



**Mr. Van Winkle moved to approve the agenda, as amended, seconded by Mr. Griscom and approved unanimously.**

**APPROVAL OF MINUTES**

**Minutes of November 20, 2009**

**Mr. Van Winkle moved to approve the minutes of November 20, 2009, seconded by Mr. Griscom and approved unanimously.**

**Minutes of December 4, 2009**

**Mr. Miller moved to approve the minutes of December 4, 2009, seconded by Mr. Van Winkle and approved unanimously.**

**ACTION ITEMS**

- **Letter of Recommendation to the RPA on Muni Grid Study**

Chair Holian reviewed the background on a Muni Grid Study as a prelude to deciding if a letter of recommendation from the ETF should be sent to the RPA requesting this economic study.

Chair Holian explained that Santa Fe County has been interested in the possibility of a city-county municipally owned electric utility. When he was on the BCC, Commissioner Paul Campos organized a task force that contracted for a technical feasibility study with funding from the county. There were also city council members on the task force. The results of the study were that a municipal grid would be feasible, as long as the city and county worked together. Then it was determined that an economic feasibility analysis and a legal feasibility analysis would also be necessary. The city and the county were going to each put in \$100,000 for the studies. However, when Commissioner Campos was no longer on the BCC and with the economic hard times, the effort fell away and the city and county did not go forward with the studies.

Chair Holian said that she has been approached by Ms. Mariel Nanasi of New Energy Economy (NEE) who has proposed a partnership with the city and the county to do an economic feasibility study. Chair Holian said she felt that it would be appropriate for the RPA to partner with NEE because the RPA is a body where the city and the county work together and the RPA has taken up energy as a focus issue as well. The RPA may also have funds for the feasibility study. Since the ETF is taking up energy issues, she felt it would be appropriate to discuss whether the ETF should recommend to the RPA that it match the \$35,000 that NEE will obtain through funding from various grant organizations, for a total of \$70,000 to do the analysis.

Ms. Nanasi stated that NEE has a list of firms that conduct economic feasibility studies and legal analyses. Some of those firms could not make a bid because they had conflicts and represent PNM. There are two entities with the most experience that have done these studies a number of times before and could work internally with the city and the county. The economic feasibility study would come as close to what they think the PNM infrastructure is worth. It is unlikely PNM would voluntarily sell it, which means eminent domain would take over the infrastructure.

A comparison would determine whether the municipal grid could save money and bring down rates, and what kind of revenue would be brought to the participating municipalities. Following that, energy efficiency and innovative incentive rebates could be added, as is being done in other utilities across the country. NEE is researching strategies that other cities have done in order to bring carbon down, energy efficiency up, and keep rates the same or even lower. Radical changes to the current model are needed to deal with the worst impacts of climate change.

Ms. Nanasi proposed that the ETF and the NEE send a request to the RPA stating they are interested in investigating to see if a muni grid is worthwhile. The firm that performs the analyses said that every study they have done has caused benefit to the municipality. At worst, it could be used as a negotiating tool with PNM. This program has been proposed to funders and the response was overwhelmingly positive. Other cities in the state have contacted NEE asking for their materials and research.

Ms. Nanasi said that determining current depreciated book value, plus future revenues, will be a hotly contested issue. She said if the RPA agrees to go through with this proposal, a joint letter from the city and county or from RPA could be sent to PNM to learn what the current book value and infrastructure cost throughout the municipality is.

Mr. Pearson noted that 25% of Los Alamos Hydro is classed as green, and wondered if that would bring the cost down. He asked about riding the coattails of the Tres Amigas project in the northeast part of state and how it would all fit in with the aspect of a new muni fitting in with a proposed smart grid. He suggested putting a mosaic together to build the value of the muni and how it fits in the whole scheme of things.

Ms. Nanasi said she would like to offer a political campaign at the grassroots, business, and government level and have a referendum in the county, which may be unrealistic to do in November.

In reply to questions from Mr. Van Winkle about what would be studied, Ms. Nanasi stated that not every single wire and pole would be counted, but it is detailed.

As a process, Chair Holian stated if the RPA approved the study, it would go forward and appropriate the \$35,000. Because of procurement rules, an RFP would then be issued and a committee assigned to decide on the bid. Chair Holian suggested that the recommendation be made to the RPA after the upcoming city and county elections in March.

Mr. Griscom said that he was on Commissioner Campos' task force and he felt this is the next logical step for the ETF.

Mr. Miller agreed this is a good idea. He said that developing a strategy to address the technical, economic and political issues would be important to ensure that the people of Santa Fe County can make the choices that are best for them. He said he would want whoever is picked in the RFP process to have a successful track record. The study should offer a perspective on future risk, carbon and fuel cost.

Mr. Van Winkle suggested that the ETF request the full amount of \$35,000 for the economic analysis and legal study to be done at one time. Chair Holian agreed that different options could be outlined in the letter and the RPA could choose which cost to go with.

Ms. Nanasi said that she will email the proposals to the ETF for analysis.

Mr. Miller said they may want to look at a range of ownership control options.

Mr. Griscom added the letter should include reasons for doing this and what the county would stand to gain.

Chair Holian said she will distribute a draft of the letter prior to the next meeting for input from the members. She could see the ETF's role as delineating what the study would include.

Mr. Sill recommended allowing sufficient time on the next agenda for discussion and asked that the members bring suggested comments to help draft a scope of work as an appendix, so it is clear to the RPA members. He and Mr. Schiavo will supply members with reference materials for their review.

Chair Holian summarized that consensus was for her to work on the letter to the RPA and have an appendix added delineating what an economic feasibility study means. This will be discussed at the next ETF meeting.

## **DISCUSSION ITEMS**

- **PNM Settlement Agreement**

Mr. Griscom explained that PNM filed a renewables energy plan in July 2009 that introduced a level of uncertainty into the industry that was unacceptable. Industry groups, consumer advocacy groups and environmental groups entered into a protracted negotiation with PNM. The outcome was filed January 25, 2010, that created a feed and tariff with different levels for costs of kilowatt hours with built in ratchets to the program, including residential pieces.

Mr. Griscom said it moves away from net metering as a general program. PNM will sign a 15-year contract with customers and then it buys the system. The customers pay retail rates for their energy and do not bank excess kilowatt hours. This is a way to allow the utility to charge normal retail rates. The cost of the program will be spread across all rate bases and there will be a specific access charge to the customer.

Mr. Schiavo added there will not be a charge coming for people who are currently net metering, and they have signed a contract.

Mr. Pearson asked if PNM is still threatening to go to the Supreme Court. Mr. Griscom replied that both PNM and El Paso Electric have said they would, but they have agreed to withdraw the appeal if legislation is filed and passed.

Chair Holian asked if residential customers will get a monthly check for energy produced. Mr. Van Winkle said if the amount is over \$20, they will get a check, otherwise it accrues to the next month.

Mr. Griscom added, assuming this is approved by PRC, a person who puts a solar system on their roof can choose to go to the net metering route.

- **Energy Efficiency Ratings Systems**

Chair Holian stated that the county code is currently being re-written for new buildings to encourage more energy efficiency. The ETF is looking to promote different energy efficiency programs that would be more retrofit oriented.

- **Energy Efficiency Ratings**

Ms. Evans said that the DOE has over 300 authorized energy rating systems. Some programs are very simple and straightforward, and some are very complex, but the math underneath them all is basically the same. Programs written for existing buildings take into account the homeowner. New programs in general are written for just the house and how it operates in its regional climate. The important part for existing buildings is to have a trained auditor to advise on a planned retrofit.

Chair Holian asked if there are write ups that exist that give an overview of the different programs. Ms. Evans replied it depends on what is needed to know about the building and most will give the BTU per square foot of area. She gave information on the different programs.

Mr. Griscom asked if there is an emerging standard of the different programs to assess home energy efficiency value that looks at the national scope.

Ms. Evans replied that is Best Test, which analyzes calculation. The federal government is looking at a recommended set for energy efficiency retrofits under their home improvement programs. Software companies have come out with different user interfaces. PNM and New Mexico Gas want to bring in an overarching program so they can claim credits for it. There are certain things the federal government asks for. A homeowner would hire a contractor certified under the program, or an auditor, to analyze the house and put the information into a computer program. Retrofits would be done and the auditor would do tests on the house to determine the change in efficiency of the house. She added there are many computer programs that basically have the same programs.

Chair Holian asked if the city is using any of the programs.

Mr. Schiavo stated the city has had energy audits done and did an analysis of what was in the walls. In many cases there is no insulation in the walls and the roofs.

Ms. Evans stated that residential energy is different from commercial and government. She said that some of the programs are free and it is important to decide how comprehensive an energy audit is needed. It is a good green energy compass. The audit calculates how the house compares on its energy usage for that climate compared to other houses in the area. It does not give information on what to do about it, but from the square footage, it learns what should be generated. The housing trust in Oregon did a study and narrowed it down to four programs, comparing 180 new and existing homes in the sample base. They found the simple program was more accurate on existing homes.

Mr. Miller asked if county inspectors will be involved.

Mr. Sills replied the county would like to ramp up its internal capability and is trying to leverage funding received from an Energy and Minerals program. They will follow up with baseline audits that have been done on certain buildings and hope to use the information to leverage other funds. At least one staff member has been sent to get training in weatherization.

Chair Holian said that the county would like to explore the possibility of sharing inspectors with the city. The county has very little internal inspection capability because it has relied on the CID until now, while the city has always has its own. The inspection program will need to be ramped up if more green building is put into the county's code.

Ms. Evans said that the building analysis for energy retrofits of existing homes that will need structural changes will need to have a person trained on building science by Building Performance Institute (BPI). The Energy Star program requires BPI certified auditors. She added that Santa Fe Community College has become an affiliate of BPI and has full BPI training classes.

Mr. Miller stated that for new residential energy programs the standard is HERS, for existing it is BPI national certification, and commercial is all engineers. Ms. Mortimer noted there are specific models that engineers can stipulate.

Mr. Van Winkle asked where the county is on implementing the new residential green building code. Chair Holian replied it is sitting on someone's desk and she has not seen the green building part of the code. She said she would like to have input from the ETF for exactly how the code will read.

Mr. Miller said the information can be powerful for homeowners to see where they are in relation to others and asked if there is a way to provide people with their percentage energy use.

Ms. Evans replied that the Green Energy program will give information on an area. An easy tool would be provided if data could be entered for a whole neighborhood.

Chair Holian said that she wants a strong energy efficiency component to the Renewable Energy Financing District. This information should be compiled to present in the community meetings.

Ms. Evans stated there is a \$200 allowance for an energy audit, which could be anywhere from \$15 to \$1,000. She said the maximum for a straight audit would be \$350 to \$500. A HERS rating is about \$1,000.

- **HERS System and Energy 10 System**

Mr. Chalom said that he has become a historian on solar energy applications in the state and is a founding member of the New Mexico Solar Energy Association. He has done analytical models of passive solar homes and compared buildings to buildings. In the early 1980s he worked with Los Alamos on passive solar and found their building guidelines to be helpful for Santa Fe's climate. He has designed 200 homes with their model. The Energy 10 System is an hour-by-hour simulation tool to analyze and optimize buildings and takes into account different types of passive solar elements. He is working with the Department of Energy (DOE) putting together a plug-in to use Energy 10 for night sky rating and cooling.

A problem he has found with the HERS rating is that it does not necessarily give the energy efficiency of the home.

Mr. Chalom gave a history of solar in New Mexico and pointed out many books that he has used and some he has written on solar. He pointed to the Anasazi who had multifamily housing that gave every home access to the sun and other passive solar and sustainable technologies that worked with the resources that the people of Northern New Mexico had in their villages to preserve their cultures. The Sun Dwellings program in Ghost Ranch in the 1970s looked at different solar apertures, staying within the economic realms of people in Northern New Mexico. He worked with LANL in monitoring the performance of the buildings, which led to passive solar design strategies. He worked with William Lumpkins, who built the first passive solar home in 1935, and Doug Balcomb on daylit buildings to increase cost effectiveness. Ed Mazria has led the international solar movement, telling everyone that buildings are responsible for a large percentage of energy usage in this country.

Combining passive solar with adobe is New Mexico's green gift to the world. Combining high solar performance and gain with thermal mass of adobe and proper insulation and design can do much better than what a HERS rating will do. He distributed information on solar adobe.

He referred to the city's green standards and said that Ms. Mortimer did a good job working with what she had. He said that the city and county can take that work further and become leaders in the world by not buying into the national standards of HERS, which should not be used as the only standard.

Homes are being built that are not sustainable, and a 4,000 square foot home cannot be called green. Mr. Chalom is into energy conservation and building with smaller, simpler, more affordable approaches. He has conducted seminars, teaches, and holds college programs on architectural sustainable design and construction. He distributed copies of the *Green Fire Times*

that contained an essay he wrote about what direction he thinks Santa Fe is headed. It is time to start thinking globally and how global warming can be affected. It is not necessary to go to zero energy homes, and the New Mexico Solar Energy Association has an incredible amount of people who have been involved with solar for a long time.

Ms. Mortimer asked his opinion of Energy 10.

Mr. Chalom replied that he sees a major discrepancy in what the HERS rating says versus Energy 10. It does not look at passive solar homes.

Ms. Evans added there are three energy raters in town and LANL has a grant between various organizations to model several different houses in three different programs.

**DATE AND TIME FOR NEXT ETF MEETING**

Chair Holian commented that this may be the most information packed meeting that has ever taken place in this room.

The next regular meeting of the ETF will be held at 1:00 PM, Friday, January 29, 2010, in the Legal Conference room at the County Building.

**ADJOURNMENT**

There being no further business to come before the ETF, this Regular Meeting was adjourned at approximately 2:35 PM.

Approved by:

Kathy Holian  
Chair, RPA Energy Task Force  
Kathy Holian, Santa Fe County Commissioner

*Minutes drafted by: Kay Carlson*

ATTEST:

Valerie Espinoza  
VALERIE ESPINOZA  
COUNTY CLERK

