

MINUTES OF THE THREE HUNDRED AND FOURTH MEETING OF THE OHIO CONSUMERS' COUNSEL GOVERNING BOARD July 15, 2014

Members Present: Gene Krebs, Chairman

Fred Cooke Mike Watkins Fred Yoder Stuart Young

Members Absent: Jason Clark

Sally Hughes

Susheela Suguness, Vice Chair

Roland Taylor

Guests: Dale Arnold, Ohio Farm Bureau

Ramteen Sioshansi, Ohio State University

CALL TO ORDER

Chairman Krebs called the meeting to order at 9:10 a.m. Mrs. Knight called the roll.

APPROVAL OF THE MINUTES

Mr. Young moved to approve the minutes from the June 17, 2014 Governing Board Meeting. Mr. Watkins seconded the motion. With no further discussion, Mrs. Knight called the roll and the minutes were approved.

Chairman Krebs mentioned that when the meeting is adjourned Board Members are invited to join him for lunch at the Statehouse.

Additionally, Chairman Krebs mentioned three members who have received reappointments by the Attorney General: Mrs. Hughes, Mr. Yoder, and Mr. Watkins.

EMPLOYEE RECOGNITION

Consumers' Counsel Weston welcomed the members. He stated that OCC staff member Jim Williams presented at a recent NASUCA meeting where he was recognized for his efforts.

Mr. Weston also noted that Deputy Consumers' Counsel Yost made a presentation at the Ohio State Bar Association for continuing legal education on Consumer Law.

PRESENTATION BY DALE ARNOLD

Chairman Krebs introduced Mr. Arnold who updated the Board with regard to Farm Bureau policy. Mr. Arnold is Director of Energy Policy for the Ohio Farm Bureau.

Mr. Arnold stated that the next state policy meeting is scheduled for December. This meeting will be attended by 318 delegates from all 88 counties who will deliberate and help the Bureau solidify policy going forward.

Farm Bureau policy has been to have a diversified energy portfolio in Ohio. That incorporates a number of technologies: clean coal, advanced nuclear and renewables (wind, solar, biomass and fuel cell).

Senate Bill 310 gives direction to investor-owned utilities; however, municipal and rural utilities are not governed by the Public Utilities Commission. Mr. Arnold discussed a number of matters related to Senate Bill 310 and other issues.

Chairman Krebs likened the need for generation to the need for fruit trees. He said it was not known in advance whether any particular tree would be productive for bearing fruit in the next season. That meant different types of fruit trees should be planted. Similarly, there should be different types of generation available.

Mr. Yoder commented that he is concerned that Senate Bill 310 will kill the renewable portfolio. He is concerned that, under Senate Bill 310, the costs to consumers will be tracked but the savings to consumers will not. He said the message appears to be that investing in renewable energy should be done outside Ohio.

Mr. Arnold said he agreed with certain of Mr. Yoder's comments. The need to make sure that our toolbox is intact will be important. He said that Senate Bill 310 was a wakeup call in certain respects. The need for energy service providers to still work with local communities on projects is still there after Senate Bill 310. Going forward, if we see changes in Senate Bill 310, we are still going to have to work cooperatively to ensure a balance.

Mr. Yoder said that he is involved with the "25 by '25" project (25% renewables by 2025). Mr. Cooke noted his interest as well. Mr. Yoder is concerned about the new law's change that renewables will not have to come from in-state (Ohio) sources.

Mr. Young referenced the Board's interest in issues eight months ago involving the Farm Bureau. Mr. Young noted the Farm Bureau was working on policy related to the metering issues for certain farmers. Mr. Arnold replied that the Farm Bureau is still working with a number of folks regarding the issue. Mr. Young stated the Board's interest in the Farm Bureau taking the lead on the metering issue. Mr. Arnold noted that there is Farm Bureau policy on the metering issue, and that he has made the issues known to Farm Bureau leaders. There are soil issues, water issues. He spoke about the need for deciding on the allocation of Farm Bureau resources

to particular issues. People are finding out that energy development is a highly charged emotional issue for a number of people.

Mr. Arnold said, as we go forward, education and outreach will be paramount. He also spoke about potential customer concerns with propane service.

Mr. Yoder said that, similar to Mr. Arnold's point, the new legislation is a wake-up call. And he said if nothing is done the renewable portfolio will go away.

Mr. Arnold wondered that if there is another bad winter and if there are rolling black outs because of that, what will happen.

Mr. Weston noted the study committee process in Senate Bill 310 and asked if Mr. Arnold has any further thoughts on the matter.

Mr. Arnold stated that things have been quiet regarding the study committee since the legislature has been on break. There is a need to be careful and show what savings come from renewable energy. Investor-owned utilities should be invited to speak to the committee and state what savings there have been for customers in this regard.

Mr. Arnold suggested that PJM should be heard on the issues.

Mr. Cooke stated that the average consumer is ignorant to what is going on as it relates to their energy service. OCC and Ohio Farm Bureau are capable of educating consumers.

Mr. Arnold stated OCC and the Farm Bureau can work together. He said the need for education is huge. He said OCC has a tremendous asset here in terms of being able to educate the public. He said OCC should consider making outreach and education part of the discussion under Senate Bill 310.

Mr. Young stated that he has watched Farm Bureau get its members together to get results. The message needs to be a coordinated effort among advocates for customers.

Mr. Weston stated that with regard to Mr. Cook's comments on outreach and education, he and Chairman Krebs were guests on the Farm Bureau's radio program some time ago. He mentioned that this may be something to consider doing again.

Chairman Krebs suggested bringing in former members of the wind working group to make a presentation to the study committee for Senate Bill 310.

Chairman Krebs strongly urged the Farm Bureau to move the metering issue up on the issue list. He stated that according to Morning Star, Forbes Magazine, and members of the investment community, the investor-owned utilities are in a death spiral.

Chairman Krebs said it was announced yesterday that there will be an Issue 1 on the ballot. Issue 1 is a potential Constitutional amendment for a program for the state to incur debt over the next 10 years for alternative energy. Mr. Arnold said the Farm Bureau is looking at it. And he suggested that Chairman Krebs talk to Adam Sharp, Farm Bureau Vice President, and others at the Farm Bureau about the issue.

Chairman Krebs stated that this Issue is a Constitutional Amendment that would require the state to issue \$1.3 billion in bonds for alternative energy projects.

Mr. Weston read from a newspaper article on Issue 1.

Chairman Krebs urged the Farm Bureau to partner with OCC to help Ohioans manage the change.

The Board recessed at 10:20 a.m. and reconvened at 10:40 a.m.

ENERGY STORAGE

Ms. Yost introduced Dr. Ramteen Sioshansi. He is an Assistant Professor in the Integrated Systems Engineering Department and Associate Fellow in the Center for Automotive Research at The Ohio State University. Dr. Sioshansi spoke to the Board on the topic of energy storage. Chairman Krebs thanked him for presenting to the Board.

Mr. Young noted some news stories about electricity provided by cities to customers. He suggested the matter be addressed at a winter Board meeting. Chairman Krebs also said a presentation could be made for the Board.

Dr. Sioshansi briefly discussed storage technologies, history of storage in the United States, application and recent developments.

Energy storage at the distribution level has the potential to revolutionize electricity generation and consumption. The challenge has been to cost effectively and efficiently store energy. Useful energy is lost every time energy is transferred between media (e.g., electrical to chemical to electrical in a battery).

Storage technologies include: thermal, chemical, mechanical and demand response.

The United States built 20 GW of pumped hydroelectric storage in the 1970s.

Categories of storage application include: energy generation shifting capacity deferral, generation-support services, transmission and distribution capacity deferral, end-user applications, and renewable curtailment.

Efficiently built and operated storage should reduce energy supply costs and improve reliability.

In regard to generation support, all of the recent large utility scale storage projects in the United States have been fly wheels built to provide generation support services – 23 MW in New York ISO and 1 MW in PJM.

The Iowa stored energy park proposed 270 MW, \$400 million compressed air energy storage plant outside of Des Moines, IA. The project was developed by a consortium of mostly municipal utilities in Iowa and neighboring states.

An example of a distributed project is a 1 MW sulfur battery installed in West Virginia. The community in Charleston was overloading.

San Diego Gas and Electric has two substation and 12 community level and 5 additional projects planned. Because of this battery storage the community was unaware of the outage that occurred.

California has a storage mandate in law. AB 2514 directs the California Public Utilities Commission to adopt procurement targets, if appropriate, for each load-serving entity to procure viable and cost-effective storage.

The California Public Utilities Commission set 1325 MW of storage targets by 2020 for the three investor-owned utilities, with 44% each to PG&E and SCE and the remaining to SDG&E.

Energy storage targets are divided into three storage domains: transmission-connected (53%), distribution-level (32%), and customer-side of the meter (15%).

Mr. Weston asked about the requirement from the California Commission. Dr. Sioshansi stated that the storage mandate was put out in 2014, and they are still figuring out details on battery use.

Mr. Weston asked what the objective is for the residential customer. Dr. Sioshansi's opinion is that most end-use customers do not care about the details. Industrial and commercial customers tend to pay more attention to details surrounding their storage use. Residential customers are more concerned about receiving service at the lowest possible price.

Mr. Yoder asked what has happened to fuel cell technology. Dr. Sioshansi's opinion is that you have 2 major fuel cell technologies. DOE decided it would invest in PEM fuel cells. One disadvantage to PEM fuel cells is that they are expensive. Oxide fuel cells are less expensive and operate at higher temperatures.

Mr. Cooke mentioned that OSU is green and purchased 25% of their energy from wind farms in Ohio. How does that transfer to the utility? Mr. Sioshansi stated that it's essentially an offset on the books. From a financial standpoint, of the electrons purchased the energy consumed is offset by with wind produced.

Ice storage is primarily used for building cooling to supplement the output of air conditioning. Lithium ion batteries providing cost improvements technology is an issue. Water electrolysis has the same problem as fuel cells.

Dr. Sioshansi stated that some technology is in its early stages. He believes flywheels have the potential to enter the market within the year.

REPORT OF THE CONSUMERS' COUNSEL

Mr. Weston provided an update on several resolutions passed by the Board.

Resolution 13-1: This resolution pertains to preserving standard offers for Ohio residential consumers. He said OCC has made proposals consistent with the resolution.

Resolution 13-2: This resolution pertains to whether Ohioans should pay utilities for clean up of old manufactured gas plants. He said, among other things, OCC has appealed the PUCO's decision allowing Duke to charge customers.

Resolution 13-3: This resolution supports preserving the most basic local telephone service for Ohio consumers.

OCC will be attending county fairs in Allen county, Coshocton county, and Montgomery county. OCC also will attend the Ohio State Fair and the Farm Science Review.

Chairman Krebs encouraged the farm representatives on our Board to attend the Farm Science Review and spend time at our booth.

RESIDENTIAL ELECTRIC RATES FOR OHIO CONSUMERS

Greg Slone reported there are 32 states that have lower residential rates than Ohio. Mr. Slone's research goes back to 1990. The PUCO's current report on Ohio electric utility rates lists AEP as having the highest rates. The monthly AEP bill for a typical customer is \$126.39. The lowest monthly bill for a typical consumer is Duke's at \$94.66. Since 2008, Ohio has had the highest increase in residential rates among the states that have transitioned to competition for electricity prices.

Chairman Krebs is embarrassed and alarmed at where Ohio is ranked among all of the deregulated states. He asked Board Members to think about what else they would like to see with regard to this data. He said that OCC could create a chart that looks at the renewable portfolio standard. When the study committee (from Senate Bill 310) convenes, OCC should provide the committee with this information about the impacts on consumers.

The states that have some of the lowest rates do not have any renewable standards or efficiency standards. These states are energy rich and have low electric rates. Chairman Krebs stated that the chart Mr. Slone discussed is worthy of sharing with the study committee. And the Chairman said it should be asked why Ohio has higher price increases than other states with electric deregulation.

ADDITIONAL MATTERS

Chairman Krebs said that future Board meeting topics may include presentation on the life of an electron in Ohio. Mr. Young again spoke of municipal electric rates compared to utility rates. Chairman Krebs suggested we ask AMP Ohio and some of the municipal co-ops what rates they charge. Mr. Yoder stated an interest in knowing what impact wind power has.

Mr. Young inquired about the results for the most recent fiscal year and staffing levels. Ms. Knight distributed the operations report. Mr. Weston explained that OCC ended the fiscal year under budget. Mr. Weston described how personnel vacancies impact OCC's budget and described other matters related to the budget. Chairman Krebs asked that future agendas include a note for members to refer to financial statements in their Board packet.

Mr. Yoder asked what it would cost for OCC to produce a quarterly newsletter. It was noted that OCC produces a quarterly newsletter. Mr. Weston described the newsletter. Board Members who are not currently on the newsletter mailing list will be added.

It was asked if the newsletter should be sent to county commissioners in all 88 counties. Chairman Krebs recommended that OCC obtain the member email list from the County Commissioners Association. Mr. Young recommended sending the newsletter to township trustees. Mr. Watkins spoke in favor of sending the newsletter to more officials.

Deputy Yost discussed scheduling the annual ethics seminar. Chairman Krebs asked that ethics training be scheduled in person on November 12 at 2:00 p.m. If there are those who prefer to attend by webinar they will be given the schedule of online courses. The deadline is the end of the year.

There is Board interest in touring a fracking facility. Mr. Taylor is making the arrangements for that tour. OCC is looking to confirm if the costs for that trip can be paid consistent with Ohio law. OCC has been in contact with the Ohio Ethics Commission for advice on whether or not state employees can accept the bus travel and lunch.

Notice will be sent out for the September meeting as soon as possible should the location be changed.

Chairman Krebs discussed the potential that financial reports will be considered for Board approval and acknowledgement in the future. That acknowledgement will be reflected in the minutes.

The Chairman said that if we do not visit the fracking plant, the plan B will be issue 1. Mr. Young commented that issue 1 may be a higher priority.

With no further business the meeting adjourned at 12:50 p.m.

I verify that the above meeting minutes have been approved and ratified by the OCC Governing Board on this 9th day of September, 2014.

Gene Krebs, Chairman

Ohio Consumers' Counsel Governing Board

Laurie C. Knight, Secretary

Ohio Consumers' Counsel Governing Board