

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. E-100, SUB 179

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of		
Duke Energy Progress, LLC, and Duke)	COMMENTS OF KINGFISHER
Energy Carolinas, LLC, 2022 Biennial)	ENERGY HOLDINGS, LLC
Integrated Resource Plans and Carbon Plan)	

NOW COMES Kingfisher Energy Holdings, LLC (“Kingfisher”), by and through the undersigned counsel, and pursuant to those Orders of the Commission issued in the above-captioned proceeding allowing the parties herein to file comments on or before July 15, 2022, and files these Comments. Kingfisher respectfully requests that the Commission take under advisement these comments in carrying out its authorities and duties as provided in Section 1 of House Bill 951, S.L. 2021-165 (“House Bill 951”), and to provide directions and approvals consistent with these comments in developing the Carbon Plan in this proceeding.

I. BACKGROUND

On October 13, 2021, Governor Cooper signed into law House Bill 951, which directs the Commission to take all reasonable steps to achieve reductions in the emissions of carbon dioxide in this State from electric generating facilities owned or operated by Duke Energy Carolinas, LLC (“DEC”) and Duke Energy Progress, LLC (“DEP,” together with DEC, “Duke Energy”).

On November 19, 2021, the Commission issued an *Order Requiring Filing of Carbon Plan and Establishing Procedural Deadlines*, directing Duke Energy to file its Carbon Plan on or before April 1, 2022, establishing procedural deadlines, and addressing other matters. On November 29, 2021, the Commission issued an *Order Granting Extension of Time*, allowing Duke Energy until May 16, 2022 to file its proposed Carbon Plan.

On May 16, 2022, Duke Energy filed its Petition for Approval of Carbon Plan, along with a voluminous set of documents that constitute the Carbon Plan.

On July 14, 2022, the Commission issued an Order Granting Petition to Intervene, allowing Kingfisher to intervene and participate as a party in this proceeding.

II. KEY PROVISIONS OF HOUSE BILL 951 SUPPORT THE USE OF COMPETITIVE PROCUREMENT OF RESOURCES NEEDED TO IMPLEMENT THE CARBON PLAN.

Kingfisher respectfully directs the Commission's attention to several key provisions of House Bill 951 that provide legislative support for the use of competitive bidding for Duke Energy's procurement of generation resources needed to comply with the requirements of House Bill 951. As explained in detail in the below Section III of these comments, Kingfisher has identified the use of competitive procurement as a significant opportunity to mitigate risk for Duke Energy and its customers and to reduce the costs of implementing the Carbon Plan, while achieving the carbon reduction goals set out in House Bill 951. In this Section II, Kingfisher identifies key provisions of House Bill 951 that support the use of competitive bidding for Duke Energy's procurement of resources needed under the Carbon Plan.

The Commission is an administrative agency created by statute and has no regulatory authority except such as is conferred upon it by statute.¹ The cardinal principle of statutory interpretation is to ensure that the legislative intent is accomplished.² Statutory interpretation properly begins with an examination of the plain words of the statute, and if the statute is clear and unambiguous, the Commission must conclude that the Legislature intended the statute to be

¹ *State ex. Rel. Utils. Comm'n v. Edmisten*, 291 N.C. 451, 232 S.E.2d 184 (1997).

² *Harris v. Nationwide Mut. Ins. Co.*, 332, N.C. 184, 191, 420 S.E.2d 124, 128 (1992).

implemented according to the plain meaning of its terms.³ Kingfisher submits that several key provisions in House Bill 951 plainly support the use of a competitive procurement process for obtaining needed resources under the Carbon Plan and must be given effect as the legislature intended.

House Bill 951 provides that, “[i]n achieving the authorized carbon reduction goals, the Utilities Commission shall: ... (2) Comply with current law and practice with respect to the least-cost planning for generation, pursuant to G.S. 62-2(3a), in achieving the authorized carbon reduction goals and determining generation and resource mix for the future.”⁴ House Bill 951 further provides that, “[a]ny new generation facilities or other resources *selected by the Commission* in order to achieve the authorized reduction goals for electric public utilities shall be owned and recovered on a cost of service basis [except for energy efficiency measures and demand-side management and to the extent that new solar generation is selected, which is subject to specific supply methods].”⁵ Significantly, the legislation does not specify the supply or procurement methods for resources that are *not selected* by the Commission.

Kingfisher submits that the General Assembly was intentional in not specifying the supply or procurement method for resources that are not selected by the Commission. For the following reasons, Kingfisher believes that the use of competitive bidding would best effectuate the legislative intent behind the-above cited provisions of House Bill 951. The mandate to use traditional least-cost planning to achieve a generation mix for Duke Energy’s future resource needs requires the use of lower cost procurement method for resources not selected by the

³ *Three Guys Real Estate v. Harnett County*, 345 N.C. 468, 472, 480 S.E.2d 681, 683 (1997).

⁴ Energy Solutions for North Carolina, S.L. 2021-165, § 1.

⁵ *Id.* (emphasis added).

Commission if one is available. As detailed in the following section, Kingfisher believes that competitive bidding represents the most efficient method for determining the least-cost options for resources not selected by the Commission.

Further, House Bill 951 directs the Commission to “[e]nsure any generation and resource changes maintain or improve upon the adequacy and reliability of the existing grid.”⁶ Also addressed in the following section, Kingfisher believes that when that competitive bidding results in power purchase agreements (PPAs) with independent power producers (IPPs), there are unique and substantial benefits and significant mitigation of risks that come with this procurement model, which support compliance with this mandate.

In summary, upon review of the plain language of the provisions of House Bill 951, Kingfisher finds support for requiring Duke Energy to use competitive bidding, to procure generation resources that the Commission does not select in developing the Carbon Plan. Kingfisher believes that this procurement method will produce the least-cost path to achieving the carbon reduction goals of House Bill 951 and will be the best approach to ensuring that the resources selected through the RFPs maintain or improve upon the adequacy and reliability of the existing grid. Because competitive procurement processes or RFPs can be demonstrated to produce the least-cost approach to compliance with House Bill 951, Kingfisher further respectfully submits that the discretion granted to the Commission to develop the Carbon Plan should be used to require Duke Energy to rely more on competitive bidding.

⁶ *Id.*

III. PROCUREMENT OF GENERATION RESOURCES UNDER THE CARBON PLAN THROUGH COMPETITIVE BIDDING WILL PRODUCE THE LEAST COST PATH TO CARBON REDUCTION WHILE MAINTAINING OR IMPROVING ON THE ADEQUACY AND RELIABILITY OF THE EXISTING GRID.

A. Introduction

As discussed in these comments, an “all-source RFP” is a competitive bidding process that would be conducted by Duke Energy (with an independent administrator or evaluator) and would accept bids from any resource capable of meeting the needs outlined in DEP and DEC’s respective resource plans that have been accepted by the Commission. Further, an all-source RFP could be structured to consider all eligible resources regardless of technology, including bids from independent power producers and from the utilities themselves. To ensure a fair and objective process, all-source RFPs utilize an independent administrator or evaluator to apply both qualitative and quantitative evaluation of bids. Recognizing that Duke has identified the specific generation resources that it believes are needed to implement the Carbon Plan, Kingfisher suggests that competitive bidding has a role to play. If not a true “all-source RFP,” Duke could undertake a competitive bidding process within each generation technology category (e.g., a multi-source RFP) and the same benefits to achieving a least-cost generation mix and ensuring the adequacy and reliability of the existing grid would result.

The Commission has gained valuable knowledge and experience in competitive bidding through its implementation of the Competitive Procurement of Renewable Energy (CPRE) Program. While that statutorily mandated RFP was not an all-source RFP (because the CPRE Program was structured to solicit bids only from renewable energy facilities), the lessons learned

from the CPRE Program will be informative to structuring competitive bidding under the Carbon Plan (where all generating technologies compete on a level playing field with a transparent and fair evaluation process that incorporates both quantitative and qualitative evaluation measures). As detailed below, Kingfisher believes that competitive bidding will ensure least-cost procurement through competition between bidders, including mitigating significant risk to Duke Energy and its customers, and support improving the existing adequacy and reliability of Duke Energy's electric system. Because least-cost planning and ensuring adequacy and reliability of the electric system are plain and unambiguous requirements of House Bill 951, Kingfisher requests that the Commission direct Duke Energy to make adjustments to its "Execution Plan" set out in Chapter Four of the Carbon Plan to incorporate the use of competitive bidding and exercise caution in "selecting" generation that could otherwise be procured through the use of competitive bidding.

B. Competitive Procurement Ensures Least-Cost Procurement

Competitive solicitations are not new to the State, nor to Duke Energy or the utility industry nationally. As part of its work under Governor Cooper's Executive Order 80, the North Carolina Energy Regulatory Process (NERP) produced a 2020 report from its Competitive Procurement Subcommittee.⁷ In that report, NERP detailed two case studies on generation procurement, one by the Public Service Company of Colorado (Excel Energy) and one related to the Commonwealth of Virginia's Virginia Clean Economy Act.⁸ Based upon those case studies

⁷ 2020 NC Energy Regulatory Process, "Competitive Procurement," available online at <https://files.nc.gov/ncdeq/climate-change/clean-energy-plan/Comp-Procurement-Products-Final.pdf> (last visited Jul. 14, 2022).

⁸ *Id.* at 6.

and other work, NERP identified “general principles” that support the use of all-source procurement⁹ and recommended that the General Assembly expand existing procurement practices to utilize competitive procurement as a tool for electric utilities to meet their energy and capacity needs.¹⁰ While the General Assembly did not enact legislation specifically requiring the use of competitive procurement, it did not prohibit the use of RFPs as a part of House Bill 951. Indeed, as cited above, a number of provisions included in House Bill 951 support the use of competitive procurement and RFPs to achieve the legislature’s required outcomes.

While it seems intuitive, and sound economic theory suggests, that competition between bidders will produce lower costs, the Commission need not rest on intuition and theory in requiring adjustments to Duke Energy’s Execution Plan. The experience of Xcel Energy’s Colorado RFP provides real-world evidence that RFPs actually produce lower costs.¹¹ Xcel’s 2016-2017 competitive solicitation returned a \$0.0107/kWh bid for wind, a \$0.023/kWh bid for solar, and a \$0.03/kWh bid for solar-plus-storage, as compared to Colorado’s average January 2021 residential electricity price of \$0.126/kWh.¹² Further, bid prices for all technologies proposed in Xcel’s 2016-2017 solicitation came in on the lower end of the price ranges for bids received in response to Xcel’s 2013 competitive solicitation.¹³ Similarly, a 2018 competitive solicitation by Northern Indiana Public Service Company (NIPSCO) produced average bid prices that were at the low end,

⁹ *Id.*

¹⁰ *Id.* at 8.

¹¹ Trabish, Herman, Utility Dive, “Xcel’s Record-low-price Procurement Highlights Benefits of All-Source Competitive Solicitations,” Jun. 1, 2021. Available online at <https://www.utilitydive.com/news/xcel-record-low-price-procurement-highlights-benefits-of-all-source-compete/600240/> (last visited Jul. 13, 2022).

¹² *Id.*

¹³ Kahrl, Fredrich, Lawrence Berkeley National Laboratory, “All-Source Competitive Solicitations: State and Electric Utility Practices,” at p. 6, March 2021. Available online at https://eta-publications.lbl.gov/sites/default/files/all_source_competitive_solutions_20210217_gmlc_format.pdf (last visited Jul. 13, 2022).

and in some cases lower than the “minimum” estimates of a 2016 screening process.¹⁴ The development and implementation of the Carbon Plan should have as its central feature a competitive procurement process to produce the least-cost method of achieving the carbon reduction goals.

Aside from the NERP process and the experience of other utilities across the county, the Commission held an evidentiary hearing in November 2021 on the subject as a part of the 2020 integrated resource planning process.¹⁵ While noting the support of intervenors SACE, et al., the support of the Public Staff, and the opposition of Duke Energy, the Commission ultimately declined to reach any conclusions regarding how all-source procurement might be incorporated into the utilities future planning processes.¹⁶ Further, noting the enactment of House Bill 951 and the impending proceeding on the Carbon Plan, the Commission stated that it “may revisit this topic, as appropriate, once the initial Carbon Plan has been approved and is put in place.”¹⁷ Kingfisher respectfully suggests that an appropriate time for revisiting this topic is in this proceeding and that the development of competitive procurement process for Duke Energy should be incorporated into the final Carbon Plan. The demonstrated opportunities to reduce Duke Energy’s costs for procuring needed generation resources to implement the Carbon Plan and to mitigate future rate increases for Duke Energy’s customers are too important to delay further the use of competitive bidding. Moreover, the directives to the Commission included in House Bill 951 support this approach.

¹⁴ *Id.* at 7.

¹⁵ *See, generally*, Docket No. E-100, Sub 165.

¹⁶ *Order Accepting Integrated Resource Plans, REPS and CPRE Program Plans with Conditions and Providing Further Direction for Future Planning*, at p. 17, No. E-100, Sub 165 (N.C.U.C. 2021).

¹⁷ *Id.*

Duke Energy has experience in using competitive procurement in its resource selection process, as evidenced by the attached Exhibit A, which is a September 2021 presentation by Duke Energy as a part of the Commission’s IRP technical process.¹⁸ In this presentation, Duke Energy provides detail of several RFPs that it has conducted,¹⁹ and states that “Duke will continue to use competitive solicitations that allow all resources to compete to meet the specific needs identified by the IRP.”²⁰ Duke further states that “[w]hen the IRP identifies capacity/reliability need, Duke will conduct a market RFP to procure the resource needed to satisfy such capacity/reliability need” with limited exceptions for “special situations.”²¹ In closing, Duke Energy states that the existing processes have “worked well,” and that Duke “will continue to improve on its competitive solicitations targeted to meet the types of needs identified in the IRP and invite multiple technologies to participate.”²² The views and approaches set out in this Duke Energy presentation are substantial justification for incorporating competitive procurement into the implementation of the Carbon Plan. In short, Duke Energy has conducted RFPs efficiently and within months, demonstrating that the use of competitive bidding under the Carbon Plan should not cause material delay in achieving the carbon reduction goals of House Bill 951. Recognizing the inherent and unique benefits to a utility and its customers from a properly-structured competitive bidding process, Kingfisher would be supportive of allowing DEC and DEP to earn a return on its PPA expenses as an incentive to encourage the use of competitive procurement under the Carbon Plan.

¹⁸ Exhibit A, p. 2.

¹⁹ *Id.* at 5-6.

²⁰ *Id.* at 2.

²¹ *Id.* at 12.

²² *Id.* at 15.

Kingfisher provides this Exhibit A as evidence that Duke Energy has conducted RFPs in the past and is able to and should incorporate competitive procurement into the Execution Plan that is a part of the Carbon Plan. The statements and positions articulated by Duke Energy in the attached Exhibit A are difficult to reconcile with Duke Energy's proposed Execution Plan that is part of the Carbon Plan, which requests that the Commission exclusively select generation resources that would be developed and owned by the utility. Simply put, Duke Energy has changed tack and excluded competitive procurement despite Duke Energy itself recognizing the success of past RFPs or the benefits of using competitive procurement as a part of the Carbon Plan to meet the mandates of House Bill 951.

In summary, given the demonstrated ability of competitive procurement to produce a "least-cost-mix of generation" and the mandates of House Bill 951 to conduct "least-cost planning for generation," Kingfisher respectfully encourages the Commission to require Duke to make adjustments to its Execution Plan to rely more on competitive procurement for obtaining its needed generation resources under the Carbon Plan.

C. Competitive Procurement Supports Maintenance and Improvement in the Adequacy and Reliability of the Existing Grid

In addition to the least-cost planning directive in House Bill 951, Kingfisher notes the legislative mandate to "[e]nsure any generation and resource changes maintain or improve upon the adequacy and reliability of the existing grid."²³ A properly structured competitive procurement process mitigates substantial risk to Duke Energy and its customers in a number of ways

²³ Energy Solutions for North Carolina, S.L. 2021-165, § 1.

throughout the life cycle of the generation facility, each of which furthers the achievement of this mandate and supports compliance with the directive to undertake least-cost planning.

For example, when an IPP submits a winning bid and enters into a contract pursuant to that bid, the IPP takes on the responsibility to deliver the project on time with significant penalties for default. This mitigates various forms of risk to Duke Energy and its customers related to execution cost and schedule, such as site acquisition and control, environmental permitting, infrastructure expansion, construction delays, and construction cost-overages. If these expenses are realized for a utility-owned project and if otherwise reasonable and prudent, they would likely be additions to the utility's rate base that would increase costs for customers. In contrast, the IPP would take on this risk and incur any penalties pursuant to its contract.

In addition, the contractual obligations of an IPP to a utility include performance and availability requirements. The consequences to an IPP for failing to meet these contractual obligations include severe financial penalties and harm to the IPP's business reputation. These penalties are not only a deterrent to the IPP's facility being unavailable, but also incentivize the IPP to make investments in its facility to ensure its availability. In fact, it is Kingfisher's experience that IPP facilities often have availability metrics that exceed those of the typical utility-owned facility.²⁴ The IPP model mitigates risk to the utility and its customers that the facility will not be unavailable to serve load when called upon, thus supporting the achievement of ensuring the adequacy and reliability of the existing grid.

²⁴ See e.g., Direct Testimony of John J. Roebel, Duke Energy Carolinas, LLC, p. 6-7, No. E-7, Sub 982 (filed Mar. 9, 2021) (explaining that overall DEC's coal-fired units achieved a fleet-wide availability factor of 86.3% for the test period and 86.9% during the summer peak months).

In the later years of a facility's life cycle, the IPP and PPA procurement model mitigates stranded costs risk to the utility and its customers. Stranded costs are, generally defined, those costs that a regulated utility reasonably and prudently incurs, but are associated with a plant or equipment that is no longer useful to serve customers. In North Carolina's regulatory model, these costs are generally recoverable by the utility, meaning customers pay for a plant that the utility determines no longer serves their needs. This can result from changes in fuel price or fuel availability, changes in legislation or regulation, or other factors. The risk of stranded costs falls on the utility's customers and puts upward pressure on the utility's rates. In the context of an IPP, this risk is mitigated because the utility only commits itself to the tenor of the PPA/contract, not to a 40–50-year useful life as would be typical in the utility-owned context.

In summary, the foregoing examples are among the ways that Duke Energy's use of competitively sourced PPAs with IPPs and utilities further the achievement of House Bill 951's direction to ensure any generation and resource changes maintain or improve upon the adequacy and reliability of the existing grid. Based on these reasons, Kingfisher again respectfully encourages the Commission to require Duke to make adjustments to its Execution Plan to rely more on competitive procurement for its needed generation under the Carbon Plan.

D. The Commission Should Require Duke Energy to Adjust its Execution Plan to Rely More on Competitive Procurement for Generation Needed to Comply with House Bill 951.

As noted above, included as Chapter Four of the Carbon Plan, Duke Energy sets out its approach to procuring resources under the Carbon Plan. Duke Energy requests that the Commission "select" certain resources and approve activities to procure those resources. As a part

of this Execution Plan, Duke justifies the use of “self-development” for projects that are “location specific, long lead-time resources that the Companies have evaluated for the best combination of siting, fuels, transmission and timing to meet their customers’ future needs and to achieve CO₂ emissions reduction goals.”²⁵ Further, Kingfisher acknowledges that Duke Energy states that it “may pursue joint development projects” and “would also competitively bid construction services for joint development projects.”²⁶ Kingfisher views this as appropriate implementation of House Bill 951 for resources that are “selected by the Commission,” which are to be “owned and recovered on a cost of service basis” by the relevant utility.²⁷

However, Kingfisher believes that Duke Energy’s Carbon Plan as proposed relies too heavily on the utility-developed and utility-owned option to the exclusion of a competitive procurement process. Kingfisher is aware of facilities that could be bid into a competitive procurement process and meet the in-service dates proposed in Duke Energy’s Execution Plan, even on the aggressive timelines set out in Duke’s proposed “near-term actions.”²⁸ Obtaining these generation resources through competitive procurement would not cause material delay in bringing these resources onto Duke Energy’s system (or meeting the carbon reduction goals of House Bill 951). Competitively-sourced generation would encompass the benefits detailed in these comments while providing the same value to the grid as the facilities that Duke Energy has proposed be selected by the Commission. Therefore, Kingfisher respectfully encourages the Commission to exercise caution in “selecting” generation resources under the Carbon Plan so that the option of a competitive procurement process is preserved for some or all of the generation resources needed

²⁵ Carbon Plan at Ch. 4, p. 12.

²⁶ *Id.*

²⁷ Energy Solutions for North Carolina, S.L. 2021-165, § 1.

²⁸ *See generally*, Carbon Plan, Ch. 4.

under the Carbon Plan. In addition, Kingfisher respectfully requests that the Commission direct Duke Energy to revise its Execution Plan to rely more on competitive procurement.

IV. CONCLUSION

In these comments, Kingfisher respectfully directs the Commission to certain key provisions of House Bill 951 that support the use of competitive procurement of generation needed under the Carbon Plan. Further, Kingfisher respectfully requests the Commission's careful consideration of the features of a competitive procurement process that support further compliance with the mandatory provisions of House Bill 951, such as least-cost planning and maintaining the reliability and adequacy of the existing grid. In light of the foregoing, Kingfisher respectfully requests that the Commission direct Duke Energy to adjust its Execution Plan at Chapter Four of the Carbon Plan to implement a competitive procurement process for obtaining generation needed under the Carbon Plan. The use of competitive procurement of resources will most efficiently determine the least-cost mix of generation needed under the Carbon Plan and best effectuate compliance with the requirements of House Bill 951 to maintain and improve on the adequacy and reliability of the existing grid.

WHEREFORE, Kingfisher respectfully requests that the Commission consider these comments in developing the Carbon Plan in this proceeding and provide the direction to Duke Energy requested herein related to making adjustments to the Carbon Plan.

Respectfully submitted this 15 th day of July, 2022.

/s/ Patrick Buffkin

Patrick Buffkin
NC Bar No. 44264
Buffkin Law Office
3520 Apache Dr.
Raleigh, NC 27609
pbuffkin@gmail.com

EXHIBIT A. SEPTEMBER 2021 PRESENTATION BY DUKE ENERGY AS PART OF THE
COMMISSION'S IRP TECHNICAL PROCESS

Duke Energy – NCUC IRP Technical Conference

All Source Procurement



BUILDING A SMARTER ENERGY FUTURE®

Introduction and Overview



- Duke has consistently used competitive procurement processes in its resource selection process to ensure the best value for customers.
- “All Source” RFPs is a term that has been applied to many different types of RFP practices (like “multi-source”) and it is crucial to assess each individual component of any proposed procurement process.
- Successful RFPs (whether All Source or not) are structured to ensure that resources are evaluated objectively against each other based upon their ability to meet the specific IRP-identified energy and capacity need.
- Duke will continue to use competitive solicitations that allow all resources to compete to meet the specific types of needs identified by the IRP.

Duke's Resource Selection Process



- Duke Energy consistently selects, and NCUC approves, least cost and prudent resources to meet power system needs as identified in its IRP.
- IRP - comprehensively evaluates supply and demand-side options to meet system needs under least cost framework that informs resource selection.
- Where need has been identified, Duke has regularly assessed market alternatives and utilized competitive bidding to secure least cost resources for customers
 - Where appropriate, Duke has used RFPs to secure the desired dispatchable, non-dispatchable, and renewable resources
 - Duke has issued RFPs that designate a specific resource type or in which multiple resource types qualify, based upon the type of need Duke is trying to meet.

Resource Solicitations – What are the drivers?



- IRP Planning Process
 - Temporal Characteristic of Need - Year, Duration, Frequency
 - Energy Need – how much? (MWH)
 - Capacity Need – how much (MW) and for how long?
 - Renewable or Carbon Free Energy Need – how much? (MWh)
 - Prioritization of Needs – capacity versus energy
 - Tradeoffs between Resources – gas generation versus wind generation
- Legislative Mandates
 - Competitive Procurement of Renewable Energy
 - Renewable Energy Portfolio Standard
- Customer Programs
 - Shared Solar
 - Green Source Rider
- In all cases, RFP must ensure that resources procured satisfy the specifics of the identified resource need/policy goal. Duke must also comply with policy goals and procurement mandates in South Carolina

DEC/DEP's Past RFPs



	Driver	MW Requested	Type of Resource	PPA Term	COD	Third Party Oversight	Proposals Received	MW Sourced
Oct. 2019 CPRE – DEC/DEP (NC/SC) Tranche 2	HB 589	DEC: 600 MW DEP: 80 MW	New renewable energy resources	20 years	Prior to 2023	yes	40 (2,151 MW)	664 MW
Jul. 2018 CPRE – DEC/DEP (NC/SC) Tranche 1	HB 589	DEC: 600 MW DEP: 80 MW	New renewable energy resources	20 years	Prior to 2021	yes	78 (3,964 MW)	551 MW
Jul. 2019 DEC & DEP NC Shared Solar Program	HB 589	Up to 40 MW	Solar PV energy and capacity	20 years	Prior to 2022	no	None	0 MW
Jul. 2018 DEP Capacity and Energy Market Solicitation	IRP	Approx. 2,000 MW	Dispatchable peaking/intermediate energy and capacity	2 - 5 years with ext. options for 2020 – 2024	NA	no	33 (11,520 MW)	1,800 MW
Aug. 2017 DEC Wind – On System and Off System	IRP/NC REPS	100 – 500 MW	Wind energy and capacity	5 - 20 years	Prior to 2023	no	38 (6,381 MW)	0 MW
Feb. 2015 DEC Green Source Rider	Green Source Rider Program	50 MW	Solar PV energy and capacity	3 - 15 years	Prior to 2017	no	10 (162 MW)	110 MW

Continued on next slide

Note(s): Multiple other smaller RFPs for poultry, swine, RECs, and solar have been performed but are not shown.
Does not include Progress Energy Carolinas RFPs that were undertaken prior to July 1, 2012 or RFPs for SC-only resources

DEC/DEP's Past RFPs



	<i>Driver</i>	<i>MW Requested</i>	<i>Type of Resource</i>	<i>PPA Term</i>	<i>COD</i>	<i>Third Party Oversight</i>	<i>Proposals Received</i>	<i>MW Sourced</i>
Feb. 2014 DEC/DEP Solar	NC REPS	Up to 300 MW	Solar PV capacity and energy	15 years	Prior to 2016	yes	27 proposals (1,099 MW)	265 MW
Oct. 2012 DEC Capacity & Energy Market Solicitation	IRP	Up to 700 MW	Dispatchable energy and capacity from baseload resources	15-20 years	Prior to 2018	yes	34 proposals (7,376 MW)	750 MW
Sept. 2011 DEC Off-System Wind	IRP/NC REPS	50 – 300 MW	Off-system Wind Energy to DEC Transmission	5-20 years	Prior to 2015	no	59 proposals (8,360 MW)	None
Sept. 2011 DEC Capacity & Energy Market Solicitation	IRP	Up to 1,500 MW	Dispatchable intermediate/peaking capacity and energy + renewable energy and capacity	1-3 years	2015-2017	yes	41 proposals (13,164 MW)	None
May 2007 DEC Capacity & Energy Market Solicitation	IRP	Up to 2,000 MW	Dispatchable intermediate/peaking capacity and energy	1-15 years	2010-2013	yes	45 proposals (24,350 MW)	1,240 MW

Note(s): Multiple other smaller RFPs for poultry, swine, RECs, and solar have been performed but are not shown.
Does not include Progress Energy Carolinas RFPs that were undertaken prior to July 1, 2012 or RFPs for SC-only resources

Considerations in Resource Selection Process



- In all cases, RFP must ensure that resources procured satisfy the specifics of the identified resource need type/policy goal.
- Not all “needs” are created equal.
 - Example: NC REPS compliance RFP compared to Winter super peak capacity RFP
- Duke Energy prioritizes affordability, safety and reliability in meeting critical power system needs
- As different resource types evolve and mature, Duke plans to expand accepted resources.

Considerations in Resource Selection Process (cont.)



Mature Resources	NEED			
	Dispatchable	Capacity	Energy	CO2 Emission Free Energy
Stand Alone Solar	No	No Capacity	Limited/Variable	Yes
Offshore Wind	No	Partial Capacity	Limited/Variable	Yes
Natural Gas CT	Yes	Full Capacity	Yes/Firm	No
Natural Gas CC	Yes	Full Capacity	Yes/Firm	No
Not Yet Mature Resources				
Battery Energy Storage System (BESS) fed by Solar	Limited	Partial Capacity	Limited/Variable	Yes
BESS fed from the Grid	Yes	Partial Capacity	Uses Energy	N/A
Offshore Wind	No	Partial Capacity	Limited/Variable	Yes
Nascent Resources				
Hydrogen CT	Yes	Full Capacity	Yes/Firm	Yes
Small Modular Nuclear	Yes	Full Capacity	Yes/Firm	Yes

Considerations to Inform Resource Selection



- There are important qualitative considerations that inform resource selections.
 - All resources have operating risk. However, the ability to accurately estimate the risk of a resource is directly related to its operating history in field conditions over long periods of time.
 - Evaluate different resource technologies that are at different stages of their product life cycle.
 - Limited operating histories will inform risk assessment of certain technologies

Considerations to Inform Resource Selection (cont.)



- IRPs are a critical tool based on a snapshot in time.
 - Periodic updates are necessary to ensure changes to system needs are as accurate as possible
 - Not always advisable to “lock in” procurement plans based upon the IRP too far in advance
- Some resources require very long lead times and cannot meet short term needs:
 - Resources can have substantially different timelines for development and construction.
 - How to structure RFP to allow for consideration of longer lead time assets such as Offshore Wind or Advanced Nuclear?
- Diversity of resources and ownership – mix of utility and nonutility owned resources

All-Source RFPs



- Terminology v. Substance
 - The term “All-Source RFPs” is often a misnomer; most “all-source” RFPs are in actuality “multi-source” RFPs.
 - Therefore, when assessing practices from other states, it is necessary to understand actual mechanics of the RFP.
 - Duke supports the practice of “multi-source” RFPs based upon types of needs identified in the IRP.
 - Comparing resources with substantially different operational capabilities and benefits solely through financial analytics profiles (as in a pure All-Source RFP) is insufficient.
- Examples of targeted multi-source RFPs:
 - Colorado
 - PacifiCorp

Duke's RFP Process in the Case of Identified Reliability/Capacity Need



- When the IRP identifies capacity/reliability need, Duke will conduct a market RFP to procure the resource needed to satisfy such capacity/reliability need.
 - Exceptions to this standard process would be limited to special situations
- The RFP would specify the operational/technical requirements needed based on the reliability need.
- RFP is open to any resource that can provide the necessary operational, reliability, and other requirements.
- Duke will utilize an Independent Third Party to assess the RFP and resulting resource selections if a utility-owned asset is being considered.

Resource Procurement Process Should Be Flexible



- Procurement Processes should not be “One Size Fits All”
 - Unique circumstances presenting advantages to customers
 - Lincoln CT
 - Asheville CC
 - Unexpected emergencies
 - Pilot Projects
- Requiring structured RFPs for all procurements is not appropriate.

Who Should be Responsible for Resource Selection?



- In North Carolina, the accountability for providing reliable service falls squarely on the utility.
 - As such, the utility should have the primary responsibility to select the resources it will use to provide service subject to oversight of the Commission.
 - Duke will utilize an Independent Evaluator for oversight and transparency.
- Commission has and will continue to exercise final approval right for resource decisions.
- Customers have been well served by the current framework for new system resources.
 - Robust IRP and CPCN processes provide regulatory oversight and direction.
 - Current processes allow coordination and alignment between NC and SC.

Closing Thoughts



- Existing processes have worked well, resulting in prudent and least cost resources that have been approved by the Commission.
- Duke will continue to improve on its competitive solicitations targeted to meet the types of needs identified in the IRP and invite multiple technologies to participate.
- An overly rigid, one-size fits all procurement process has drawbacks and imposes costs—a “solution in search of a problem.”
- Duke is committed to utilizing RFP process (when considering utility project) with appropriate third-party oversight for future needs



*BUILDING A **SMARTER** ENERGY FUTURE®*

CERTIFICATE OF SERVICE

I hereby certify that a true and accurate copy of the foregoing Petition to Intervene has been duly served upon all persons on the docket service list by United States Postal Service or by electronic mail with the party's consent.

This the 15th day of July, 2022.

BUFFKIN LAW OFFICE

BY: /s/ Patrick Buffkin

Attorney for Kingfisher Energy Holdings, LLC

OFFICIAL COPY

Jul 15 2022