that I would like to go through. I hope it is beneficial to the Subcommittee.

The Public Utilities Commission of Nevada is a unique entity and has many roles. I look at it as a hybrid state entity [page 2, ([Exhibit C](#))]. We have a quasi-executive role in that we enforce compliance with Nevada and federal laws, conduct onsite inspections, conduct fiscal audits, and issue administrative fines and business certifications. The Commission and the Commissioners also have a quasi-judicial role in that we adjudicate contested cases pursuant to *Nevada Revised Statutes* (NRS) Chapter 233B. We hold evidentiary hearings, and issue orders subject to judicial review by higher courts, including the district court and perhaps

even the Court of Appeals and the Nevada Supreme Court. We also have a quasi-legislative role in that we have administrative rule-making authority. We hold consumer sessions, and we conduct investigative workshops on relevant policy issues.

The reason it is exciting to work at the PUCN is the diversity. We touch all three branches of government [page 3, ([Exhibit C](#))]. We are housed within the Executive Branch, but we are a creature of statute and not the *Nevada Constitution*. We are a creation of the Legislative Branch, but we also perform certain quasi-Judicial Branch functions. The creation and authority of the PUCN is primarily set forth in NRS Chapters 703 and 704. We are fully subject to Nevada's Open Meeting Laws and Nevada's Public Records Acts.

I find the history of the Commission fascinating [page 4, ([Exhibit C](#))]. I like to tell my younger boys I have involvement with railroads. We started in Nevada as the Railroad Commission of Nevada in 1907. The Nevada Legislature created the Public Service Commission of Nevada in 1911, and then combined the two entities in 1919. The Public Service Commission of Nevada stayed relatively stable until 1997 when the Public Utilities Commission of Nevada was created.

The first annual report of the Railroad Commission [page 5, ([Exhibit C](#))] was delivered to then-Governor John Sparks in 1908. I always think of author Joyce Carol Oates and her short essay titled "Where Are You Going, Where Have You Been?" In order to look forward, sometimes we need to take a look back. In this first annual report, it states, "No State in the union has suffered more, relatively, from unjust discrimination at the hands of interstate carriers, and with respect to interstate traffic ending within its borders, than has the State of Nevada." What I also thought telling in that first annual report over 110 years ago is, "Our laws cover practically the whole field of railroad regulation, including that of passenger fares, time schedules, train service, track conditions, depot accommodations, unjust discrimination between persons or localities, and . . . [t]he subject of freight rates generally." In my mind, when I was thinking about how that is relevant today, is back in 1908, railroads, the freight transportation, and the passenger transportation were truly a lifeline into the state of Nevada, and they were monopolies. Today, we have transmission lines and energy lines that are truly the lifeline in Nevada. Back in 1907 and 1908, the Nevada Legislature, in its wisdom, saw the need for regulation. We are, 110 years later, doing similar regulatory work on one level.

Today at the PUCN [page 6, ([Exhibit C](#))] we oversee the full or limited regulation of over 500 entities engaged in providing electricity, natural gas, telecommunications, water, wastewater, and rail services to the population of Nevada. We do a lot at the Commission, and that is sometimes overlooked.

This slide [page 7, ([Exhibit C](#))] is a breakdown of some of those entities in a little more detail. There are 29 electric/natural gas/liquefied natural gas (LNG)/propane companies; 263 partially regulated entities in telecommunications; 17 fully regulated water entities; 87 commercial mobile radio service entities; 7 electric cooperatives; 143 mobile home parks; 12 water cooperatives/municipalities; and 3 railroads.

The annual utility revenue regulated by the PUCN is approximately \$4.2 billion [page 8, ([Exhibit C](#))], which I think is somewhere around the annual budget for Nevada.

The big three electric/natural gas regulated utilities are Nevada Power Company, Sierra Pacific Power Company, and Southwest Gas Corporation [page 9, ([Exhibit C](#))]. Nevada Power Company covers the electric services provided in southern Nevada and has 892,834 customers with approximately \$9 billion in assets. Sierra Pacific Power Company in the northern area has approximately 336,054 customers with approximately \$3 billion in assets. Sierra Pacific Power Company does have a natural gas component that serves the Washoe County region with approximately 159,824 customers. Southwest Gas Corporation services approximately 708,732 customers in the state with \$4.5 billion in assets.

I would like to break down a few of those in a little more detail for the Subcommittee. As mentioned earlier, we have 263 providers in the telecommunications realm [page 10, ([Exhibit C](#))] with annual revenue overseen by the PUCN of approximately \$357.5 million. There are some entities that are not rate-regulated by the PUCN, and some small-scale providers of last resort in the telecommunications field that are fully regulated by the PUCN.

The PUCN regulates 29 water and wastewater utilities [page 11, ([Exhibit C](#))]. Of those 29 utilities, 17 are fully regulated investor-owned water and wastewater utilities, and the remaining 12 are under the control of noninvestor-owned governing bodies such as a city, a cooperative, or a homeowners' association. These utilities can range in size from approximately 4,000 residential customers to as few as 14 residential customers here in Nevada. The PUCN does not regulate or have any jurisdiction over the Southern Nevada Water Authority (SNWA) or the Truckee Meadows Water Authority.

The next slide [page 12, ([Exhibit C](#))] is a list of the 17 PUCN regulated water and wastewater utilities. Many of these are in more rural areas within our state. The names of most of them will describe where they are located.

Chair Brooks:

I have a question about the previous slide [page 11, ([Exhibit C](#))]. You stated the PUCN has no regulatory oversight over the Southern Nevada Water Authority or the Truckee Meadows Water Authority. Why is that?

Joe Reynolds:

It is my understanding this legislative body determined that and gave us a limited jurisdiction over these water entities.

The PUCN has three full-time Commissioners who are appointed by the Governor [page 13, ([Exhibit C](#))]. The Commissioners are appointed for four-year terms. No more than two Commissioners at any given time can be of the same political party and are to have diverse experiences set forth by statute. I am the Chair of the Commission. Paul Thomsen in Carson City and Ann Pongracz in Las Vegas are the other two Commissioners.

Stephanie Mullen is the executive director, who serves as the chief financial officer and oversees the day-to-day administration of the budgets and human resources. Ms. Mullen is here today. Sitting next to Ms. Mullen is Garrett Weir, who is the general counsel. He serves as the legal counsel to the Commission and represents the Commission in all legal matters. We are not represented by the Office of the Attorney General. That is also something that makes the Commission very unique.

This slide [page 14, ([Exhibit C](#))] is an organizational chart of the Commission in more detail. The utility hearing officer is Mr. Donald Lomoljo. We have a public information officer, a policy analyst division, a human resources division, consumer outreach, and the Regulatory Operations staff. Under the Regulatory Operations staff, we have legal counsel, engineers, financial analysts, market analysts, rail safety, and consumer complaint resolution. The Regulatory Operations staff operates as a separate entity within the PUCN. Something I will discuss a little later is how that operates with the full Commission.

The PUCN has 96 full-time employees [page 15, ([Exhibit C](#))]; 65 positions are budgeted for Carson City and the other 31 positions are in Las Vegas. As you can see going down the list, we have many accountants, engineers, and lawyers. As the Chair, I would like to say we have some very smart folks, many of whom do not have a political bone in their body and who are very good at what they do. I am very proud to work with them.

The PUCN is primarily a fee-funded entity [page 16, ([Exhibit C](#))]. There is approximately \$24 million in our biennium operating expenses. Because we do have some executive oversight authority and impose administrative fines on companies and utilities, we have imposed approximately \$1.9 million in administrative fines since 2008. That is money collected and deposited into the General Fund.

What does the PUCN do? First and foremost, we protect public safety and critical infrastructure [page 18, ([Exhibit C](#))]. The PUCN maintains the Rail Safety Program as part of Nevada's participation with the U.S. Department of Transportation's Federal Railroad Administration. We have certified inspectors who oversee railroad track safety, operating practices, motive power and equipment use, and transportation of hazardous materials for rail operations throughout the state. The PUCN maintains the Pipeline Safety Program, where we have inspectors and engineers who monitor the design, construction, operation, and maintenance of liquid propane and natural gas piping throughout the state to ensure all entities are in compliance with Nevada law and the Code of Federal Regulations. The PUCN also maintains the 811 "Call Before You Dig" program created through the Federal Communications Commission to help protect homeowners and construction contractors from damage or injury.

The PUCN designs utility rates for Nevadans [page 19, ([Exhibit C](#))], large and small, commercial/industrial, and residential customers. We have a statutory responsibility to ensure that rates are just and reasonable and not unjustly discriminatory. Utilities are also

entitled to a reasonable rate of return on their investment. We do have a duty and responsibility to balance those interests. Once every three years, large electric and water utilities file a General Rate Case (GRC). Statutory language requires a three-year period, but they can file a GRC before the three-year period. There are generally three phases to a GRC: the cost of capital, which is essentially how much the utility can earn on their investment; depreciation and revenue requirement, which is how much it costs the utility to provide the services, the infrastructure, the maintenance, and the resources that the PUCN requires; and rate design, which is how much consumers pay on their monthly bill.

The PUCN does integrated resource planning [page 20, [\(Exhibit C\)](#)], which is essentially looking to future resource planning for large electric and water utilities once every three years. The PUCN is expected to forecast such things as future energy and water demands, determine the best combination of sources to meet or reduce demands, review renewable energy zones, energy efficiency and conservation programs, and utility assets. We also have the Division of Consumer Complaint Resolution where we provide the public information, address consumer problems, and respond to disputes between Nevadans and the utilities. In short, I like to think we help people. We provide information on energy efficiency programs; renewable energy rebate programs, including solar, thermal, wind, and water; and other ways for consumers to save money on their monthly bills. We also conduct consumer sessions to gather direct public input.

As a part of our mission and duties, we also regularly gather, analyze, and report on energy information [page 21, [\(Exhibit C\)](#)]. Our statutory obligations require entities to provide information on energy generation, distribution, and usage data for public and private sectors throughout Nevada, as well as economic, public safety, and financial market conditions. As the Chair of the Commission, I would like to bring your attention to the fact that we do have a tremendous amount of information and some intelligent people who work at the PUCN. That is a resource for this Subcommittee, the Legislature, and any policymakers to take advantage of. The PUCN will be there to help provide any information we can. There are some confidentiality statutes that govern that information, but we have many resources and are here to help however we can.

We also regulate and oversee business certification, licensing, and permitting requirements in Nevada. We perform auditing, inspections, and we collect fees on regulated entities.

The PUCN holds biweekly public meetings, generally every other Wednesday at 10 a.m. [page 22, [\(Exhibit C\)](#)]. All Commissioners are present, either in Carson City or in Las Vegas. We video-link those meetings, and they are publicly noticed with public comment periods, both before and after the meetings. During the meetings is when the Commissioners discuss, deliberate, and vote on pending matters. We review draft orders from presiding officers on cases, Regulatory Operations staff recommendations, and general counsel.

As I mentioned earlier, we do have a Regulatory Operations staff that serves as an independent public advocate and party before the PUCN in contested cases [page 23, ([Exhibit C](#))]. By law, Commissioners cannot discuss substantive issues regarding a pending contested case, except as permitted with other legal entities, with the Regulatory Operations staff. The director of the Regulatory Operations staff is Anne-Marie Cuneo. The chief legal counsel for that part of our agency is Tammy Cordova. As the Chair who presides over contested cases, the input and the amount of work done by our Regulatory Operations staff is tremendous, in that they serve as an objective party that provides expertise and resources to me in cases the Commission has to review and decide.

There have been some changes at the PUCN [page 24, ([Exhibit C](#))]. As the Chair, I am proud that in November 2016, we adopted new ethical standards for the Commissioners based on guidance from the Nevada Code of Judicial Conduct, *Nevada Revised Statutes* Chapter 281A, and Governor Sandoval's Executive Order 2011-02. That is something that had not been done before, but because the Commissioners act in a quasi-judicial role, even though we are not part of the Judicial Branch, I thought that guidance was important to instruct the conduct of the Commission. As the Chair of the Commission, my major concerns and priorities are the integrity of the decisions, transparency, and to make sure there is confidence in anyone who appears before the Commission in the decisions that the Commission makes.

The Commission adopted a new mission statement in December 2016. The old statement said the mission of the PUCN was to "Supervise and regulate the operation and maintenance of utility services in Nevada." As the Chair, I thought that is not exactly all the Commission does. Our new statement says, "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." Public interest and serving and protecting the public interests are priorities of the Commission.

In January 2017, the Office of Economic Development, Office of the Governor presented for the first time in front of the Commission. Mr. Steve Hill came and spoke. I thought that was important to bring awareness of the importance of economic development and the impact that decisions before the Commission can have.

A few weeks ago, we established a full video-link for all public meetings and hearings before the Commission to promote greater public access and transparency. That is something our information technology staff worked very hard to complete, and something of which I am very proud.

One of the hot topics at the PUCN is the net energy metering or rooftop solar [page 26, ([Exhibit C](#))]. The Commission did issue a decision on December 28, 2016. I have provided a copy of that order ([Exhibit D](#)). There is a reconsideration petition pending on this matter, so I cannot say a whole lot about it. I would say that I think the order speaks for itself

and where the Commission stands, although we are taking the issues that have been raised on reconsideration seriously and are reviewing those. That is probably about all I should say regarding that issue.

I would like to draw the Subcommittee's attention to NRS 704.7735, which was amended by Senate Bill 374 of the 78th Session. This is language that was really important to me in looking at these matters. The language in NRS 704.7735, subsection 2, paragraph (e) states the Commission "Shall not approve a tariff filed pursuant to subsection 1 or authorize any rates or charges for net metering that unreasonably shift costs from customer-generators to other customers of the utility."

The other issue is exit applications [page 27, ([Exhibit C](#))] or NRS 704B.310. Again, we have matters pending before the Commission, so I cannot say a whole lot regarding that, but the relevant statutory provision to bring to the Subcommittee's attention is NRS 704B.310, subsection 7, paragraph (b), which states, "The Commission shall order such terms, conditions and payments as the Commission deems necessary and appropriate to ensure that the proposed transaction will not be contrary to the public interest. Such terms, conditions and payments: (1) Must be fair and nondiscriminatory as between the eligible customer and the remaining customers of the electric utility" That phrase is something I think is very important and relevant to the NRS Chapter 704B application analysis.

I was in Washington, D.C., just last week at a utility conference, and something I learned is that the NRS Chapter 704B applications are unique to Nevada. There are many other states that have watched this process, and there are actually professors who study it and teach it in their energy classes. What I thought was an interesting note is that the first NRS Chapter 704B application was in 2002 from Barrick Gold Corporation.

The renewable portfolio standards (RPS) are also a very hot topic [page 28, ([Exhibit C](#))]. As members of the Subcommittee may be aware, the RPS establishes the percentage of electricity sold by a utility to customers that must come from renewable sources. Currently, the percentage increases every two years until it reaches 25 percent in the year 2025. Those figures are established by the Legislature. I view the role of the Commission, and our responsibility, is to enforce, as best we can, the decisions of the Legislature in ensuring compliance with those portfolio standards.

Other issues include large-scale utility solar and community solar, which are sometimes also referred to as solar gardens. We do have an investigatory docket and are working with interested stakeholders on looking at battery and energy storage issues.

Regarding renewable energy and energy efficiency programs, I am very proud that the Commission just voted a few weeks ago to restart our light-emitting diode (LED) lighting program in an investigatory docket. That was something that had been discontinued, but was a program that was working quite well. We opened an investigatory docket—which I think is just another name for a workshop—to take a look at restarting that program.

Something else that is very important is the critical infrastructure and cybersecurity protections. As I mentioned earlier, there is a lot of information stored at the PUCN concerning wells, natural gas, and electricity infrastructure throughout the state. Ensuring that information is adequately protected is something that is important to me as the Chair. Last, but certainly not least, is the Energy Choice Initiative [Ballot Question 3], which is an issue we are monitoring.

That concludes my presentation. I hope it was helpful to the Subcommittee.

Chair Brooks:

Could you expand on the fee-funding model? You stated a majority of your funding comes from fees from the industries the PUCN regulates [page 16, ([Exhibit C](#))]. Could you briefly discuss how that works?

Joe Reynolds:

I am certainly not the expert on that process, but it is what is called a mill assessment, which is essentially a fee that is imposed through the utility that is ultimately passed on to customers. There is a small percentage of fees allocated to the Commission, which we use to fund the Commission and its activities.

Chair Brooks:

Do you determine a budget and then base the funding and the fees recovered on the budget you determined ahead of time?

Joe Reynolds:

Executive Director Stephanie Mullen does the budget and is our chief financial officer. I believe it is done based upon projections with the mill assessment.

Stephanie Mullen, Executive Director, Public Utilities Commission of Nevada:

The mill assessment is essentially one-tenth of 1 cent. It is levied on all revenues for all utilities that operate in Nevada. There is a calculation performed based on what our anticipated projections of expenses will be, and then a fee is calculated. Currently, for the next biennium we have estimated 2.41 mills, which is approximately 41 cents per month per customer.

Assemblywoman Jauregui:

Is that 41 cents per customer per utility?

Stephanie Mullen:

No. That is a cumulative amount, so it is broken out per bill based on what utilities the customer pays for.

Chair Brooks:

What percentage of your budget would you say pertains to the electric utility? I know that may be a difficult question because some of the costs are spread across all utilities.

Stephanie Mullen:

I do not have that information, but I would be happy to get it for you tomorrow.

Chair Brooks:

I would appreciate that. The reason I ask is because Mr. Reynolds touched on the Energy Choice Initiative very briefly, but you would have a lot more to do were that to move forward. I am curious how that would impact your agency and your budget.

Joe Reynolds:

There would need to be a lot of analysis done to look at that. We are looking forward to assisting Lieutenant Governor Mark Hutchison with the Governor's Committee on Energy Choice. We do not have that information quite yet.

Assemblywoman Carlton:

Along those same lines, as the initiative progresses, I think it would be great if the Commission kept other interested committees informed. I am wearing my "Ways and Means" hat now because we just did your budget today. If we are going to have to figure something out, the sooner we know, the better. The Assembly Committee on Ways and Means would like to be kept in the loop with the same information. If you could just send that to our staff, they will make sure the committee and the chair has it. We will then all be working from the same songbook. I would appreciate that.

Joe Reynolds:

I want the PUCN to be in the space to provide whatever information we can to whatever policymakers are looking at this issue, in whatever body that is.

Chair Brooks:

Are there any further questions from the members? [There were none.] I appreciate your presentation. I am sure we will be talking to you soon on those questions. Next up we have Eric Witkoski from the Bureau of Consumer Protection, Office of the Attorney General.

Eric Witkoski, Chief Deputy Attorney General and Consumer's Advocate, Bureau of Consumer Protection, Office of the Attorney General:

Before I get started, I will follow up on your question on the revenues of the electric utilities and the mill assessment. Nevada Power Company is a big part of it, and the next one is Sierra Pacific Power Company. It is quite a bit down before Southwest Gas Corporation and the telephone companies. You are right. If we go to a competition, the impact of the mill assessment will have to be worked through. Nevada Power is about \$2.3 billion, Sierra Pacific Power Company is about \$859 million, and Southwest Gas Corporation is \$522 million.

I would like to give an overview of my office and perhaps follow up on some of the hot topics Mr. Reynolds mentioned. Frankly, we have similar ones. By way of background, our office was created in 1981. It was originally the Office of the Consumer Advocate, and that is where the consumer advocate part of it comes from. It operated that way until 1997

when we were blended with the folks out of the Office of the Attorney General who did antitrust and deceptive trade. We had sort of a consumer unit. One of the reasons we did that was because we were going to go to electric competition for electric service in 2000, and then probably for gas service as well at a later time. We thought we would be dealing with other consumer issues like those we saw in the telephone business and anticipated it might happen on the electricity side. We reorganized in anticipation of that.

As you know, in 2001, the deregulation bill was reversed, and we did not go to deregulation. Our office stayed the same. We kept that structure until about 2010 when we did a little bit of restructuring. At that time, I had the criminal side as well as the civil side. In response to the mortgage crisis, we have moved some attorneys and investigators over to the Criminal Fraud Unit in the Office of the Attorney General so they could focus on that.

Basically what we do right now is deceptive trading, and we do a lot of multistate work, where we work with other attorney's general offices, the U.S. Department of Justice (DOJ), and the Federal Trade Commission (FTC) in those kinds of cases on a civil level. We also do antitrust the same way with other state agencies, the DOJ, and the FTC, depending on the type of case.

We still do work in front of the Public Utilities Commission of Nevada (PUCN). As Mr. Reynolds mentioned, they deal with natural gas, electricity, water cases, and telephone cases. We are involved in most of the major electricity cases and natural gas cases; for instance, the rate cases. Nevada Power will be filing a General Rate Case in June, and Southwest Gas has anticipated they will file one next year.

As far as the telephone business, as you know, with cellphones it has transitioned from a full regulation. We introduced legislation with former Assemblywoman Barbara Buckley in 2007 to transfer out of the full regulation. That was completed in 2012. In 2013, we worked on legislation for moving out of the provider of last resort. That was stretched out over a period of time with the more urban area relief and then the more rural areas. Some areas were granted relief, but some of the areas were not because there was not sufficient competition.

I thought I would give you a brief anatomy of a rate case. Mr. Reynolds is correct. There are a lot of cases; for instance, the Nevada Power case. There would be numerous dockets. When the filing comes in, the stacks are very high. There is a lot of information that has to be gone through. The Commission has to have an order out in 210 days from beginning to end. What the process is, and the reason I want to explain it, is so you can see our role. The application is filed, and we will file a Notice of Intervention, and other parties will intervene. We do discovery, gather information, send data requests, gather information from the company, and maybe meet with the company on various issues.

In a rate case, we would be looking at what we call the rate base or the plant investment and depreciation rates. We then look at the rate of return, which includes the cost of debt and term on equity, and then operation maintenance, taxes, and depreciation expense. That comes up with the revenue requirement. All of those elements can be contentious in themselves. We have experts in our technical staff look at those issues. Findings are presented in what we call prefiled testimony, and then the company will file rebuttal testimony.

Also during this process, a consumer session is usually held where the Commission will hear from consumers regarding the filing. There will then be a technical hearing where the evidence is taken. Witnesses for the company and our witnesses are all subject to cross-examination and rebuttal. The Commission will take all that evidence in and write an order on all those details, which takes about six weeks. The Commissioner will place it on the agenda and the various issues will be voted on. That is the process for a rate case or a deferred energy case.

In a deferred energy case, we are reviewing the prudence of the fuel and purchase power costs. Several years ago, the prudence of the purchases was very controversial and there were many disallowances and a lot of anguish about that. I was involved in those cases. We evolved over time to where we have an agreement with the electric companies and Southwest Gas that we meet quarterly, so we know what they are planning. What would happen in the past is we would not know what they had done until 18 months later. At that point, we would all argue about what they did. Now, every quarter we monitor what is going on. Much of it is impacted by the natural gas production and natural gas costs, including oil and those kinds of things, because the electric companies use a lot of natural gas for fuel and purchase power. Of course, the gas company uses all gas. We think the quarterly meetings have been productive, and we think we are able to save money and be more involved upfront.

That is an overview of the process and how it works. I would like to talk about some of the hot topics. I suppose I could not be the Consumer's Advocate and not come here and say we have to worry about rates, because we do. We have to keep things affordable. As you consider legislation, we want to keep it affordable because the rates impact the customers. If they are spending more on their utility bills, there is less money to go around for other things. It also harms the businesses.

I would like to follow up on something. Last week NV Energy mentioned something which I thought was noteworthy. They talked about the clean energy plan which the Obama Administration and the U.S. Environmental Protection Agency were pushing. We are not sure where it is going to go, but because of the progress we have made, if the plan goes into play, we are at about the 2028 or 2029 milestone. In other words, we are about ten years ahead of where we could be. I think part of that is closing the coal plants. Reid Gardner Generating Station Units 1, 2, and 3 are already closed. Those plants are off Interstate 15 to the west. Reid Gardner Generation Station Unit 4, the bigger one, is closing if they are not already closed. I think they are burning through the last of the inventory and may close in a week or so. I did want to mention that they are closing, but we cannot forget

about them because they are still going to be in the rates. We still have to pay for those, which is going to take three to six years. We need to keep that in mind as we look at other things that may impact the rates.

The other item is NRS Chapter 704B, which Mr. Reynolds mentioned, which is a law placed in 2001. It has not been used a lot, but Barrick Gold Corporation used it in 2008. It became more popular with filings in 2015. What it is, basically, is customers with 1 megawatt or larger can file with the PUCN to exit. If they pay the appropriate impact fees, they can depart what we call the full bundle service of NV Energy—meaning they can get their transportation, which is a fairly attractive rate, from NV Energy, and then they can buy it from a marketer. Currently, in the wholesale market there is a lot of power out there, and it is very cheap. California has built up a lot of generation and a lot of renewables. There are many merchant plants that were built when it was thought there would be competition, but they are now struggling. There is a lot of energy out there.

As you look at what you may want to do legislatively, keep in mind that if rates get too out of hand, there is a back door where these businesses can exit. NV Energy states there are 270 businesses that actually qualify. I do not think there would be that many, but it is still a concern. Hopefully, we get the impact fees right, but we do have a certain amount of infrastructure that has been built, and we want to make sure that is not going to impact the other customers.

The next thing, as you know, is the Energy Choice Initiative. That initiative puts us in a bit of a quandary. Of course, I know that ballot question needs to go through another election before going into the *Nevada Constitution*. Section 1, Subsection 3 of the initiative states the law passed by the Legislature must include "... but not limited to, provisions that reduce costs to customers" I know everyone has the feeling that may have passed, and if I thought I was going to get reduced costs, I would probably go for it, too. I know we are in sort of a gray area, but if we are going in this direction, we need to be cognizant of the imbedded costs we already have.

NV Energy provided numbers during their presentation, but to be frank, what happens is they have \$3.2 billion invested in a plant that has been bought and invested into service. If we go to a competition, we have to figure out what to do with that plant. If it is sold in the current market, they will probably not get what the book value is that they are owed. There may be a portion of that we have to pay for. Many times in the industry, it is called stranded cost. That will have to be dealt with. I believe the Governor is talking about a task force to look at that. Those are the things we have to look at.

We also have contracts which NV Energy said were about a \$4.2 billion net value. Those are the contracts from the renewable portfolio standard. You have to remember, we started that some time ago, and in the early contracts, they were not very attractive. They were kind of

expensive, and the average price was probably 13 cents. If that portfolio were sold today, it would not even be worth a third because the prices are in the 3-cent range now. That is something we are going to have to deal with and need to be aware of as we move forward.

I will close by saying as you look at legislation, I encourage you to keep affordability in mind. We have made a lot of progress with closing the coal plants, but we still have to pay for those. We do have NRS Chapter 704B customers who are looking at options. I would caution the Committee on long-term commitments.

Chair Brooks:

What role would you and your office have if we were to go down the path of valuing the assets and then looking at how we distribute the costs associated with the value of those assets under an energy choice scenario as it is proposed on the ballot initiative?

Eric Witkoski:

The Governor is going to at least give us a seat at the table to talk about those issues. I have been with this office since 1994, so I have seen quite a bit. What was happening during 1997 to 2000 was there were contracts, and the plants were ready to be sold. At that time, there was a shortage of power so the plants were going to be sold at a gain. It is a different situation now. We would probably sell into a buyer's market, so we are going to have to deal with those various things. Do not misinterpret what I am saying, but if we go into competition, there are certain ways and certain costs that have to be managed. What will happen is from day one, if there is a stranded cost from the generation, that will be on the bill. If there is a cost from the renewable contracts, that will be on the bill. There will also be transmission, distribution, and energy costs. What we have to figure out is how can we transition these costs, or spread them out so the transmission, distribution, and new energy that are purchased from a provider are still economical. That is going to be the challenge.

Chair Brooks:

Are there any questions from the members? [There were none.] The next presentation is from Jayne Harkins, Executive Director of the Colorado River Commission of Nevada to give us an overview of that agency.

Jayne Harkins, Executive Director, Colorado River Commission of Nevada:

I have brought with me Gail Bates, who is the Assistant Director of Energy Services for the Colorado River Commission of Nevada (CRC). I will go quickly through some of the slides, but more slowly on others to talk about where there may be issues with the Energy Choice Initiative. I will give you an agency overview of hydropower, our power delivery, and our energy services. Then I will specifically talk about the power that we sell into the state from our hydropower projects that the federal government owns, which is Hoover Dam; the Salt Lake City Area Integrated Project, which is primarily Glen Canyon Dam, but there are some other dams included in that project; and then the Parker-Davis Project, which are Parker Dam and Davis Dam located below Hoover Dam [page 2, [Exhibit E](#)].

Our organization was created in 1935 by the Nevada Legislature [page 3, ([Exhibit E](#))]. At that point, Hoover Dam was completed. The power plant was just being completed, and in 1936, commercial generation operation began at Hoover Dam. We put federal contracts in place with the CRC and the federal government to sell that power to Nevada. Our first two customers were Lincoln County Power District No. 1 and Southern Nevada Power Company, which was the precursor to NV Energy. Lincoln County Power District No. 1 was created in 1935; they took generation in 1937, and they were building their transmission lines in 1936.

Our organization has a staff of 33. Our main headquarters are in Las Vegas in the Grant Sawyer State Office Building. We have two field offices: the Energy Services Group is located with the Southern Nevada Water Authority; our field group operates and maintains our transmission system and is located in Henderson at the River Mountains Water Treatment Facility of the Southern Nevada Water Authority. We are organized with a seven-member Commission—four appointed by the Governor, including our chairwoman, and three from the Southern Nevada Water Authority Board of Directors. Their purpose is to protect, receive, safeguard, and hold in trust the water and hydropower resources provided from the Colorado River for the benefit of the state of Nevada.

As an organization, the CRC receives no State General Funds [page 4, ([Exhibit E](#))]. We bring our budget through the Office of the Governor and to the Legislature for approval, but our funding is provided by the water and hydropower customers for the operations of our organization. We have been providing hydropower for the state for over 81 years. We own, maintain, and operate power and communication facilities in and around Las Vegas, Henderson, and Boulder City. The CRC mission [page 5, ([Exhibit E](#))] is to responsibly manage and protect the Colorado River water and power resources.

In the water and environmental processes, we are working with the other six Colorado River states and the federal government [page 6, ([Exhibit E](#))]. We are working on a number of actions with the federal government. The Glen Canyon Dam is where we receive hydropower. The Hoover Dam is not shown on this map, but the Parker-Davis Dam is below the Hoover Dam on the Colorado River.

This slide [page 7, ([Exhibit E](#))] shows a picture of the four dams we have contracts with for federal hydropower. The Bureau of Reclamation, U.S. Department of the Interior, owns and operates the four dams [page 8, ([Exhibit E](#))]. Our first contracts for hydropower were with the U.S. Department of the Interior. When the U.S. Department of Energy was created through the Western Area Power Administration (WAPA), they took over marketing and our contracts have been with WAPA since that time. We have very long-term contracts with the federal government. We provide energy by contract, and we wholesale to utilities and some retail customers in southern Nevada. There are other Nevada entities. I think you heard this last week from the Nevada Rural Electric Association that there are some other rural cooperatives that hold federal government contracts for federal hydropower into the state. The CRC is not the only one. At Hoover Dam the U.S. Congress employs two federal contractors; the Colorado River Commission of Nevada and the City of Boulder City.

This slide [page 9, ([Exhibit E](#))] is a listing of our current hydropower customers now through September 30, 2017.

We have built our power delivery project and deliver electricity through our transmission and substation system to the SNWA and the Basic Management Industrial Complex (BMI), which is near Henderson [page 10, ([Exhibit E](#))]. We also operate and maintain some substations owned by SNWA, as well as the Clark County Water Reclamation District.

The Energy Services Group [page 11, ([Exhibit E](#))], which Ms. Bates heads up, purchases and delivers energy for use by the members of the Silver State Energy Association (SSEA). I will pause just a moment to talk to you about the SSEA. The SSEA is a joint action agency that was formed, so they have their own board of directors, including Boulder City, Lincoln County Power District No. 1, Overton Power District No. 5, the Southern Nevada Water Authority, and the CRC. They are able to benefit the members working on transmission projects, as well as on the market to gain benefits by purchasing power in larger blocks.

Our hydropower is a highly desirable resource because it is clean, low-cost, and renewable [page 12, ([Exhibit E](#))]. One of the things this Subcommittee saw last week was a graph that showed NV Energy's sources of power. One small piece of that was Hoover Dam and was identified as Hoover Power. Nevada Power Company has a contract with CRC for power and get their largest portion, about half, from Hoover Dam. I would tell you though that under Nevada's renewable portfolio standard, large hydropower, and their Hoover Dam contract do not count as part of Nevada's renewable portfolio standard. I do not think the Subcommittee was told that last week as you were hearing different pieces from different folks.

The CRC gets a portion of federal hydropower resources. A large part of it goes into California and Arizona. Glen Canyon Dam hydropower goes to Wyoming, New Mexico, and Arizona. The CRC gets a portion of all of that. Some of that goes to cooperatives and other utilities, but it includes state agencies, municipalities, and tribes who have gained access to federal hydropower in more recent years.

I would like to talk a bit about drought [page 13, ([Exhibit E](#))]. Although you are not living in drought at the moment, on the Colorado River the Hoover Dam is still 140 feet lower than full pool. The hydropower that we get depends on water deliveries, river operations, and lake elevations. You would have to go all the way back to the Colorado River Compact of 1922 that the State of Nevada signed. The Nevada Legislature ratified the compact in 1923. The power and the hydropower we get is incidental to water storage on the Colorado River system. That was also put into the 1928 Boulder Canyon Project Act, which authorized the building of Hoover Dam. It was first put in place for flood control. The second priority was for conservation of water and the storage of water. The third priority is for hydropower. As the lake has gotten lower and folks have wanted to conserve water and keep it in Lake Mead, there is less water going through the generators, which means we are actually getting less power.

On the water side of the house, which we deal with as well, the CRC with SNWA has been working with entities in California and Arizona on what we call a drought contingency plan. It would protect Lake Mead elevations and thereby protect the hydropower production. There are some things we have been working on and have agreed to, which is to protect Lake Mead elevations from falling below a specific elevation of 1,020 feet. It also includes a number of voluntary reductions in water use and incentivizing people to conserve water in Lake Mead.

Hoover hydropower has been available to us since 1936 [page 14, [\(Exhibit E\)](#)]. In 1928, the Boulder Canyon Project Act authorized the construction of Hoover Dam. One of the things put into the act is who got the hydropower, and that is determined by Congress. It has been by the authorization of Congress since that time that the CRC receive power for the benefit of the state. Our current hydropower contract with the federal government expires on September 30, 2017.

In preparing for our contracts to expire, my predecessor in the executive director role, George Caan, and CRC staff began working about a decade ago with the Hoover Dam hydropower customers in California and Arizona and got federal legislation in 2011 [page 15, [\(Exhibit E\)](#)]. What that legislation did was give CRC 50-year terms for federal contracts, and we lost 5 percent of our allocations. We created a new 5 percent pool that was to go to new customers in the three states. That enabled 12 new Nevada entities to receive hydropower starting on October 1, 2017.

Last summer, Governor Sandoval executed our contract with the federal government [page 16, [\(Exhibit E\)](#)]. We now have hydropower through 2067. At the same time, we entered into contracts with our current and new customers within the state of Nevada. The terms for those new customers are for 15 years and many are for 50 years.

This slide [page 17, [\(Exhibit E\)](#)] is a list of the customers beginning October 1, 2017. State of Nevada entities, including Department of Corrections, Department of Administration, Department of Transportation, as well as College of Southern Nevada, Clark County School District, and University of Nevada, Las Vegas, all received allocations in the process.

When talking about the Energy Choice Initiative, we do have a number of specific provisions in our contracts to ensure the benefits stay in Nevada [page 18, [\(Exhibit E\)](#)]. What the CRC is tasked with by statute is to make the determination in our allocation processes as to the greatest possible benefit to this state. We do have a number of contracts with utility providers. As the Energy Choice Initiative impacts those energy providers, we will be looking at how it impacts the hydropower contracts they have. Those contracted utility providers include Nevada Power Company doing business as NV Energy; the City of Boulder City; Valley Electric Association, Inc.; Lincoln County Power District No.1; and Overton Power District No. 5. Specifically, one of the contract provisions that Nevada Power has are several allocations of power. One of those allocations must be passed through to all of their customers. They then have another allocation that the economic benefit needs to be passed through to their residential class of customers only.

One of the things we have been able to do by statute is issue bonds [page 19, ([Exhibit E](#))]. We have done that in the past, and we can do that based on our long-term hydropower contracts that give us a long-term revenue stream. Bond councils and bond folks are okay with having CRC issue those bonds because they know we have a mechanism to pay for it. In the 2013 Legislative Session, we asked for authorization from the Legislature to issue bonds where we had debt to the U.S. Department of the Treasury at 8 percent and 10 percent, which was very high. These were capital costs of the Hoover Dam Visitor Center, which was built in the late 1980s and early 1990s, and the Hoover Dam air slots, which were to repair damage to the penstocks after the 1983 floods. At Hoover Dam, the hydropower customers pay for everything. There are no appropriated dollars except when something like the Hoover Dam Visitor Center is put together, but then the hydropower customers still owe the U.S. Department of Treasury that money at the treasury rate.

We were able to issue bonds at a much cheaper rate. We were able to reduce our customer expenses by over \$800,000 a year, but we do have a bond issuance with a maturity date of October 1, 2043. We use our long-term contracts, and those long-term contracts ensure those who issued CRC the bonds and gave CRC the money upfront to pay off the federal debt earlier, will be paid back.

This slide [page 20, ([Exhibit E](#))] shows our integrated projects. We have a contract through 2024 for Glen Canyon Dam and some of the smaller dams in the upper basin. Western Area Power Administration has started the marketing process for the post-2024 contracts. The Parker-Davis Dam has contracts through 2028, and likewise, the customers have contracts through 2028 [page 21, ([Exhibit E](#))].

Federal hydropower is a valuable resource [page 22, ([Exhibit E](#))]. The CRC, Boulder City, and other Nevada entities hold these long-term contracts with the federal government for hydropower. The passage of the Energy Choice Initiative may raise policy and rate questions for the CRC, and maybe some of these other contracts. We will have to see how that works in the future, and we will be participating and watching to see how it goes and will let you know if we see other issues.

With that, I am open to answering any questions.

Assemblywoman Jauregui:

Will consumers be able to buy power directly through the CRC?

Jayne Harkins:

I hope not. I say that only because we are not equipped or staffed to do that. We have always done long-term contracts with specific entities, like utilities. We are assuming those contracts are in place and that they cannot be changed. If something happens that the utilities cannot meet the requirements of their contracts, they may turn it back to the CRC. I do not know if that would happen, and they would have to do it voluntarily at this point because they are executed contracts. If they were to turn the power back to the CRC, the PUCN would reallocate the power. That would be through a public process, as we have always

done, to determine what the best interest of the state is. I do not believe CRC wants the business of people choosing us because we are not equipped to handle a lot of accounts and small users.

Chair Brooks:

What is the Hoover Dam allocation in megawatt hours and its cost?

Jayne Harkins:

Hoover Dam's total capacity is 2,074 megawatts. We have 403 megawatts, about 19 percent, of the capacity. We have about 23 percent of energy. That is not the current total. The current total for this fiscal year is 1,920 megawatts and we have 377 megawatts.

Chair Brooks:

What is the capacity factor? How many megawatt hours is that?

Jayne Harkins:

The capacity factor is about 25 percent.

Chair Brooks:

What is the current cost of that contract?

Jayne Harkins:

About \$23 a megawatt hour. That is everything, including bond costs, environmental costs, and our operational costs.

Chair Brooks:

Is that the cost to the off-taker that you have the contract with?

Jayne Harkins:

We have other costs, not just Hoover Dam costs. Our other costs include Nevada's share of the Endangered Species Act of 1973 compliance, our operational costs because we are customer-funded, and the bond costs I mentioned. You would have to take on all those costs if you want to take on the Hoover hydropower.

Chair Brooks:

Are all of those costs, including the energy, incorporated into that \$23 per megawatt hour?

Jayne Harkins:

Yes.

Chair Brooks:

Is it a flat contract with CRC taking a certain amount of the capacity all day, every day, or does it fluctuate based on load or other factors?

Gail Bates, Assistant Director of Energy Services, Colorado River Commission of Nevada:

Hoover Dam is unique in that it can be shaped on an hourly basis. As long as we adhere to the capacity limitations, we can fit as much energy into the on-peak periods as the capacity will allow.

Chair Brooks:

If you are shaping that capacity, is there a different price, or is it all \$23 per megawatt hour regardless of when you are taking it and when you are delivering it?

Gail Bates:

It is all \$23 per megawatt hour, irrespective of how the power is being utilized. It would have more value in the on-peak period if we were able to shape it there.

Jayne Harkins:

That is the 2016 cost. The cost can change from year to year if there is less energy developed. We are paying the operation costs of Hoover Dam, Bureau of Reclamation of the U.S. Department of the Interior, and Western Area Power Administration, and sometimes we throw in "wide-head" turbine, which will raise the cost, but that is approved by the contractors at Hoover Dam. Costs can shift from year to year.

Chair Brooks:

How many contractors are at Hoover Dam?

Jayne Harkins:

Currently there are 15. Post-October 1, 2017, I would have to get you that number. I know 46 tribes have been added, so the number will increase quite a bit.

Assemblywoman Bustamante Adams:

In regards to the drought information you mentioned [page 13, ([Exhibit E](#))], given the heavy rainfall, how long does it take to come up with new numbers of where the gap is from previous numbers to the number that has been replenished? How long does it take to get new information?

Jayne Harkins:

Every month the Bureau of Reclamation updates the monthly model and projects ahead the next two years. Every month they are updating inflow projections and people's water use.

Assemblywoman Bustamante Adams:

Do you have anything more recent?

Jayne Harkins:

We have received the February numbers and information. It has been very favorable. The April to July runoff into Lake Powell is 139 percent of normal. The snowpack this month is about 159 percent of normal. That is going into Lake Powell for storage. We have

to see when the operations would begin to move that water to Lake Mead. We do know in January, the intervening inflow, the flows coming directly into Lake Mead from Lake Powell, was 200 percent of normal. We also know there has been a lot of rain in large irrigation districts in the Imperial and Yuma Valleys, so they have reduced their water orders. Currently, our projection for January 1, 2018, is three feet above the shortage elevation. We have had great improvement. In February and March, if the snowpack gets high enough, they would begin increased releases out of Lake Powell to Lake Mead in April. It is not quite there yet.

Chair Brooks:

Are there any further questions from the members? [There were none.] I appreciate the overview. The next presentation will be from Angela Dykema from the Governor's Office of Energy, Office of the Governor. She will do an overview of the office, and following the overview, she will provide information to the Subcommittee about the New Energy Industry Task Force Technical Advisory Committee on Clean Energy Sources.

Angela Dykema, Director, Governor's Office of Energy, Office of the Governor:

I would like to thank you for the opportunity to present an overview of the agency, as well as the New Energy Industry Task Force, which will be a separate presentation.

I will start with a brief history of the Governor's Office of Energy before I get into our current structure and function. The Office of Energy was originally created in 1975 as the Nevada State Office of Energy. It was created in response to the Middle East energy crisis to respond to fuel shortages across the West. The initial responsibilities of the office included emergency planning functions and coordinating energy programs and activities throughout the state. The agency has been reorganized as duties have changed over the years. Some programs were transferred to other agencies, such as the Department of Business and Industry, and other duties and agencies were absorbed by the Office of Energy, such as the consolidation of the Nevada Energy Commissioner.

In 2001, the office was renamed the Governor's Office of Energy, and the administrator position became a cabinet-level director position with a deputy director position created to handle the day-to-day management of the office. I am pleased to have my Deputy Director, Matthew Tuma, here tonight.

The mission of the Office of Energy [page 2, ([Exhibit F](#))] is to ensure the wise development of our domestic energy resources while promoting economic development. Our core functions are to encourage renewable energy programs, energy efficiency and conservation, and exportation of energy. I serve as both the Director of the Office of Energy, as well as the Governor's energy advisor. The agency functions as both a facilitator for effective communications amongst our key stakeholders, as well as a policy body implementing the laws of the state as defined in *Nevada Revised Statutes* (NRS) Chapters 701 and 701A. Within these statutes, we administer a number of energy programs around our primary focus areas, which I will touch on in a moment.

Although the agency has grown over the years, we are still very small [page 3, [\(Exhibit F\)](#)]. We are currently budgeted for 13 full-time employees. Our staff consists of three program managers along with support staff to focus on each of the key policy areas. We also have a public information officer, a grants and fiscal manager, and an administrative assistant.

I will not go into too much detail on our budget breakdown [page 4, [\(Exhibit F\)](#)], but I did want to note that the agency is not funded by the General Fund. Instead, we are funded through grants, revolving loan interest, application fees from applicants to our tax abatement programs, and primarily the Renewable Energy Fund, which receives the state's portion of property taxes from renewable energy projects that have received abatements between 2011 and 2013. This slide gives a visual breakdown of those revenue sources. We do have three budget accounts: the Renewable Energy Fund, the Revolving Loan Fund, and the operating account, which is also funded by a portion of the Renewable Energy Fund.

Under the agency's renewable energy sector, we have the Renewable Energy Tax Abatement program [page 5, [\(Exhibit F\)](#)], which awards partial sales and use tax and partial property tax abatements to renewable energy producers. To be eligible, the projects must employ at least 50 percent Nevada workers, pay 175 percent of Nevada's average wage, and offer health care benefits to workers and their dependents. This has been a very crucial tool for attracting renewable energy development to the state, and it has been a very successful program. We have invested \$721 million in tax incentives to date, which has attracted nearly \$7 billion in capital investment through capital investment, payroll, and taxes paid. It represents a 10 to 1 return on investment for the state. The program has also created over 4,600 jobs that pay an average wage of over \$37 per hour.

Our Revolving Loan Fund is funded from the American Recovery and Reinvestment Act of 2009, and provides short-term, low-cost loans to developers of eligible projects in the state. The loans are a bridge-financing option to provide funding for the various startup costs associated with renewable energy and energy efficiency projects.

The Nevada Renewable Energy Technical Assistance program is a recent grant that was awarded to our office. It is the U.S. Department of Agriculture Technical Assistance Grant that we administer. The initiative provides development assistance for small businesses and agricultural producers in Nevada's rural counties. Through the program, we partner with the Desert Research Institute to educate participants about renewable energy technologies available to them, as well as the pathways to financial assistance.

Under our energy efficiency sector [page 5, [\(Exhibit F\)](#)], we have a number of programs as well. With building codes, the Governor's Office of Energy is required by statute to adopt the latest version of the International Energy Conservation Codes (IECC), which is a model for the establishment of minimum design and construction requirements for energy efficiency measures. Every third year, we adopt the most recent version of the IECC. Currently, we have the 2012 codes, which were adopted on July 1, 2015. On July 1, 2018, we will adopt the 2015 IECC. There is always a three-year lag.

Our Green Building Tax Abatement program offers building owners tax incentives for installing energy efficiency measures. Incentives range from 25 percent to 35 percent of property taxes paid for periods of 5 to 10 years, depending on the Leadership in Energy and Environmental Design (LEED) or Green Globe Certification level. The LEED is the rating system used by the U.S. Green Building Council, whom you heard from last week. Green Globe Certification is an equivalent rating system from the Green Building Initiative.

Our State Building Energy Benchmarking program is a tool to meet the goals set forth in NRS 701.215 and 701.218, which are to establish a program to track the use of energy in state-owned buildings, and a plan to target buildings with inefficient energy use, reduce energy consumption, and lower energy costs. We have recently contracted with a company called Lucid Design Group to integrate the 500 largest state-owned buildings into a database and target the buildings with inefficient energy use for reporting usage and costs with the goal to identify measures that can be implemented to reduce those costs and consumption.

The last few programs listed on this slide are agency programs that the Office of Energy has developed internally, not necessarily within statute but to meet our policy goals. Performance Contract Audit Assistance Program (PCAAP) is an alternative financing mechanism to accelerate investment in energy conservation measures and accomplish energy savings projects without upfront capital. The way it works is an energy service company will perform an energy audit and identify improvements that will save energy. They guarantee that the improvements will generate enough cost savings over the term of the contract. Our office will actually fund the financial grade audit, which is the first step to determine whether a project is worth pursuing. We have awarded over \$1 million in performance contracting projects across the state since we started the program in 2014. There are a number of projects we are expecting to come into the program as well.

Our Home Energy Retrofit Opportunities for Seniors (HEROS) provides an energy assessment to eligible seniors. After the energy audit, we perform weatherization measures and installation of things such as windows, attic insulation, duct, ceiling, furnace cleaning or replacement, et cetera. We provide a \$6,000 grant, and up to \$8,000 for veterans. It actually comes out to a savings of about \$900 annually for each senior who participates in the program, which is significant for low-income individuals.

The Direct Energy Assistance Loan (DEAL) program is a benefit that provides State of Nevada employees an interest-free loan for energy efficiency programs and is paid off through a monthly payroll deduction. We fund the program and partner with the Nevada Housing Division, Department of Business and Industry, to administer it through their system of contractors and community action agencies.

Last but not least, is the Nevada Electric Highway. This was an initiative we announced a couple of years ago in partnership with NV Energy and Valley Electric Association to install electric vehicle charging stations along U.S. 95 between Reno and Las Vegas. To date, we have two charging stations that are operational in Fallon and Beatty.

The remaining two on U.S. 95 should be operational by the end of this fiscal year. We are also looking at opportunities to expand the reach of the Electric Highway and install charging stations across all of our highway systems.

Beyond administering the programs to meet the statutory goals, there are some other sources I wanted to touch on, which also highlight our energy policy goals [page 6, [Exhibit F](#)]. In 2016, Governor Sandoval published his Strategic Planning Framework with input from cabinet members. The specific goal governing our agency is listed in section 7.2 to become the nation's leading producer and consumer of clean and renewable energy. The objectives to reach that goal are set forth on the slide. As you can see, a number of our agency programs are complimentary to reaching these goals.

I also want to mention the Governors' Accord for a New Energy Future [page 7, [Exhibit F](#)], which you did hear mentioned last week from the Clean Energy Project as well. The Accord is a bipartisan group of 17 governors across the nation who have all signed on to the state-led initiative, which enables participating states to work together and identify opportunities in the clean energy sector in challenges that we are all facing together.

The goals of the Accord are listed on the slide, but I wanted to highlight it because it does reflect our agency priorities. Like the Strategic Planning Framework, it serves as a guiding principle for our state's clean energy policies.

This slide [page 8, [Exhibit F](#)] lists the emerging energy issues that have dominated the scene in the past year that affect our agency, which we expect to continue as hot topics this session and beyond. There were many to choose from, so I tried to narrow it down to what would fit on one slide. First and foremost is the continuing discussion around resource valuation. I will not go into too much detail, but it is a topic that has involved the Office of Energy through participation on the New Energy Industry Task Force and many stakeholder meetings. It is not unique to Nevada. There are many other states around the nation that are dealing with the question of how to value distributed energy resources, like rooftop solar and storage, and how the different ancillary benefits of baseload resources should be compared to intermittent resources. It is an ongoing discussion that we expect to see continue.

The topic of portfolio diversity is another issue that will be addressed this year. A renewable portfolio standards (RPS) increase was the topic of discussion at multiple Task Force meetings. While it ultimately did not make its way into our final recommendations, the Task Force actually did recommend a similar measure to reduce the amount of electricity produced by fossil fuels down to 50 percent by 2040. It was kind of an inverse RPS recommendation. As you saw from the presentations last week, our current portfolio consists of roughly two-thirds natural gas, and we do recognize the importance of a diverse energy portfolio consisting of all viable resources.

Corporate sustainability policies, also known as 704B [NRS Chapter 704B], while not something directly affecting our office, are a trend that we are seeing across the state as more companies are choosing to be powered from 100 percent renewables. The challenge is that exiting the system may present with stranded assets paid for by other customers, reliability, et cetera.

Regional integration is also a hot topic we expect to continue to be discussed and how Nevada might take advantage of the economic opportunities that a regional market might present. Similar to the energy imbalance market that NV Energy joined in December 2015, a regional energy market could optimize resources and enable dispatch of low-cost renewables to meet our neighboring states' clean energy goals. That export opportunity aligns with our agency mission as well.

I will get more in depth in the integrated resource planning process when I go through the Task Force recommendations. However, this is a bill that the Office of Energy is carrying to ensure we do continue to maintain a diverse energy portfolio based on all relevant criteria.

Last but not least, clean energy financing continues to be a topic of interest. Last year, the Office of Energy was tasked with providing administrative and technical support to the Interim Legislative Committee on Energy to conduct a study on the viability of a green bank in the state. Through partnership with the Energy Foundation, we were able to enlist the services of the Coalition for Green Capital to complete the study for the committee. It is available as a resource to this Subcommittee should there be additional legislation that comes up this session.

Of course, there is also property assessed clean energy (PACE), which is also a bill my agency is carrying as a result of the Task Force recommendations. I will expand on that in a moment. That wraps up my agency overview. I would be happy to answer any questions.

Chair Brooks:

I have a question about the budget [page 4, [Exhibit F](#)]. You talked about the Renewable Energy Fund, which is the largest share. What does that look like moving forward? Is it an annual budget based on projections of the monies coming in? I know they are long-term contracts, and they pay a little bit every year. Could you briefly talk about what that looks like and how it is projected?

Angela Dykema:

Currently, we receive about \$3.7 million annually as revenue into our budget from the Renewable Energy Fund. The revenue coming in will decrease over time; not significantly, but it will decrease with depreciation and, of course, they are finite contracts. The program was started in 2011, so we will continue receiving revenue from the account through about 2030 or 2035.

Chair Brooks:

Are there any questions from the members? [There were none.]

Angela Dykema:

The New Energy Industry Task Force [page 2, [Exhibit G](#)] is managed by the Governor's Office of Energy, separate from the Committee on Energy Choice that was recently announced by the Governor. This is the Task Force that met throughout 2016 to provide recommendations on energy policies. I have provided the Subcommittee with a handout of all the final Task Force recommendations ([Exhibit H](#)), which were included in the report to the Governor last fall for reference. The recommendations are also available on our website for the public as well.

The New Energy Industry Task Force is a statutory body created in NRS 701.500 to 701.515. This slide [page 2, [Exhibit G](#)] shows the membership and how it is defined in statute. As the Director of the Office of Energy, I served as the Chair on the Task Force. The other 11 members were made up of representatives of large-scale solar, geothermal, wind, distributed generation, an electric utility, environmental interests, a labor organization, and contractors. An additional three members are left to the Director's discretion. This time around, we appointed two members of the Legislature, as well as a member of the Office of Economic Development, Office of the Governor.

The Task Force had not met since early 2013 when the former Office of Energy Director had chaired it, but it was placed on the agenda of the Sunset Subcommittee of the Legislative Commission early last year. At that time, we thought it would be an opportune time to reconvene the Task Force to not only address the issues surrounding net metering, but also broader state energy goals.

In February 2016, Governor Sandoval issued Executive Order 2016-04 [page 3, [Exhibit G](#)] convening the Task Force and charging it to address policies to encourage the development of clean energy sources and integrate renewable technologies into Nevada's energy sector; create a modern, resilient, and cost-effective energy grid; and to support distributed generation storage with a specific focus on rooftop solar and net metering. We were directed to deliver a report of the recommendations and findings to the Governor by September 30, 2016.

At the first Task Force meeting, we actually voted to establish three separate technical advisory committees to assist the Task Force in each of the three policy areas set forth in the order. Those committees are the Technical Advisory Committee on Clean Energy Sources, the Technical Advisory Committee on Grid Modernization, and the Technical Advisory Committee on Distributed Generation and Storage [page 4, [Exhibit G](#)]. This was important because we were up against a deadline of June 1, which is the Executive Branch bill draft request (BDR) deadline to come up with any recommendations that would require statutory changes.

The Task Force did come up with a set of ten recommendations [page 5, [Exhibit G](#)] with the help of the technical advisory committees for the Governor to consider putting forth as BDRs. We selected three. The first, which is actually not included on this slide, was the recommendation to grandfather in the net metering customers who had systems in place prior

to the Public Utilities Commission of Nevada's (PUCN) December 2015 decision enacting the new rate system. That BDR was ultimately withdrawn after the settlement agreement was reached late last year to grandfather in the 32,000 existing customers.

The other two recommendations selected were put forth as BDRs by the Office of Energy, and those are listed here on the slide. Assembly Bill 5 has to do with property assessed clean energy. This bill is currently assigned to the Assembly Committee on Government Affairs and awaiting a hearing. The third recommendation from the Task Force is Senate Bill 65, which includes a couple of revisions to the integrated resource planning process conducted at the PUCN. This bill is currently assigned to the Senate Committee on Commerce, Labor and Energy.

The final report to the Governor included 27 different recommendations for the best energy policies for Nevada's future [page 6, [Exhibit G](#)]. I will not go into every single one, but I tried to summarize them in a colorful manner in categories. There are seven different recommendations related to rooftop solar and net metering. Those ranged from things like allowing solar generation to receive points for energy code compliance; to directing the PUCN to establish a value of solar; establishing a minimum bill as a compromise measure until that value could be decided upon; guidelines for implementing community solar projects or community solar gardens; and incentivizing solar on newly constructed homes. With the portfolio diversity and resource planning, we have S.B. 65, the fossil fuel reduction target, inverse renewable portfolio standards, and storage. We had recommendations to include a definition of storage in statute and what the technology is, and that it be considered in utility planning processes, and having the PUCN study cost-effective procurement targets.

For clean energy financing, we have A.B. 5, PACE, including battery storage and the definition of eligible PACE projects. We had some recommendations for repurposing NV Energy's renewable generations funding to promote new technologies and demonstration projects for technologies like storage and electric vehicles.

In the energy efficiency category, we had a recommendation to give the PUCN the authority to consider decoupling if found to be in the public interest. There was a recommendation for a carve-out of 5 percent of demand-side management funding to help low-income people with energy efficiency programs with some parameters.

Some of the policy recommendations that did not require statutory changes were related to clean power plan continued planning, some recommendations related to electric vehicles, and developing a state plan to accelerate the adoption of electric vehicles. We had a recommendation for the Office of Energy to engage in the U.S. Department of the Interior, Bureau of Land Management's Section 368 Energy Corridor Regional Review Project. They are going through a regional review of all of the west-wide energy corridors, so we are actively engaged in that project and helping to track if they need to be revised or moved.

We did have a recommendation to continue working collaboratively with western states on regional energy issues that maximize the opportunity to advance the development of renewables in the state and lower costs for consumers.

I will conclude the presentation by touching on some of the recommendations that you may see come up this session [page 7, ([Exhibit G](#))]. Recommendations 17 and 18 [pages 13 and 14, ([Exhibit H](#))] are related to some of the solar recommendations of the Task Force, such as establishing a minimum build and community solar gardens. Recommendations 2 and 3 [page 2] were combined into one BDR, which is now S.B. 65. Recommendation 13 [page 10] is related to storage procurement targets and is included in BDR 58-642. Recommendation 5 [page 4] is for PACE and is in A.B. 5. Recommendation 9 [page 6] for the 5 percent of utility demand side management (DSM) carve-out for energy efficiency programs is now Assembly Bill 223.

Chair Brooks:

On the Task Force, it can only be convened through an executive order. Is that correct?

Angela Dykema:

The most recent times it was convened were by executive order. However, in statute, I believe it gives the Director of the Governor's Office of Energy authority to convene it. Of course, I would never do that without the Governor's permission.

Chair Brooks:

Can the Legislature convene the Task Force?

Angela Dykema:

I do not believe so.

Assemblywoman Bustamante Adams:

I want to make sure I understand this correctly. For this Task Force, are you providing administrative and technical support?

Angela Dykema:

For the Committee on Energy Choice, yes. We will have a representative as an ex officio member on the Task Force, and then my office will be providing administrative support.

Assemblywoman Bustamante Adams:

If there is a financial cost, will that also come from the Governor's Office?

Angela Dykema:

Financial cost as far as meeting rooms and that sort of thing?

Assemblywoman Bustamante Adams:

Consultants or other people we may need to testify from that group.

Angela Dykema:

As far as consultants and third-party reports, that could also potentially come from the Office of Energy as well.

Chair Brooks:

Does that show up as an additional line item in the budget, or is it expanding the scope under your existing budget?

Angela Dykema:

I believe it would most likely require a work program. However, we do have the funds available through the Renewable Energy Fund.

Chair Brooks:

That account seems to pay for a lot of things.

Angela Dykema:

It does.

Chair Brooks:

Are there any further questions from the members? [There were none.] I appreciate your presenting for us. Is there anyone here for public comment?

Fred Voltz, Private Citizen, Carson City, Nevada:

I do not have any written comments. This will be very extemporaneous based on what I have been hearing this afternoon. Most of my comments will go either to things I have heard from the Bureau of Consumer Protection, the Governor's Office of Energy, and the PUCN.

The first concern I have is I take great exception to any agency claiming they have all three branches of government's powers. I think all of us were taught in government class in high school that there is very distinct separation between the Judicial, Executive, and Legislative Branches. They have specific powers. The intent is to balance each other out, so no one branch has more power than the other. To claim that the PUCN has all three of these powers in some quasi-form does not really pass the litmus test in my opinion and based on what I understand of government.

Secondly, the PUCN is not a full-requirements resource as it was claiming to be. For each of the General Rate Cases that happen every three years, they have to hire independent consultants to do depreciation calculations, even though they have a certified public accountant heading up the financial function with several other people. Because of the recurring need, if there was not the training or the experience within the staff, it would seem reasonable to send staff to continuing education, so they would be competent and they would not have to hire a consultant. Similarly, twice before the current Chairman came to the Commission, the PUCN hired outside consultants to do the net metering calculation of cost and benefit. That was not something that, even with a 56-person operation and a 5-person policy analysis staff, they could do internally. That is concerning given what they

are claiming. Also, the Regulatory Operations function is really not independent because it is funded from the same mill tax that funds all the PUCN. There is really no great separation or independence, as was claimed.

All of this really leads to some of the comments that were being made by the Bureau of Consumer Protection, specifically on stranded costs, and also, what we know or what we do not know about the cost of going to 100 percent renewable in this state. We have talked about many programs, and the Governor's Office of Energy outlined all the various initiatives they are undertaking. However, before we actually mandate anything further, it seems, given the existing technology, it would be very helpful to know just how much all of this is going to cost the rate payers, because that is who it will be passed along to. It seems the Governor's Office of Energy has the best range of information on the subject and should be tasked to come up with that summary number to then figure out what sort of policies should be going forward or not.

Chair Brooks:

Thank you, Mr. Voltz. If you would please leave your information with the secretary, I would appreciate it. Is there any further public comment? [There was none.] Our next meeting will be on Wednesday, February 22, 2017 at 4 p.m. or after the adjournment of the Assembly Committee on Commerce and Labor, whichever comes first. This meeting is adjourned [at 5:55 p.m.].

RESPECTFULLY SUBMITTED:

Earlene Miller
Recording Secretary

Lori McCleary
Transcribing Secretary

APPROVED BY:

Assemblyman Chris Brooks, Chair

DATE: _____

EXHIBITS

[Exhibit A](#) is the Agenda.

[Exhibit B](#) is the Attendance Roster.

[Exhibit C](#) is a copy of a PowerPoint presentation titled "Public Utilities Commission of Nevada," dated February 2017, presented by Joseph C. Reynolds, Chairman, Public Utilities Commission.

[Exhibit D](#) is a document titled "Order Granting In Part and Denying In Part General Rate Application by Sierra Pacific Power" by the Public Utilities Commission of Nevada, dated December 28, 2016, submitted by Joseph C. Reynolds, Chairman, Public Utilities Commission of Nevada.

[Exhibit E](#) is a copy of a PowerPoint presentation titled "Colorado River Commission of Nevada (CRC)," dated February 20, 2017, presented by Jayne Harkins, Executive Director, Colorado River Commission of Nevada.

[Exhibit F](#) is a copy of a PowerPoint presentation titled "State of Nevada Governor's Office of Energy," dated February 20, 2017, presented by Angela Dykema, Director, Governor's Office of Energy, Office of the Governor.

[Exhibit G](#) is a copy of a PowerPoint presentation titled "State of Nevada Governor's Office of Energy New Energy Industry Task Force," dated February 20, 2017, presented by Angela Dykema, Director, Governor's Office of Energy, Office of the Governor.

[Exhibit H](#) is a document titled "New Energy Industry Task Force Final Recommendations," dated September 30, 2016, submitted by Angela Dykema, Director, Governor's Office of Energy, Office of the Governor.