

October 18, 2024

Mr. Cayce Hinton Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

> Re: Comments Submitted by the Florida Electric Power Coordinating Group, Inc.'s Next Generation Nuclear Workgroup in response to FPSC's Advanced Nuclear Workshop

Dear Mr. Hinton,

The Next Generation Nuclear Workgroup of the Florida Electric Power Coordinating Group, Inc. ("FCG-NGNW") submits the following comments and recommendations for the Florida Public Service Commission's (FPSC) advanced nuclear development study required by CS/CS/HB 1645 (the "1645 Study").

Members of the FCG are a diverse group of investor-owned utilities, electric cooperatives, and municipal utilities that provide electricity in Florida. The FCG has a long history of working cooperatively with state and federal regulatory agencies to address regulatory initiatives that affect the electric utility industry in Florida. The FCG-NGNW facilitates discussions on potential state, legal, and regulatory changes that may be needed to move advanced nuclear projects forward over the next decade.

# **1. Expanded Study for Assessing Benefits for Florida's Economy for Deployment of Advanced Reactors**

The FCG-NGNW applauds the Legislature for providing the 1645 Study directive on advanced nuclear technologies and commends the Commission and its staff for its dedication to the development of the study for the Governor and the Legislature. As a potential follow up measure, we believe that the Commission should consider commissioning a more comprehensive study beyond the impacts to Florida's electricity needs. The work could be overseen by a recognized independent Florida body, such as a major state university, that would help to define the benefits of new nuclear development to the state including its influence in attracting new economic development, manufacturing and workforce development. This follow-up study would also include working with the utilities and Geographic Information System (GIS) experts on the creation of an inventory of potential sites for new nuclear development. This inventory of potential nuclear sites should be aligned with the Accelerating Deployment of Versatile Advanced Nuclear Energy (ADVANCE) Act and by showing its potential impact on our state's energy landscape, particularly focusing on brownfield or retired fossil fuel sites in close proximity to existing transmission infrastructure. Siting new nuclear in these locations in coordination with the ADVANCE Act could offer customer benefits through reduced permit timelines and related cost savings.

# 2. Examination of Federal Programs that Support or Create Barriers to New Nuclear Development

The 1645 study should also include a realistic view of the costs of advanced nuclear development and present a comprehensive overview of the federal financial mechanisms designed to mitigate the risks of cost uncertainty. The FPSC and the Legislature should seek to better understand how the federal incentives and related customer benefits for new nuclear deployment in the Inflation Reduction Act (DOE-loan program funding, production tax credit, investment tax credit), the NRC regulatory process (early site permit, construction permit, operating license, combined operating license) and state policies on cost recovery, and construction work in progress, can work together to enable new nuclear deployment to benefit customers. Just as importantly, the 1645 Study should seek to identify policy barriers and propose changes that enable future deployments that could reduce risks and costs. It should also incorporate a detailed analysis of the Nuclear Regulatory Commission (NRC) rulemakings pertinent to the ADVANCE Act. A robust discussion of these regulatory developments will provide stakeholders with an informed perspective on anticipated changes in the permitting and siting processes. This clarity will be instrumental in understanding how these updates will impact the regulatory landscape and project timelines and should be discussed in the 1645 study as initiatives that can reduce costs for customers.

# **3.** Cost Recovery for Preliminary Site Environmental Evaluations and Pre-Construction Work

We further suggest that the study explore mechanisms enabling regulated utilities to recover preliminary costs incurred during site evaluations, including site selection, development of the NRC Early Site Permit, and the subsequent construction permit and operating license. Such measures would mitigate financial risks during the early phases of project development, thereby incentivizing investments in advanced nuclear technologies. Ensuring cost recovery for these initial evaluations is essential for facilitating strategic site selection and project advancement. For new nuclear development, most state permitting is embedded in the federal permitting process governed by the NRC. Below are some examples of recoverable activities for consideration:

- Nuclear Regulatory Commission and other federal agency National Environmental Protection Act Environmental Assessments, and Environmental Impact Statements
- NRC Early Site Permit
- US Army Corps of Engineers permitting under Section 404 of the Clean Water Act
- Florida Department of Environmental Protection Power Plant Siting Act Certification
- Florida Department of Environmental Protection Wetland and Stormwater permitting
- Brownfield site redevelopment costs
- o Geologic Studies and Reports
- Cultural Resources Assessment Survey and Department of Historical Resources Concurrence

Cost recovery for these activities could be implemented through changes to s. 366.8255, Fla. Stat., s. 366.93, Fla. Stat., or FPSC implementing regulations in Rule 25-6.0423, Fla. Admin. Code.

#### 5. Safety Benefits of Advanced Reactor Design

Advanced nuclear reactors are designed with passive safety systems that operate automatically without the need for external power. These systems leverage natural processes, such as gravity and convection, to cool the reactor in emergencies, effectively preventing overheating and potential meltdowns without the need for human intervention. For instance, if the reactor begins to overheat, the design allows coolant to flow naturally to the core, dissipating heat without requiring operator intervention. This inherent safety feature significantly reduces the likelihood of severe accidents while simplifying maintenance and operational procedures. As a result, advanced reactors not only enhance reliability and safety but also bolster public confidence in modern nuclear energy. We encourage the FPSC's study to highlight the updated risk and related safety protocols in the advanced reactor technologies including the elimination of the 10-mile and 50-mile emergency planning zones.

### 6. Stakeholder Engagement and Education on Safety Advances

On related note to the previous recommendation, it would be helpful for the FPSC and the state of Florida to enhance stakeholder engagement and education concerning advancements in nuclear safety. Modern nuclear reactors incorporate state-of-the-art safety features, including advanced containment systems and passive safety mechanisms, which substantially reduce accident risks. Providing stakeholders with detailed information on these safety enhancements will help dispel the misconceptions and build public confidence in advanced nuclear energy. Transparent communication and educational initiatives are essential for fostering informed support within the community.

### 7. Construction and Workforce Funding Legislation

We recommend that the Florida policy leaders move forward with additional initiatives if the costs associated with advanced nuclear technologies are more certain and demonstrate clear benefits to utility customers. Finally, we suggest that the FPSC consider recommending additional support of new state and/or federal legislation providing increased grant funding specifically for the deployment of advanced nuclear reactors. Such funding could significantly support the development and implementation of advanced nuclear technologies by alleviating initial capital costs thereby benefitting utility customers. In addition to financial support for reactor deployment, we recommend that any legislation also focus on establishing a workforce development program aimed at training construction and operations teams for new nuclear power plants. By investing in workforce development, the state can ensure a skilled labor pool ready to meet the demands of this emerging industry. This dual approach presents a comprehensive strategy to not only encourage investment but also to accelerate progress in advanced nuclear energy while fostering job creation and economic growth in Florida and may be appropriate for consideration by the Governor and Legislature.

The FCG appreciates this opportunity to provide these comments and may submit additional information as appropriate throughout the development of the FPSC's report on the technical and economic feasibility of the future of advanced nuclear technology in Florida due on April 1, 2025, to the Governor's office and legislative leadership. If you have any questions regarding this letter, please contact me at (813) 418-0054 or at tanyap@FCG.org.

Sincerely,

Tanya Portillo

Tanya Portillo FCG Executive Director

cc: Mr. Mark Futtrell, FPSC Mr. Hastings Read, FDEP FCG Next Generation Nuclear Workgroup