

**NORTH CAROLINA ENERGY POLICY COUNCIL
MEETING MINUTES**

**10:00 a.m., Wednesday, May 17, 2023
Department of Environmental Quality
Green Square Training Room
217 West Jones Street Raleigh, NC 27603**

Energy Policy Council Members Present

Lt. Governor Mark Robinson

Brian LiVecchi, Lt. Governor Mark

Robinson's designee

John Hardin

John Szoka

John White

Mark McIntire, Kendal Bowman's designee

Scott Tew

Susan Munroe

Sushma Masemore

Energy Policy Council Members Not Present

Gus Simmons

Paolo Carollo

Paul Worley

CALL TO ORDER

Lt. Governor Mark Robinson called the Energy Policy Council (EPC) meeting to order at 10:02 a.m. on Wednesday, May 17, 2023. He opened the meeting and welcomed the members and participants. With this being the first meeting, he has attended in a while, Lt. Governor Robinson had the council and SEO Director, Julie Woosley introduces themselves. After the council's introductions, and Lt. Governor Robinson's introduction, he asked for a motion to approve the EPC's February 15, 2023, meeting minutes. Mr. Mark McIntire moved to approve the minutes, and Mr. John White seconded the motion. The motion was unanimously approved. Lt. Governor Robinson then stated that the presenters would begin their presentation concerning Hydrogen. Any questions the council has will be discussed after the speakers present their topics.

Hydrogen Overview: Brian Bullecks

After introducing himself and his work experience with hydrogen technology, Mr. Brian Bullecks began his presentation on an Overview of Hydrogen. During his presentation, Mr. Bullecks talked about energy content and safety properties when concerning hydrogen flammability. Throughout his discussion, he spoke on numerous key topics that consisted of hydrogen use, it's demand in the United States, it's functions as energy storage, hydrogen colors and representations (i.e., green hydrogen, which is the most expensive to produce and is often used together to increase power availability), disruptive technologies, and many other essential items. Mr. Bullecks concluded his presentation by stating that hydrogen information exists all over, but it is important to know its value in helping to create a solution that moves society forward in energy transition.

Upon completion of the presentation, Lt. Governor Robinson asked what the difference was between hydrogen and gasoline as it concerns which is more flammable. Mr. Bullecks explained that hydrogen can be ignited very easily and has a broad range where it can become flammable

and will ignite. However, the evolution of the flames is different. Mr. Bullocks continued stating that gasoline slow flame propagation philosophy, and its fumes can spread across the ground. He states that hydrogen is more flammable, but depending on the situation determines which of the two are more dangerous. With no further questions, Mr. Lt. Governor thanked Mr. Bullocks for his presentation and moved to the next presenter.

Hydrogen Hubs: Cynthia Klein

Ms. Cynthia Klein introduced herself and her experience in hydrogen and then presented the council with the three takeaways from understanding hydrogen hubs. The three takeaways consisted of hydrogen's main potentials to support local industry/commerce in the Carolina's, extending the value of existing natural gas fired generation, and providing for fuel security (local production). Similar to the previous presentation, Ms. Klein discussed the colors of hydrogen and where they come from. While discussing blue hydrogen, Mr. Scott Tew asked where the major cost was as it concerns particular hydrogen colors. Ms. Klein answered stating that for green hydrogen, a lot of the cost is within the electrolysis cost. She additionally added that it is a manual process due to it being a new technology. Mr. Tew additionally added if it were something Duke would get into. Ms. Klein stated that while Duke wouldn't be an electrolysis supplier, they would have many customer manufacturers that they would love to bring to the state of North Carolina to produce the electrolysis. After discussing federal funding and tax opportunities, Mr. Tew asked if all the investments require matching or do some just flow through the state. Ms. Klein responded stating that the infrastructure investment and jobs act requires matching, for the hydrogen hubs, it is a 50/50 match. She also stated that the IRA tax credit does not require a cost match. Mr. John Szoka asked how many years the tax credit extends for, which Ms. Klein stated that the Treasury is currently working on the matter.

Upon the conclusion of Ms. Klein's presentation, Ms. Sushma Masemore stated that there is a lot of work to do in terms of knowledge base concerning the topic. Ms. Masemore additionally stated that from the scientific community, the production of the membranes that are used for electrolysis is related to other environmental issues. It is recommended that we progress in an environmental sound. Mr. McIntire added that Duke was intentional in identifying partners when considering the Southeast Hydrogen Hub. He also stated to the council that green hydrogen is a major topic due to the recent replacement rule from EPA, which provides an option for compliance. Mr. Brian LiVecchi asked if our existing pipeline capacity is enough to meet the standards, which Mr. McIntire answered stating that though the answer isn't definite, ours is possibly insufficient for meeting the load we expect to meet. After a few more discussions amongst the council concerning the presentation from Ms. Klein, Lt. Governor Robinson opened the floor for Ms. Woosley to present her funding opportunity updates.

Funding Opportunity Updates (IIJA & IRA): Julie Woosley

SEO Interim Director, Ms. Julie Woosley, provided the council and the public with updates concerning the numerous funding opportunities that SEO is currently working on. Ms. Woosley firstly discussed the differences between the Bipartisan Infrastructure Law (BIL) and the Inflation Reduction Act (IRA) in which, BIL provides grants/research and development programs through

various DOE offices and IRA builds on existing tax code to provide investment tax credits and production tax credits through the Department of Treasury. She additionally discussed some of the federal funding opportunities that currently exist in SEO or are coming in the next few months (SEP funding, WAP, LIHEAP, HARRP, 40103(b), 40108, 40502, 40552, etc.). Mr. Szoka asked if single family residences have to be owned by the people living there to receive funding, to which Ms. Woosley answered stating that it is something SEO will look further into.

Upon concluding her updates, Lt. Governor Robinson wanted to know about the carryout process. Ms. Woosley provided the various ways such as working with energy entities. Mr. Szoka and Lt. Governor Robinson also added that it is essential to ensure that what is being purchased and is also installed to prevent chances of fraud in the program.

Sub-Committee Reports

Energy Assurance Committee

Sub-Committee Chair, Mr. Paul Worley, was not present, so Mr. Brian LiVecchi provided an update from the committee's meeting. He mentioned the presentation that was given by Mr. Steve Davis of Emergency Management on the milestones for standards and metrics. Although Mr. LiVecchi noted that it was not ideal that it has taken so long, it is good that there is a target for September 2023 to host a tabletop exercise to address the concerns.

Energy Efficiency Committee

Sub-Committee Chair, Mr. Scott Tew, provided an update concerning the presentation provided by Mr. Matthew Davis on the Status of Energy Savings in Public Buildings. He mentioned that based on the information presented, North Carolina could possibly meet the energy goal. Mr. Tew additionally mentioned some of the topics they plan to talk about for future meetings such as the NC Clean Energy Fund status and Monitoring and Development on the building codes, talking to the new energy program from UNC Charlotte – Update Forthcoming as it concerns the Biennial Report recommendations.

Energy Infrastructure Committee

Sub-Committee Chair, Mr. Gus Simmons, was not present, so Mr. John White gave information about the presentations from Jay Oliver of Duke Energy and Jacob Bolin of Advanced Energy on EV and the capacity of implementing it to the grid long term. He additionally mentioned their discussion of the recommendations from the Biennial Report.

Energy Innovation Committee

Sub-Committee Chair, Mr. John Hardin, provided updates on EI's mission statement that was drafted as this is a new committee and to ensure no overlap in the duties of the other committees was prevalent. From discussion with Mr. Simmons, Mr. Hardin stated that the committee concluded that it did not overlap and offered the full council to review it as it is written. Ms. Masemore suggested that the mission needs to also include the end-user component when delivering the mission. She additionally suggested that the last statement should also include securing the energy sector as a whole and not just the grid. Mr. Hardin asked if everyone was

comfortable voting for the submission of the Energy Innovation mission statement. However, it was suggested by Mr. McIntire that the council should vote after revisions are made upon full council review. Lt. Governor Robinson also suggested that mission statement should be shortened and concise a bit as it seems more like a vision. Mr. Hardin stated that it can be separated through objectives.

Mr. Hardin then discussed the alternative matrix that details technology that is new/emerging as it relates to innovation created by SEO staff. He stated that the goal is to review all the information gathered from the matrix in detail and have the council review and determine what other recommendations can be made from the objectives presented. It was recommended from the other council to include other energy technology along with extending some of the factors being considered.

Public Comments

Upon opening the floor for public comment, no comments were made.

CLOSING COMMENTS

With no further comments, Lt. Governor Robinson said that the next meeting would be held on August 16, 2023, at 10:00 a.m. He thanked the presenters and council for their discussion today and asked if anyone had any additional comments. With no other comments, a motion to adjourn was made by Mr. McIntire and seconded by Mr. Tew. The meeting was adjourned at 11:33 a.m.