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GOVERNOR'S OFFICE OF ENERGY

MINUTES
New Energy Industry Task Force

July 27, 2016

The New Energy Industry Task Force (NEITF) held a public meeting on July 27, 2016, beginning at 9:04 AM. at the following location:

Legislative Counsel Bureau
Grant Sawyer State Building
555 East Washington Avenue, Room 4412
Las Vegas, NV 89101

The meeting was also available via videoconference at:
401 S. Carson Street, Room 3137
Carson City, Nevada 89701

1. Call to order and Roll Call: The meeting was called to order at 9:04 AM by Chair Angela Dykema. The agenda item was opened up for roll call and a quorum was confirmed.

The following Task Force Members were present:

Task Force Members

Angela Dykema, Chair
Danny Thompson, Member
James Oscarson, Member
Josh Nordquist, Member
Kathryn Arbeit, Member (Carson City)
Kyle Davis, Member
Matthew Tuma, Member
Patricia Spearman, Member
Starla Lacy, Member
Tom Ewing, Member

Task Force Members Absent

Beth O'Brien, Member
Jeremy Susac, Member

2. Public Comment and Discussion: Chair Dykema opened Agenda item number 2 for public comment.

Richard Birt, a firefighter with the Las Vegas Fire and Rescue for 25 years, stated that he has lived in Cold Creek for ten years and he does so off the grid. He provided a letter to the Governor signed by 508 fire fighters who are concerned about the industry, how it has dropped off, and expressing their desire to see roof top solar. He would like to see a policy in which the community has the opportunity to have solar again.

Duana Malone and Mathew Alexander spoke about the Adelano Solar ColdBox, a cold food storage container that produces water and ice with electricity from solar panels.

David Sharp commented as follows, citizens should be encouraged to drive an electric vehicle and to power their transportation via solar power. Given proper PACE financing, consumers could swap fossil fuel and vehicle maintenance costs in exchange for a solar canopy in an electric vehicle. This vision of the future is one that we can create immediately once Nevadans are given the right to procure their own solutions for sustainability. The Solar Energy Industries Association and the Nevada Renewable Energy Laboratory have offered decoupling policies that can provide a win-win strategy to both utility companies and customers by breaking the link between electricity sales and revenues. Currently only 14 percent of Nevada's electricity generation comes from in-state renewable resources. I urge this Task Force to adopt the Clean Energy Sources Subcommittee proposal on carbon curtailment. Increasing our renewable portfolio standard is necessary for our future security. A much greater difference can be made if the individual consumer is empowered to join in the collusion for a sustainable future.

Harold Carnes spoke about people who come from communities of color and that are hard up on money. He also spoke about his fight to preserve our planet and desire to have access to clean energy because he would like to see his energy bills go down.

Christian Castellanos commented as follows, I know I might seem young, I'm actually 14 years old, but you guys are here deciding my future and that's why I chose to come up here and give my public comment. So I would like to start off by talking about our planet. Our planet is in danger. Our water is being contaminated, our air is being polluted, and our soil, our ground, it's being poisoned. Our communities don't deserve this. We have to guarantee our children a world that is habitable and a world that is sustainable for them and future generations. We have allowed fossil fuels to power most of our energy in this state. In fact, according to the U.S. Energy Information Administration, Nevada generates 63 percent of its energy from natural gas. That's outrageous, and what's even more outrageous is the fact that almost 90 percent of the energy that our state consumes comes from out-of-state. We are more than capable of using our own resources to power ourselves, yet we are slaves to the industries, the industries that feed life to the population, and the industries that will not fight for us if it means not making a profit. Greed is their master. Greed drives them to destroy our air in order to benefit themselves. Greed is what might someday be the nail in the coffin for our planet. Greed is borne out of ignorance. Ignorance comes in many different ways. Sitting down and letting our planet waste away and not doing a single thing about it, that's ignorance. You shouldn't, just sit there and ignore all the problems that are going on in the world. And according to Gallup, only 64 percent of Americans are worried about climate change. 64 percent is a very low number, in my opinion, and it's unacceptable. It's very disappointing to know that not many of us care for what's actually going on in our world, yet people are voting against clean energy, they are the problem, and they know that the problem exists, yet people like Donald Trump and others are

denying that this problem is real. This problem is very real. Climate change is not a debate; climate change is a fact. That's why we must change. People fear change, but a great philosopher once said that the only thing constant in life is change. We have to teach the children better, and we have to tell the fossil fuel industry that they will no longer be our masters. We have to break away from coal and head towards a brighter Nevada. We have to commit to do something for a change, but not just commit, we have to do something. Sometimes words don't match actions, but most of the time words don't match intentions. What we have to do is we have to plant saplings, saplings that will become trees, trees that will bear fruit, that fruit will have seeds, and those seeds will give rise to new saplings, and our fruit will nourish us today. I know I'm young, but I'm fully aware that I will not live long enough to see all of this change. I might live long enough to see renewable energy, but it's going to take much longer than a lifetime to restore the destroyed ecosystems. And Nevada has to be what Nevada should be, and Nevada should be a beautiful state, a green state, and we must fight to ensure that that becomes the reality in our future. I would like to end my statement with another quote. The quote, I think is a Greek proverb. The proverb states: A society grows great when old men plant trees which shade they know they shall never sit in. This quote refers to wise men, who in Greek times were the elderly. Wise men who plant trees, knowing they will never sit in the shade is what we are. And after you leave today, if you want to do something about our planet, let that action be wisdom. Be wise, plant a tree, and have a beautiful day.

Alejandro Romero appeared to represent the masses that were working and Latinos. He discussed how asthma affects 40 percent of Latinos and that almost half of all Latinos live in the 25 most ozone polluted cities in the United States. He encouraged roof top solar to continue and stated he was present on behalf of CHISPA of Nevada.

A.J. Buhay stated that he is a community organizer with the Progressive Leadership Alliance of Nevada. I want to say that this Task Force has failed at the job to include communities of color and low income families in the important conversations of Nevada's energy future. We are demanding that this Task Force recommend policies to the Governor that will guarantee all Nevadans will have the final decision on their energy future, not Nevada Energy, not Berkshire Hathaway, and especially not Warren Buffett. By adopting policies that promote virtual net metering and community solar projects, we will finally break the monopoly that national energy companies have a hold over Nevadans. We demand that this Task Force support policies that include Green Banks to support green energy community projects, and that will allow energy co-ops that will promote energy independence from big corporate utilities. Creating a new clean energy will be Nevada's opportunity to start a just transition. By paving a way for a new clean energy economy, we can reshape Nevada's clean energy future that will include and ensure opportunities from workers from the old dirty energy industry to transition into a clean energy economy that will include workers from communities of color and low income families, and the many young and talented Nevadans all across the State. By including policies that will ensure new job opportunities with living wages, retraining, and new and continuing education in future green jobs, we are ensuring that Nevadan workers will not be left out of this booming industry.

Josh Morina discussed his disappointment with the PUC's decision regarding energy efficiency programs. He asked that the Task Force help improve their quality of life by using electricity more efficiently.

Sessa Vortese appeared to support solar energy as the main source of power in the state. She would like to give the next generation the opportunity for a bright future. She would like to see the PUC's decision reversed and a welcoming of clean energy corporations into the state.

Lyn Twitchell, a small business owner, discussed what appears to be a retrograde in Nevada's policies for clean energy.

Quentin Abramo stated the benefits of having a LEED Silver Building, including the ability to manage costs and operating expenses. He expressed his support for all solar programs.

Zach Conine spoke about the PUC's decision and asked the Task Force to provide certainty with regards to rates, subsidies and incentives to regain the trust of the market and restore Nevada's reputation as a clean energy market innovator. He went on to discuss voters' concerns regarding renewable energy and their frustration with the solar policy in Nevada.

Zoe Berkery stated that she is the manager of Federal policy for the Business Council for Sustainable Energy. BCSE would like to commend the New Energy Industry Task Force and its Technical Advisory Committees for its focus on the importance of clean energy sources in the State of Nevada, and for continuing to consider compliance planning issues under the Clean Power Plan, which as currently structured puts Nevada in a good position to meet the targets. The increased deployment of energy efficiency, natural gas, and renewable energy in the power and transportation systems is contributing to a significant decline in U.S. greenhouse gas emissions. This downward trend in emissions has been occurring while the U.S. has been growing, and wholesale and retail power prices have declined or remained flat in most of the country. Looking at Nevada, sustainable electricity sources, including natural gas, have generated two-thirds of the State's energy every year since 2008, and the State has doubled its renewable energy generating capacity, driven by new geothermal, solar, and wind. Specifically BCSE is pleased the Task Force is considering the concept of a Green Bank in Nevada. Green Banks in New York and Connecticut have resulted in new clean energy and energy efficiency projects, both residential and commercial, and as a result these states' greenhouse gas emissions are decreasing. In addition, boosting energy efficiency represents an important area of opportunity for the State. While Nevadans' annual energy efficiency savings and spending have slowed in recent years, the State's utilities are implementing demand-side management programs. Scaling up such programs will play a critical role in helping the State meet its summer peak demand for electricity, and help the State return to historical levels of annual efficiency savings. Further, BCSE sees building efficiency standards and building codes as a means to create jobs, advance technology, and reduce energy demands. Overall, increasing efficiency will help the State move into compliance with the Clean Energy Incentives Program, and the Clean Power Plan, as well as benefit the residents of the State. Related to renewables, Nevada has a broad scope of technologies to consider. The levelized cost analysis conducted by Bloomberg indicates that Nevada's utility-scale wind and solar PV are within striking distance of economic viability without incentives. After accounting for incentives, utility-scale solar PV is among the lowest cost options available in the State; wind is also competitive. In addition, Property Assessed Clean Energy, or PACE, is expanding across the country, and could work well in the State to help promote the dissemination of energy efficiency and renewable energy at both residential and commercial properties. BCSE and its members are committed to helping the State of Nevada adopt clean energy solutions to its unique circumstances, and would like to be a resource to the Committee, the full

Task Force, the Governor's Office of Energy, and the Nevada Department of Environmental Protection. BCSE believes the work of this Task Force will be critical for identifying energy policies and frameworks that meet Nevada's energy needs, support economic development, or exceed Nevada's climate change and Clean Power Planning objectives.

Hernando Amaya, the communication coordinator of Chispa Nevada spoke about Latinos and thanked the Governor for the Task Force. He asked that the policies be inclusive of all Latinos as this is an important matter to all. He stated that Nevada has over 300 days of sun per year and we should be taking advantage of that. He encouraged making renewable energy available to people in low income housing. He encourage community solar projects to make this possible.

Chris Zampino thanked the Governor and the Task Force for addressing our energy needs and concerns of rooftop solar. He believes we should increase the development of renewable energy resources. He encouraged the Task Force to put forth policies that bring Nevada closer to positioning itself as the Western United States clean energy leader.

Marlene Adrian referred to the recommendations made by the Task Force during the May 26, 2016 meeting regarding net metering customers and restoring them to the same conditions and rate structure they previously had without a set time limitation. She argued there was no justification for only grandfathering for 20 years, as many solar customer generators do not lease their systems but rather own their systems. She would like to see Nevada's reputation restored as a leader in renewable energy. She spoke about NV Energy as a monopoly and requested that we bring in choice to Nevada in order to balance everything out.

Mort Friedlander expressed that he would like to see the old rates restored for people who have rooftop solar. He also stated the importance of restoring incentives in order to bring back solar companies to Nevada.

Kenneth Evans, president for the Urban Chamber of Commerce, highlighted the importance of having renewable or solar-based energy generation sources that make it possible to operate off-grid. He stated that we have a great opportunity to produce renewable energy, create better technologies in terms of distribution, and to work on better technologies in terms of storage.

Caroline Lowman would like to see the promotion of constructing energy efficient buildings.

Tom Dudas who would like to see the 20 or 25 year limitation eliminated. He highlighted the extractable lithium deposits in Nevada and how this is going to be the future gold.

Jennifer Taylor with the Clean Energy Project stated that the Clean Energy Project has been and continues to be honored to help develop innovative energy policies aimed at realizing Nevada's potential as a clean energy leader, and seeking to diversify our economy by taking advantage of our abundant natural resources, our abundant renewable natural resources. These policies are designed to answer our Governor's call to restore and advance Nevada's role in clean energy leadership.

Brookings Mountain West presented an economic development agenda for Nevada that would unify, regionalize, and diversify. The opening line from that study Nevada stands at a crossroad, yet

it appear ready to re-map its future. Brookings identified seven major industries with the potential for economic growth and diversification for Nevada. One was clean energy, another was business IT ecosystems, including data centers, cloud computing, and cyber security. Five years later, this Task Force is poised to re-map Nevada's energy future. Nevada was, as we've heard, an early adopter of clean energy development policies such as the Renewable Portfolio Standard, and now we have the chance to strike out again down the road mapped out by our Governor in his Accord for a New Energy Future, and his strategic framework for our state.

The Governor's strategic framework, it includes increasing the number of jobs in advanced manufacturing, information technology, logistics, renewable energy technology, and development of unmanned systems, and advancement mobility. Additionally, the Governor's strategic framework casts Nevada as the nation's leading producer and consumer of clean and renewable energy by, in part, significantly reducing the percentage of imported fossil fuels over the next ten years.

What you recommend will also support the work of the Governor's Office of Economic Development. Today's high-tech companies, the ones that we want to attract to the Silver State, such as the Teslas, the Faradays, the Apples, Googles, and Switches, require strong energy policies to meet their renewable energy and sustainability goals. Companies like Amazon, Facebook, and Sony have all signed onto the President's American Business Act on Climate Pledge. If Nevada wants to compete for these types of companies, we need to have strong, innovative, and consistent energy policies that mirror those companies' core values. Our cities, led by Reno and the City of Las Vegas, have recognized this and are implementing aggressive energy and sustainability standards. In support of my point, in 2014 an article in Tech Republic reported that Amazon, Apple, Google, Facebook, and others, had vowed to power their data centers with 100 percent renewable energy. If Nevada doesn't shape our energy policies to mirror the sustainability goals of the companies that we want to attract, we will not be able to compete with other markets that do. Nevada should lead with our energy policies if we don't want to miss the economic development opportunities that come with clean development. CEP and its business and the grassroots supporters look forward to continuing to work with the Task Force in developing policies that will make Nevada an innovation and clean energy leader for years to come.

Chuck Swackhammer recommended that Nevada remove the barriers for rooftop solar. He also spoke about vehicle to grid technologies and their enhancement of the grid by supplying energy storage. He also stated the need for level 1 charging stations at the workplace and in locations where people spend a lot of time.

Tom Polikalas spoke about energy policy as an economic development tool. He stated that a study performed by SWEEP revealed that there was an opportunity to create 4,000 more jobs. He asked that they find a way to fund the economic modeling to take a look at the economic impacts of saving energy and money in the State of Nevada.

David Gibson spoke about his prior work history, accomplishments and programs he has worked on as well as the energy efficiency improvements he has made to his home. He made reference to a study performed by NREL in 2015 on economically viable renewable energy potential. He would like to see the state transition to 100% renewable energy and switch from importing fossil fuels to exporting clean energy.

Bob Fulkerson discussed voting during the prior Task Force meeting regarding the 50% Renewable Portfolio Standard by 2040. He was bothered by the 2 abstentions by the Governor's appointees during the vote. He also expressed his concerns for low income communities in Nevada and the importance to take proactive measures to reach out to the Latino communities and communities of color and engage the communities in finding solutions.

Rita Sloan would like to see the adoption of 100% clean energy and have all recognize that they have a part in making the world a better place.

Laura Meek is concerned with Nevada's Renewable Portfolio Standard and the rejection of the motion to transition to 50% by 2040.

Linda Gallaspy thanked the Task Force for their work and expressed her desire to see stronger renewable goals. She listed other cities and states who have set examples of 100% renewable goals. She also spoke about natural gas and greenhouse emissions as well as the Clean Power Plan.

Dine Campbell discussed natural gas as a fossil fuel.

Theo Marine commended the Task Force for their vision but also mentioned the politics that are being played. She was also concerned with the RPS and the voting from the previous meeting. She would like to see recommendations that take into consideration low-income communities and their availability for these meetings. She would also like to see the decoupling recommendation backed by the Task Force as well as recommendations regarding weatherization and the Green Bank.

Kevin McGehee commended Governor Sandoval for convening the Task Force and discussed the market for clean energy technology. He was shocked by the PUCN's decision in December that disrupted the solar rooftop industry. He supports the recommendation regarding residential customers with solar panels and the rate class. He also hopes to see the policy recommendations directing the PUCN to prioritize energy efficiency and utility resource planning advance.

Tony Simons discussed the PUCN ruling regarding net-metering and NV Energy.

Mr. Thompson interjected that no one, including the Governor, did anything because of campaign contributions. He stated that the Governor selected these diverse, hard-working people because there are two sides to every issue.

Chair Dykema thanked them all and closed Public Comment.

3. Review and Approval of Minutes: Chair Dykema opened Agenda item number 3 and asked for any correction or additions to the meeting minutes. A motion was made to approve the minutes, it was seconded by another Task Force member.

The motion carried and closed agenda item number 3.

4. Update on Task Force Recommendations and Bill Draft Requests: The Chair opened agenda item number 4, which included the final recommendations from the last New Energy Industry Task

Force (NEITF) meeting that required legislation, and which were sent to the Governor for consideration as BDR's.

The update is that the Governor has agreed to proceed with the first recommendation on grandfathering the existing net metering customers at the pre SB 374 rates. This will be introduced as a bill from his administration.

Recommendations 2 and 3, both of which are related to the IRP planning process amendments, have been combined into one BDR by the Governor's Office of Energy, and the BDR on PACE will also be carried. So four of the six recommendations have been selected, with a total of three BDRs introduced on behalf of the Task Force by the Governor and the Office of Energy.

Chair Dykema stated that from here, it's their job to prepare additional policy recommendations for the final report to the Governor due by September 30th. The Technical Advisory Committee Chairs have been asked to start wrapping things up with their meetings. A deadline of September 12th has been set for each Technical Advisory Committee to provide a summary of their findings and recommendations in writing for inclusion into a draft final report that the Task Force will then review and approve or modify as necessary at the final meeting at the end of September.

A copy of the final recommendations from the last Task Force that was convened under former Director Stacey Crowley in 2013 has been included, as an example of the formatting for the final report.

Chair Dykema closed this agenda item and moved on to agenda item number 6 (out of order).

6. Presentation by the Technical Advisory Committee on Distributed Generation and Storage:

Chair Dykema opened agenda item number 6, she invited Matt Tuma, co-chair of the committee to present.

Mr. Tuma acknowledged all the good testimony that was heard earlier and expressed his appreciation. He began by discussing the grandfathering issue and the fact that the committee has been working to make those people whole again. He stated the committee's conversations have focused on two issues, distributed solar, rooftop solar and storage, and integration of energy storage technologies.

On distributed solar and net metering, most of the discussion has really revolved around establishing a full value of solar. This is moving off of existing law from the last Legislature session and the PUC decision last year that determined a value of solar at lower than the retail rate. The PUCN is working on establishing a value of solar through their integrated resource plans and rate cases for Sierra Pacific and Nevada Power. This process takes time, and that's created a little bit of uncertainty for the development of new rooftop solar.

What other states have done is being explored, they have established retail rates for buy-backs to provide an interim solution while they're establishing a full value of solar. They've also used time-of-use rates, minimum bills, and other options promote development and installation of rooftop solar.

There have been proposals from committee members and from the public that have looked at these options, and there have been some robust discussions, but haven't come up with a final proposal or final recommendation yet.

Traditionally, through the net metering at retail rates, the cost shift was borne by other ratepayers. There have been some proposals in the committee that have sought to pay for that through the State general fund or through other mechanisms as well. And so those proposals are being evaluated and debated, but there is no recommendation at the time. The proposals will continue to be discussed in future meetings.

On the storage side of things, there has been a lot of discussion around some of the technical and policy constraints of integrating new storage into the grid. Testimony has been heard from the PUCN on workshops that they've been going through to address some of those technical issues, as well as presentations and proposals on ways to speed that up, speed up integration and incentivize integration and put targets on energy storage in the future.

The Technical Advisory Committee expects to have some proposals by the end of this process and by the September meeting. There have also been discussions around the Renewable Generations Program and the excess funding that's expected to be left over after that program has fully incentivized all of its projects, which will be in excess of \$26 to \$36 million range. These funds could be reprogrammed to support some of these new emerging technologies, especially around the storage area.

Senator Spearman spoke about NREL's Energy Executive Leadership Academy and she encouraged everyone to take advantage of the resources provided regarding energy integration systems.

Assemblyman Oscarson expressed his appreciation for all the committees do and acknowledged the fact that recommendations are being made and will continue to be made to the Governor. He took a moment to speak about the integrity of the committee, the dedication and devotion shown by all.

The chair thanked everyone and agenda item number 6 was closed.

7. Presentation by the Technical Advisory Committee on Grid Modernization: The Chair moved on to agenda item number 7 and she invited Starla Lacy to present.

Ms. Lacy said that the committee continues to gather information to support the EMAPP project and no legislative proposals have been submitted. She discussed prior presentations made to the committee regarding grid modernization initiatives in Nevada, security reinforcements, resource and transmission planning, renewable transmission needs in the state, advanced rail energy solutions, a summary of the PUCN's investigatory docket into storage, and a presentation from the Pacific Northwest National Labs on the proper economic evaluation of storage.

Ms. Lacy shared that the committee is also working to set up a technical workshop with the National Association of State Energy Officials. With a primary focus on Nevada-based information

collection to support energy markets and planning the EMAPP project. The committee will also be looking at the challenges of generation and transmission sitting on Federal lands. She also stated that Chris Tomchuck was no longer able to participate in the committee.

Seeing no other comments, Chair Dykema closed agenda item number 7.

5. Presentation by the Technical Advisory Committee on Clean Energy Sources: The Chair moved on to agenda item number 5.

Kyle Davis began his presentation describing the main areas their discussion has been around. One, follow up on some of the policies that were brought up at the first NEITF meeting that needed more work. Two, exploring the Clean Power Plan and figuring out what moves the State should make in terms of moving forward with it.

One of the recommendations was the issue of Green Banks, the committee proposed that the recommendation of the study was followed. Another issue explored was funding for lower income Energy Efficiency Programs. The committee's recommendation was to figure out a way to do more there and figure out a funding source. The committee hopes to bring forward a proposal to the final meeting in terms of what can be done to expand lower income energy efficiency.

The third policy that was sent back to the advisory committee for more work was the proposal that was presented as an amendment to the Renewable Portfolio Standard proposal at the May meeting, which is a policy to constrain the use of fossil fuels for energy use. A significant amount of time was spent on that, and there is a recommendation that Mr. Nordquist will present on.

The other and main topic area was discussion around the Federal Clean Power Plan. The committee has been trying to gather information regarding the baseline in order to keep with the goals from the Governor's framework to reduce carbon emissions. There will be a meeting in August in which Starla will provide NV Energy's numbers in connection with the recent filing with the PUCN.

Chair Dykema then invited Josh Nordquist to begin his presentation on the recommendation from their committee.

Mr. Nordquist referred to the RPS alternative and stated that integrating more of these clean energy sources into the electricity grids can improve the flexibility and stability of these grids. He quoted Governor Sandoval's Executive Order regarding the Task Force and the Governor's Planning Framework.

He stated they discussed the RPS alternative proposal considering currently available data from the utility's publicly filed integrated resource plans. This analysis illustrated the impact based on energy produced and consumed in Nevada of the RPS alternative. Currently, according to those filed IRPs, Nevada's public utilities are planning that the State will be, at a minimum, 75 percent dependent upon natural gas for our energy production starting in 2026, and continuing through 2025.

The energy production requirements of this RPS alternative were compared to the current RMS requirements, which mandates a 25 percent RPS compliance by 2025 for the State of the Nevada.

The RPS alternative, as stated, provides an equivalent 35 percent RPS compliance by 2026, 40 percent by 2033, and 45 percent by 2040. Currently the public utilities of Nevada do not plan to integrate any more renewable energy than is required by the current RPS. This provided clear evidence that the RPS alternative would help to achieve those goals set forth for the State of Nevada, including the expansion of renewable energy sources, the diversification of the energy generation, and the advancement of Nevada as a leader in renewable and clean energy generation.

The current plan for both the retirement and acquisition of power generation assets was then examined. Based on those publicly available IRPs, Nevada's public utilities plan to retire and acquire more than three times the amount of equivalent capacity than the RPS alternative would require from clean energy sources. Additionally, the RPS alternative would create energy requirements that are currently ten years away from today. And so it was clear that the RPS alternative amendment would not force early retirement of assets, burdening the ratepayer, and that there is ample time to allow both the public utilities and the Public Utilities Commission to plan accordingly.

The current market pricing of renewable energy was discussed as well. It was noted that recent solar PV contracts, 229 megawatt's worth, which have been approved by the PUCN to be included in Nevada's energy portfolio, will provide energy at a rate less than 5 cents per kilowatt hour. More recent PV products in California will provide energy at a rate less than 4 cents a kilowatt hour, based on publicly available data. Not as recent, but public, geothermal energy pricing was noted to be sold at a rate of just over 7 cents per kilowatt hour, and it was noted by industry experts that geothermal energy prices today are expected to be less than 7 cents per kilowatt hour. It's clear that the renewable energy prices are decreasing across technologies, and it should be expected that they would decrease even further ten years from now, when this RPS alternative would create new renewable energy generation in Nevada.

Furthermore, it was discussed that the current cyclically low natural gas pricing has driven down renewable energy prices. When natural gas prices cycle upward, it would be expected that renewable energy pricing follows, which presents an opportunity to integrate low cost renewable energy for the benefit of Nevada ratepayers sooner than later. Grid reliability was also addressed. Nevada should learn from the mistakes their neighbors are making. The current Energy Imbalance Market, in which NV Energy has been taking part in for some time now, is a great example. The tremendous integration of solar generation in California has resulted in an over-generation scenario in which California utilities must dispose of excess energy. While unfortunate for California, because they have to pay others to take this energy, it's a great benefit to Nevada, who gets this energy, and even renewable energy, at unsustainably low rates. California is now dealing with grid reliability issues due to many factors, a couple of which are the same integration of solar generation mentioned before, and a considerable reduction in their natural gas supply due to the Aliso Canyon disaster. California is taking steps to resolve these reliability issues, but these steps will likely result in an increase in the cost of energy for Californians. Nevada should not be faced with such an issue, as we have the ability to properly plan and execute an energy strategy that prevents this, while providing the most benefit to Nevada ratepayers. Grid reliability is assessed and monitored mostly by our public utilities and Public Utility Commission. These organizations have the best ability to ensure that our energy infrastructure and the generation sources that are integrated in or out of the system provides stable and reliable energy for Nevada's customers.

Therefore, it was agreed to amend this RPS alternative to allow that, if the Commission determines there is not or will not be a sufficient or reliable supply of electricity made available to that provider, then the Commission can exempt that provider from such requirements for that year. Lastly, an additional amendment to this RPS alternative was proposed, with a suggestion to clarify the providers which would be required to comply with this RPS alternative. Language was added directly from NRS 704.187 Subparagraph (5), Subsection (c), and further Subsection (3), which defines an electric utility. This language in the amendment starts as: In the most recently completed calendar year, or in any other calendar year within the seven calendar years – and ends with - had a gross operating revenue of \$250 million or more in this state. This amended language was added with the intent to clarify that any electric utility in the State of Nevada, whether operating today or others potentially in the future, and 704B providers of new electric service, would be required to comply with this RPS alternative.

The amendment received ten yeas and two abstains. And so, the Clean Energy Sources TAC recommends to the Task Force that this amendment be considered as a recommendation to the Governor or the Office of Energy as a BDR for the 2017 legislative session. Renewable energy products will bring stability to Nevada's energy bills, and will provide stable jobs, and investment in economic development where it's needed the most. Renewable energy products will provide ten to 20 times more jobs than natural gas. Renewable energy will bring income to rural counties through taxes and royalties from lands that would have remained barren otherwise. Today renewable energy, and specifically geothermal, is one of the highest taxpayers in Churchill County. I believe this is only the beginning, but a great example for Nevada.

Mr. Thompson asked whether there was any analysis of the costs to ratepayers with this proposal.

Mr. Nordquist added that the costs to ratepayers was analyzed and the study was included in the packet. He added that renewable energy today is providing a competitive and potentially lower energy rate than fossil fuel can.

Mr. Thompson stated that the reason he voted against this in the first place was that this isn't about NV Energy, it is about ratepayers, and today, the reality is that we can't have everything be clean. He had a question regarding Lazard's figures and the chart by 2026. He pointed out that renewables don't operate 100% of the time and that the reality is that you would have to add almost an additional 2,000 megawatts alone of solar and other energy to meet this requirement by 2026.

Mr. Nordquist responded that the data that is in there is megawatt hours produced per year, so it's offsetting those megawatt hours. He stated that the number Mr. Thompson was referring to, the 590, is an equivalent megawatt capacity for those megawatt hours. It in no way assumes that they have to be operating 100 percent of the time. But he did say as well that he thought Mr. Thompson touched on a very good point, that one renewable is not the answer, we can't move forward with just one renewable technology alone, it has to be portfolio, a balanced portfolio of those to provide accurate and reliable sources that offset, that truly offset fossil fuels. He added that fossil fuel plants are not also on 100 percent of the time. In fact, maybe the numbers are off a little bit, geothermal and fossil fuels today geothermal actually shows they're on more of the time than fossil fuels; as one renewable though, it's not to all of them, certainly. He finished with two points: One, that we're talking about goals set a decade from now, and it is key that we have proper time to plan for both

our utilities and our Commissions, to plan appropriately to solve the goals set; and the other is that we need to provide ample time to do that based on what's happening in the renewable energy market today.

Mr. Thompson then asked how comparing renewables to combine cycle peaking plants is fair.

Mr. Nordquist replied that the utilities also cite this data in their filings.

Ms. Lacy interjected that there was not an economic analysis done on this, and returned to the fact that there is an assumption that they are going 100% capacity factor. She highlighted the importance of having an economic analysis done for the sake of credibility. She said with regards to geothermal, you would be adding 907 megawatts equivalent in 2026, and she wonders if that is even practical given that the average size of a geothermal project is 30 megawatts.

Senator Spearman pointed out the importance of using NREL's Regional Energy Deployment System's analysis especially in this conversation. She stated they have a model that she thinks will substantiate what Mr. Nordquist said and it is an independent analysis. She also encouraged moving forward with a robust agenda.

Mr. Tuma then asked whether they thought this kind of analysis could be provided by the conclusion of this Task Force.

Senator Spearman said she believed so. She spoke about the reason NREL exists and what type of resource it is.

Mr. Davis said it is important to get to the point where they actually talk about how something gets accomplished. Think about how to reach the long-term goals and plan for the future.

Senator Spearman discussed the RPS and how it needs to be viewed as a renewable energy standard as opposed to a portfolio standard.

Mr. Nordquist stated that what was set forth with this Task Force was to find what the next goals are for the State with regards to clean energy.

Mr. Davis added that this is one step in a long process in terms of how we make things into laws in the State and there will be an entire legislative session that will have to consider this as well.

Ms. Arbeit commended the members of the Task Force.

Mr. Thompson commended everyone for their hard work. However, he still questioned how you get to everything green and what impact it will have. Which is why he wants to see the economic impact on the ratepayers.

Chair Dykema asked how it addresses economic impact in this study.

Senator Spearman then explained that it is designed to look at the impact from a green or clean power policy as well as how it impacts the economy.

Assemblyman Oscarson asked whether it can be done in a timely manner so they can get it in as a recommendation.

Senator Spearman said she believed so.

Chair Dykema proposed two separate recommendations. To take this moving forward as its written and have a modeling analysis done by an independent party.

Senator Spearman added that she believed this study with NREL will validate Mr. Nordquist's information.

Chair Dykema proposed moving forward with the recommendation with a caveat to have a follow-up further analysis completed along with it or consider that as two separate recommendations.

Assemblyman Oscarson stated that the Legislature will ask for economic impact statements and the economics will be vetted.

Mr. Thompson spoke about his history with the Legislature and what happened with Enron and the mistakes that were made. For those reasons he cannot support this unless he see what impact it will have.

Chair Dykema stated that their job is to come up with policy recommendations subject to further analysis and investigation. She ask that they decide whether they will want to include this in their final report on recommendations and include the results of this study.

Mr. Davis said it would be a matter of finding a bill sponsor since they have run out of time and he's comfortable with moving forward.

Mr. Tuma asked whether they were voting to approve the motion with a caveat or to have this go back to the TAC for some additional analysis.

Chair Dykema asked for votes on a motion to pass the recommendation as written with an amendment to redirect the Clean Energy Sources TAC to conduct further analysis with the NREL modeling. They voted with six in favor and two opposed, the motion carried. Then they voted on asking the TAC to continue the investigation and into the NREL study, the motion carried.

Chair Dykema closed agenda item 5.

8. Discussion on Work Session: Chair Dykema then opened agenda item 8.

This was an opportunity for the Task Force members to discuss any other topics that may not have been previously brought up. Chair Dykema asked them to discuss the development of a vision statement going forward that incorporates not only the directives set forth in the Executive Order

convening this body, but also the goals described in the Governor's Accord for a New Energy Future and the Strategic Planning Framework. She discussed NRS 701.450 and used it as an example. She asked whether the Task Force or the Technical Advisory Committee should consider if the Office of Energy should use these funds to cover other areas outlined in the Accord and the Strategic Planning Framework.

Mr. Thompson discussed the negative impacts of the new renewable industry and the effects on Nevada and electric cars. He further explored electric cars and the implications for the state and a carbon tax.

Mr. Davis agreed that we should think about how we will deal with the carbon tax and electric vehicles. He also discussed mass transit.

Mr. Thompson added that mass transportation is going the electrical route as well. He stated that we need to discuss these things because people are not aware that we pay for our roads every time we fill up our cars.

Chair Dykema stated that there is a vehicle miles traveled study that was recently completed by the State Department of Transportation.

Senator Spearman echoed the concerns of Mr. Thompson. She added that we should concern ourselves with consumer education.

Mr. Davis said it is worth looking into whether something can be done with the fund the Office of Energy has, He also stated that a stakeholder process was very important. He said we should spend more time thinking about regionalization and how Nevada fits in the Western energy markets.

Chair Dykema summarized it by saying we should look at clean transportation issues, a way to continue the Task Force in a broader stakeholder process and possibly consider how to have funding for it and regionalization.

Mr. Thompson discussed a project he was involved with regarding converting plastic to diesel. He stated there are a lot of opportunities with garbage.

Senator Spearman spoke about Nellis Airforce Base, she thought it would be a good idea to have them present to the Task Force.

Chair Dykema asked which TAC would be the most appropriate for this.

Senator Spearman said it could be beneficial to all of them. She also referred to the 14-year old and he spoke about. She highlighted the point he made about looking at the humanitarian benefits of moving towards a more clean power resource economy. She stated that becoming a world leader means not just reaping the economic benefits, but it makes us respond to the responsibility of how do we share that and how does it benefit humanity.

Chair Dykema asked whether they wanted to make a motion to refer any of the particular ideas to one of the TACs to explore further.

Mr. Tuma recommended asking the Clean Energy Sources TAC to explore further the idea of regionalization. All Task Force members supported it.

Agenda item number 8 was closed.

9. Discussion on Task Force's Final Report to the Governor: Chair Dykema opened agenda item number 9.

Chair Dykema stated that she thought that since this was the second to last meeting, this is the opportunity to discuss these ideas, and she asked the Technical Advisory Committee Chairs to wrap up their discussions and produce a summary of their recommendations in a report format, similar to the one that she provided in the handouts today by September 12th.

She asked that if anybody on the Task Force has any similar recommendations that they would like to submit by September 12th to do so as well, and submit that in writing to her, she will then work with the Chairs of the Technical Advisory Committees to draft the recommendations and summaries into a final report. And then that will be distributed to all of us on the Task Force here for review prior to the final meeting. The following meeting was set for Tuesday, September 27th.

Agenda item number 9 was closed.

10. Discussion on Time and Date of Next Meeting: Chair Dykema opened Agenda item number 10.

The next meeting was set for Tuesday, September 27th at 9 am with the primary location in Carson City.

Agenda item number 10 was closed.

11. Public Comments and Discussion: Chair Dykema opened agenda item number 11 for Public Comment.

David Gibson Discussed the 30 people who gave public comment at the onset of the meeting with numerous suggestions. He claimed there were almost no suggestions discussed during agenda item number 8 and he showed his disapproval.

Mr. Davis interjected that he thought that it was a discussion in terms of coming up with a more comprehensive energy strategy.

Agenda item number 11 was closed.

12. Adjournment: The meeting was adjourned.