

North Carolina Municipal Power Agency Number 1

Potential Long-term Sale of Power from Catawba



Council Updates
August 2023



#### Agenda

- Summary of NCMPA1 Catawba Ownership
- The Proposed Transaction
- Economic and Risk Analysis
- Key approvals and Next Steps

#### Purpose of Today's Discussion

- North Carolina Municipal Power Agency Number 1 (NCMPA1), the wholesale power supplier to 19 municipalities in western NC, has an ownership interest in the Catawba Nuclear Station
- There have been ongoing efforts to identify opportunities to "right-size" and diversify the power supply portfolio through the sale of excess nuclear capacity and energy
- The Boards authorized execution of a Power Purchase Agreement (PPA) with Central Electric Power Cooperative, Inc. (Central) that replicates a 150 MW (18%) sale of NCMPA1's nuclear ownership interest in Catawba
- The Central PPA was executed on June 5, 2023 subject to several conditions which include that all 19 NCMPA1 Participants will be required to agree to the PPA
- Requesting that the Council take the appropriate steps necessary to approve the required Ordinance and other documents required thereby, pursuant to the letter from Mike Colo of Poyner Spruill dated July 31 as supplemented on August 10.

#### Background – Efforts to Diversify Resources

- NCMPA1 conducted RFP process in 2011-12 with negligible results
- NCMPA1 pursued the potential sale of 50% of NCMPA1's ownership interest in the Catawba nuclear station to Duke Energy Carolinas (DEC) in the 2016-2018 timeframe to diversify its portfolio and reduce rates in the near term
  - DEC pulled the plug on the deal in early 2019 due to political issues surrounding nuclear power in South Carolina, decreasing natural gas prices, and DEC's excess capacity situation
- During 2022, NCMPA1 engaged in similar discussions with both DEC and Central Electric Power Cooperative, Inc. (Central) who provides wholesale electric service to all of South Carolina's 20 electric cooperatives

#### Catawba Nuclear Station

- Consists of two identical units jointly owned by NCMPA1, Duke Energy Carolinas (DEC), Piedmont Municipal Power Agency (PMPA) and North Carolina Electric Membership Corporation (NCEMC)
- NCMPA1 owns 75% of Catawba
   Unit 2; PMPA owns 25%
- Through contractual arrangements, the owners share both units at the plant
- Nuclear Regulatory Commission licenses for both Catawba Units expire on December 5, 2043



 NCMPA1 owns the largest share of the Catawba Plant total capacity

_	NCMPA1	37.500%
_	NCEMC	30.754%
_	DEC	19.246%
_	PMPΔ	12 500%



#### **About Central**

 Not-for-profit generation and transmission cooperative headquartered in Columbia, SC



- S&P Credit Rating of A+/Stable (NCMPA1 is A/Stable)
- 4,200 MW peak load and 19 GWh annual energy requirements (~4x the size of NCMPA1)
- Provides power to approximately 1/3<sup>rd</sup> of SC's population within the DEC and Santee Cooper Balancing Authorities
- Obtains most power through purchase agreements through Santee, DEC and SEPA





#### Central PPA Proposal Overview

- Central would purchase 150 MW (18%) of NCMPA1's Catawba output, structured as a PPA to mimic an outright ownership purchase, effective January 1, 2024
- Levelized capital payment of \$56M/yr, 2024-2031
- Central pays for its proportionate share of all expenses associated with NCMPA1's Catawba ownership interest
- Central buys-in to NCMPA1's decommissioning fund and contributes at the same rate as NCMPA1 going forward

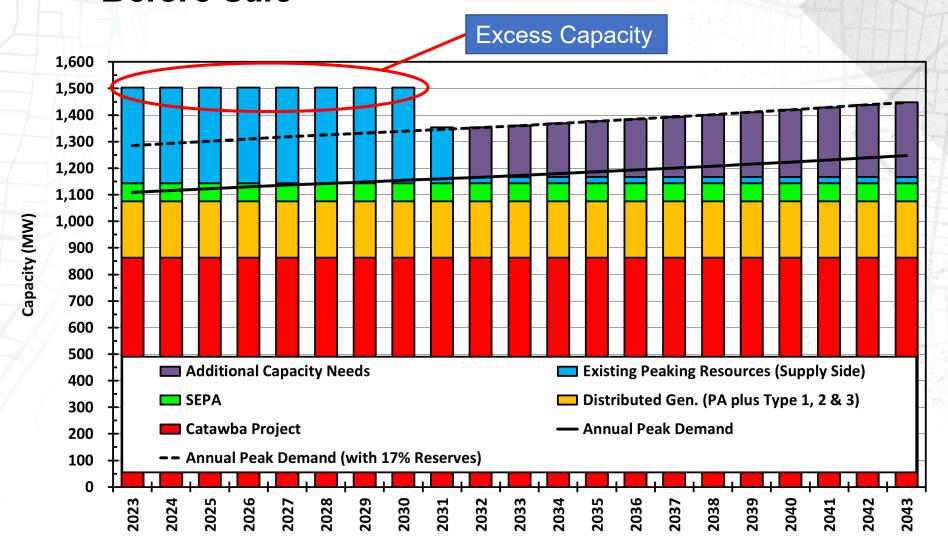
#### Benefits of Proposed Sale

- Transfers 18% of cost and nuclear concentration risk (however significant nuclear concentration risk remains)
- "Right-sizes" the power supply portfolio (eliminates excess capacity 2024-2030)
- "Locks-in" margins on surplus energy sales higher than current forecast
- Proceeds will be utilized to defease a portion of the outstanding debt
- Provides wholesale rate benefits over the term of the sale, potentially dropping wholesale rates below DEC even in the near-term

#### Considerations of Proposed Sale

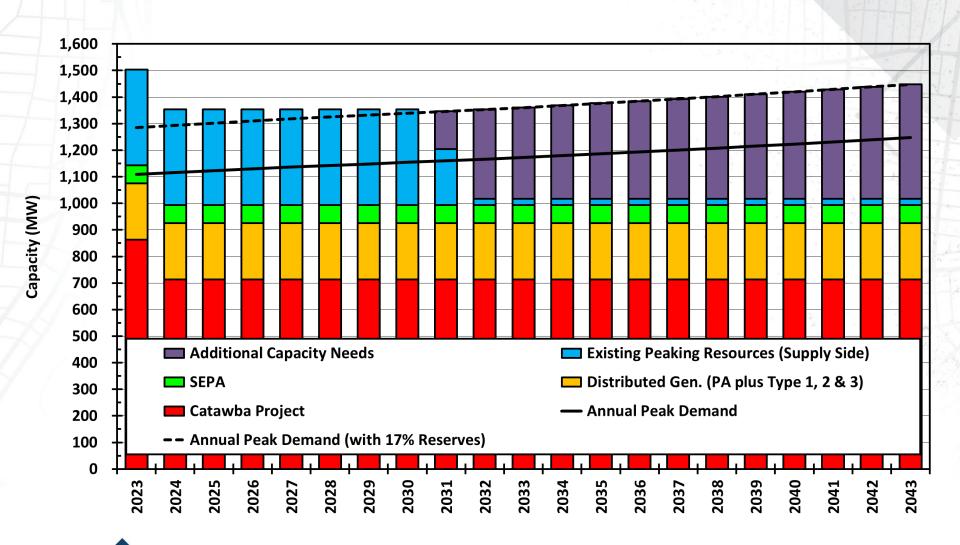
- Giving up potential upside in surplus power market if prices increase
- Catawba could continue to rise in value due to carbon constraints
- Uncertain cost of replacement power supply in the future (2031 and beyond)
- Timing and amount of baseload growth
- Likely increase in NCMPA1 carbon footprint
- Taking on credit risk of Central

## Projected Capacity Resources vs. Requirements Before Sale





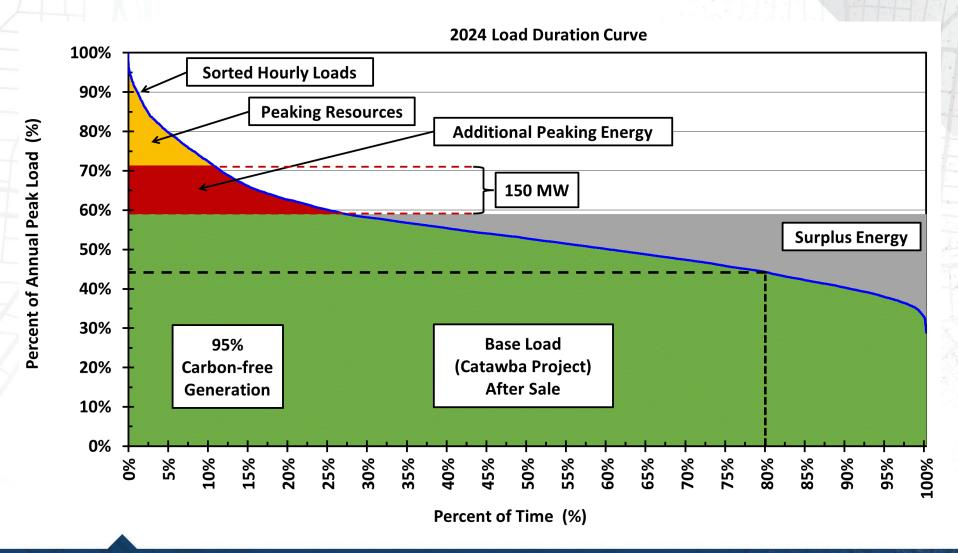
# Projected Capacity Resources vs. Requirements After 150 MW Sale







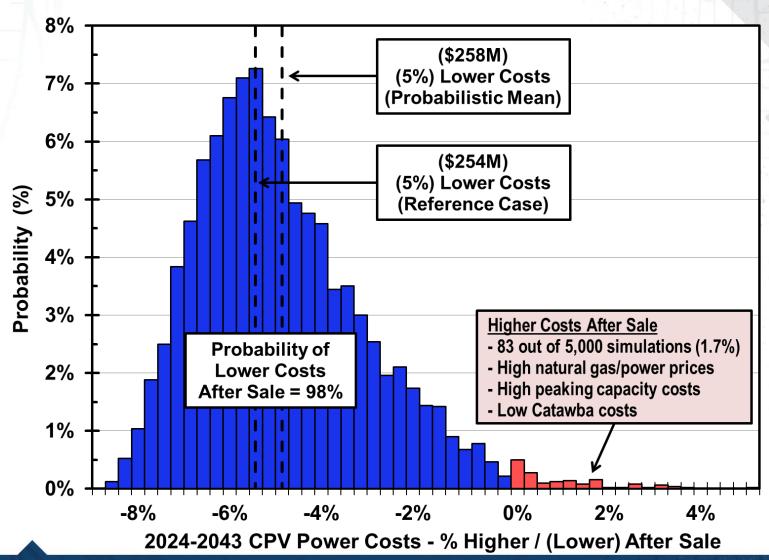
#### NCMPA1 2024 Load Duration Curve After <u>150 MW</u> Sale



# Analysis of Sale - Reference Case and Probabilistic Mean

CPV Power Costs – Higher / (Lower) Due to the Sale							
	Initial	CURRENT Catawba Operating License			w/ EXTENDED Catawba Operating License		
	Rate Reduction	2024 – 2031	2032 <b>–</b> 2043	2024 – 2043	2024 – 2063		
Reference Case							
\$ Millions (2023\$)		(377)	123	(254)	(174)		
Percent	(15%)	(15%)	6%	(5%)	(3%)		
Probabilistic Mean							
\$ Millions (2023\$)		(378)	120	(258)	(171)		
Percent	(15%)	(15%)	5%	(5%)	(2%)		

## Probabilistic Analysis of Sale – CPV Costs % Higher/(Lower) After Sale 2024-2043 (Life of Asset)





## Allocation of CPV Higher / (Lower) Power Costs Associated with the Sale – Reference Case\*

	CPV (\$Millions)			
Participant	2024-2031	2032-2043	2024-2043	
Albemarle	(21.9)	7.0	(14.6)	
Bostic	(0.1)	0.0	(0.1)	
Cherryville	(3.4)	1.1	(2.3)	
Cornelius	(4.4)	1.4	(2.9)	
Drexel	(1.2)	0.4	(0.8)	
Gastonia	(48.8)	15.8	(32.7)	
Granite Falls	(4.3)	1.4	(2.9)	
High Point	(88.0)	28.4	(58.7)	
Huntersville	(20.5)	6.9	(14.0)	
Landis	(3.5)	1.1	(2.3)	
Lexington	(30.6)	9.8	(20.3)	
Lincolnton	(4.5)	1.4	(3.0)	
Maiden	(5.3)	1.7	(3.5)	
Monroe	(54.1)	18.7	(37.6)	
Morganton	(20.4)	6.6	(13.6)	
Newton	(11.2)	3.6	(7.4)	
Pineville	(10.2)	3.6	(7.1)	
Shelby	(12.3)	4.0	(8.2)	
Statesville	(32.2)	10.4	(21.6)	
Total NCMPA1	(377)	123	(254)	
% of Power Costs	(15%)	6%	(5%)	

<sup>\*</sup> Reference Case amounts shown; probabilistic mean results not materially different.

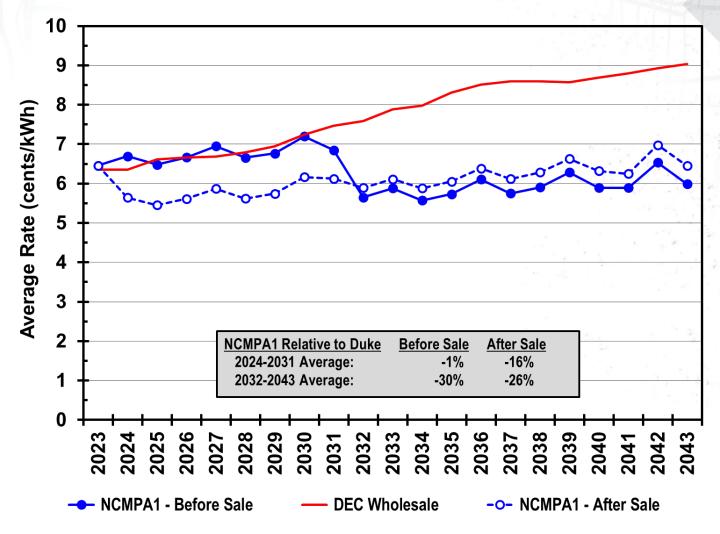


## Summary of Projected Range of Initial Reductions in Participant AR Charges – 2024/25 Timeframe

	Reflected in 1 <sup>st</sup> Demand Block		
Participant	(\$000)	(%)	
Albemarle	(3,194)	(15.9%)	
Bostic	(20)	(15.1%)	
Cherryville	(498)	(14.9%)	
Cornelius	(651)	(15.4%)	
Drexel	(187)	(17.7%)	
Gastonia	(7,010)	(14.6%)	
Granite Falls	(620)	(15.5%)	
High Point	(12,704)	(15.5%)	
Huntersville	(2,676)	(13.5%)	
Landis	(517)	(15.6%)	
Lexington	(4,530)	(16.4%)	
Lincolnton	(658)	(15.2%)	
Maiden	(784)	(16.3%)	
Monroe	(6,749)	(13.7%)	
Morganton	(2,969)	(15.1%)	
Newton	(1,609)	(16.0%)	
Pineville	(1,223)	(12.3%)	
Shelby	(1,812)	(15.0%)	
Statesville	(4,645)	(15.2%)	
Total NCMPA1	(53,055)	(15.0%)	



#### Competitive Position – Before & After Central Sale



DEC wholesale has not been adjusted for NCUC's final Carbon Plan nor for the cost impacts of the announced merger of the DEC and DEP operating utility systems.





#### Indicative Timeline

**Q4 Q1 Q2 Q3 Keep Boards and Rate Committee Apprised of Developments** 

2022

**Boards Approved Letter of Intent Develop PPA/Due Diligence** 

**Initial Member City Visits as Needed** 

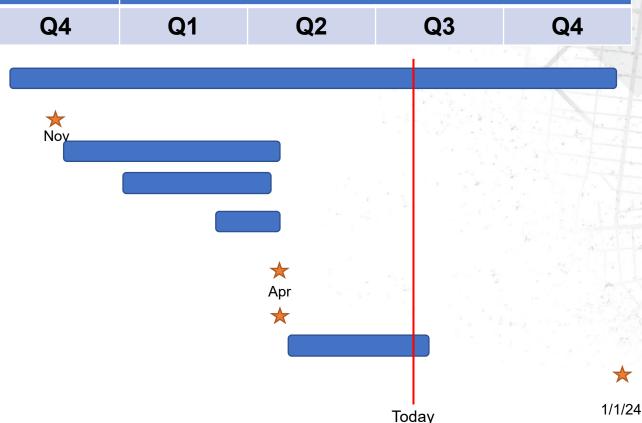
Rate Committee Reviews PPA, Final **Economics and Rate Plan** 

**Boards Consider PPA, Final Economics** and Rate Plan

**Execute PPA** 

**Member City Consideration** 

**Effective Date** 



2023



#### Key Approvals & Action Requested

- Board of Directors of ElectriCities approved the Central PPA on May 5, 2023
- The Central PPA was executed on June 5, 2023 subject to several conditions
  - All 19 NCMPA1 Participants are required to agree to the PPA because it would reduce the cities' rights to Catawba output under the Project Power Sales Agreement
- Requesting that the Council take the appropriate steps necessary to adopt the required Ordinance and other documents required thereby, pursuant to the letter from Mike Colo of Poyner Spruill dated July 31 as supplemented on August 10.

### **Questions?**