

♦ ELECTRICITIES of NC

VALUE SUMMARY

POWER SUPPLY BENEFIT					
VALUE CATEGORY	VALUE AREA	2023 YEAR END BENEFITS	DETAILS	CALCULATIONS	
Power Supply	Asset Sale Agreement	\$129,606,890	Additional Benefits were realized since the actual close of the asset sale in 2015. The asset sale proved more favorable than originally projected. These additional savings shown in the Jan 2024 Rate Committee meeting and FR rates updated in GDS analysis.	Total Benefit = (Using FR-8 in the GDS Analysis = \$169,606,890 - \$40,000,000 estimated true-up) = \$129,606,890	
Power Supply	Asset Sale Agreement	\$145,928,000	Asset Sale Savings under FR Rate is calculated by projecting costs under the AR Rate less the actual costs under the new FR rate (GDS Analysis July 2015).	Total Benefit = (Projected AR Rate revenues of \$870,046,000 less the total FR Rate charges of \$724,118,000) = \$145,928,000	
Power Supply	Disallowed Capital Addition Project	\$169,867	Duke Energy Nuclear Corporate Employees were relocated to the Catawba site in 2022, approximately 60 employees. A letter agreement dated Feb 1, 2022, details the ongoing support payment from Duke Energy Nuclear Corporate to the Catawba Plant for support of these employees. This support credit is ongoing as long as these corporate employees are working at the Catawba site. In addition, the CNS garage project renovation capital improvement project was disallowed and the Tower system project was erroneously billed.	Support credit: (20,217.50 sq ft x \$4.25/ sq ft = \$85,924.38) x 0.375 (A1 allocation) = \$32,222; Total Benefit = (\$32,222 corporate + \$119,206 garage renovation disallowed + \$18,439 tower project disallowance) = \$169,867	
Power Supply	Hourly Trading Services	\$440,000	Staff outsourced NCMPA1's hourly energy trading/scheduling functions rather than adding staff. The resultant annual savings are based on these factors: internal staff cost = 5 FTEs @ \$140,000/FTE + 20% carrying charges on infrastructure cost of \$225,000; outsourced cost = \$305,000.	Total Benefit = Internal cost - Outsourced cost = ((5 FTEs x \$140,000/FTE) + (0.2 x \$225,000)) - \$257,360 = \$440,000	
Power Supply	Market Transactions Checkout	\$28,612	Staff identified billing errors during checkout and reconciliation of market transactions for NCMPA1.	Total Benefit = Bill corrections identified and paid to NCMPA1 = \$28,612	
Power Supply	Nuclear Fleet cost Arbitration with DEC	\$1,838,799	Settlement Agreement and OFA amendment as a result of a negotiated settlement with DEC for the nuclear fleet cost allocation to the Catawba Nuclear Plant. Arbitration proceedings started in 2019 and completed in August 2021. Credits received on the Operating Statements for Jan - Dec 2023.	Total Benefit: Sum of all nuclear cost allocation credits on Operating Statements = \$1,838,799	
Power Supply	QF Sellers Costs	\$166,800	Monthly PURPA QF Sellers cost	Total Benefit = \$556 per month x 25 contracts x 12 mo/yr = \$166,800	
Power Supply	REPS Compliance	\$1,383,000	Lobbied NCUC to postpone swine requirement by one year, allowing the Power Agencies to avoid retiring RECs for 2023 compliance.	Total Benefit = Value of RECs that would have been retired in 2023 = \$1,383,000	
Power Supply	REPS Compliance	\$1,188,000	Ensured compliance on behalf of all 51 Power Agency members and 3 non-Power Agency members. Utilize ElectriCities staff to provide REPS compliance services to Power Agency cities instead of having each city perform the function on their own.	Total Benefit = 54 cities x 10% FTE x 2000 FTE hours x \$110/hour = \$1,188,000	
Power Supply	Supplemental Capacity and Energy	\$20,205,731	Staff renegotiated NCMPA1's Interconnection Agreement (IA) with Duke to allow NCMPA1 to purchase supplemental capacity and energy from the market rather than from Duke. The savings result from the difference between 2023's actual supplemental and reserves power supply cost versus what would have been paid to Duke under the old IA.	Total Benefit = Duke cost - market cost = (\$62,506,127 - \$42,300,396) = \$20,205,731	
Power Supply	Surplus Sales Program	\$52,000,000	Staff negotiated changes in NCMPA1's Interconnection Agreement with Duke in order to sell NCMPA1's surplus electricity directly into the wholesale markets rather than to Duke at lower prices. The value of the surplus energy program represents the additional margins gained through these sales.	Total Benefit = Sales revenue - Sales cost; Sales revenue = Energy price x Sales volume = \$33.84/MWh x 2,068,392 MWh = \$70M; Sales cost = Energy cost x Sales volume = \$8.70/MWh x 2,068,392 MWh = \$18M; Total	

Benefit = \$70M - \$18M = \$52M

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Power Supply	Transmission Peak Reduction	\$1,550,340	NCMPA1 dispatches Agency, city and customer owned generators at the time of Duke's transmission peak. The reduction in load provides a savings on NCMPA1's transmission bill. The estimated amount of DG operated during the Transmission peaks multiplied by the avoided transmission service rate for 2023 yields the total benefit.	Total Benefit = $(140MW \text{ of DG x 7 months})$ during $2023 \times 1.58/kW$ avoided cost of Transmission service expense) = $1,550,340$
SERVICES B	ENEFIT			
Business Development Services	C&I Power Audits	\$100,000	Staff performed energy audits for NCEMPA & NCMPA1 C&I customers. 40 power audits were provided. If outsourced, energy audits cost \$2,500 each.	Total Benefit = (Number of energy audits x Outside audit cost) = 40 x \$2,500 = \$100,000
Business Development Services	Key Accounts Events	\$29,000	Hosted Key Accounts events for NCMPA1 and NCEMPA members. 7 events were hosted or assisted in 2023	Total Benefit = Amount spent on events + Avoided member staff time for planning = \$20,000 (for 2 fall events) + (\$0 x 1 spring events) + (\$3,000 for 1 summer event) + (\$6,000 for 4 local events) = \$29,000
Business Development Services	Lighting Rebate Program	\$131,113	Provided lighting rebates to members and their customers. Total of 25 lighting projects were funded and \$131,113 rewarded in rebates.	Total Benefit = Total rebates provided = \$131,113
Business Development Services	Member/customer training	\$2,700	Staff provides training through webinars and workshops for technical and energy efficiency topics. The estimated difference between market price (or outsourced city cost) of this service and the cost charged to the cities by Staff is \$100/person. There were 27 attendees logged for one class in 2023.	Total Benefit = (Estimated savings for EC training/attendee) x Number of attendees = \$100/person x 27 attendees = \$2,700
Business Development Services	Power Quality & Infrared Scanning Audits	\$21,000	Staff performed/assisted 4 Power Quality Audits and 0 Infrared Scanning Audit	Total Benefit = (0 Infrared Study at an outside cost of \$2,000 + 2 Power Quality Study at an outside cost of \$8,000 + 2 equipment loan outs at a cost of \$2,500) = \$21,000
Business Development Services	Questline Newsletter	\$50,000	Provided bi-monthly newsletter for participant C&I customers	Total Benefit = price of contract = \$50,000
Compliance	Load Forecasting	\$45,000	Staff developed an application used in the long term load forecasting process. The vendor charges \$35,000 for the use of the application and \$10,000 per year maintenance fee.	Total Benefit = (Avoided application cost + yearly maintenance fee) = (\$35,000 + \$10,000) = \$45,000
Compliance	NERC Compliance	\$322,504	Staff provides NERC/SERC reliability compliance services for 5 cities in NCEMPA, and 1 non Power Agency city. It is estimated that each city would require 1.98 FTE (a combination of their own employees and consultants) to maintain compliance in order to avoid potential penalties of up to \$1,000,000 per occurrence per day.	Total Benefit = (0.33 FTE/city) x (6 cities) = 1.98 FTEs. Assume 70% of FTEs are provided by city employees (1.39 FTE) at \$50/hour and 30% by consultants (0.59 FTE) at \$145/hour. Total Benefit = (1.39 FTE x \$50/hour x 2,080 hours/year) + (0.59 FTE x \$145/hour x 2,080 hours/year) = \$322,504
Departmental Corporate Ads	Ads	\$414,000	Economic Development ad creation for print and digital placement in industry publications	Total Benefit = Ad production and concept development Estimated ElectriCities (3) staff. (5/hrs per month total @ \$100 = \$500 x 12 = \$6000) x 69 NC members = \$414,000
Distribution Services	Distribution Services	\$50,200	Staff provides distribution services to members. Some of these services include subscriptions to APPA's eReliability Tracker outage tracking system to members at no charge, system losses studies, reliability tracking and assistance, SDS online system, etc.	Total Benefit = (Number of Cities x Cost per Subscription) + (Number of Cities x Avoided Cost per SDS Account) + (Number of Cities x Avoided assistance time for reliability x Labor rate) = (27 x \$225) + (5 x \$3625) + (65 x 4 hrs x \$100/hr) = \$50,200

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Distribution Services	Electric System Construction Manual	\$108,000	Standardized Construction Practices allow for training programs to teach the same practices to all members. This shortens the learning curve, allows for better emergency response and assures acceptable practices are taught. Construction drawings developed and approved by Public Power employees allow for standardized training and construction practices. Staff provided manuals at no additional cost to members, where members would otherwise have to hire a consultant. The Operations Standards Team (OST) also developed and maintains the Utility Director Best Practices Manual and System Losses Best Practices Manual.	Total Benefit = Consultant cost per member x Number of members = \$1,200 x 90 = \$108,000
Distribution Services	Joint Purchasing - Utility Poles	\$30,548	Staff coordinated the joint purchasing of utility poles for 2023 but the vendor could not commit to a large order. They did meet individual members needs.	Total Benefit = EC discount x Pole expenses = 3% x \$1,018,273 = \$30,548
Distribution Services	Padmount Transformers	\$17,500	Members developed specs and staff developed RFP for padmount transformers, hardware, poles, elbows in 2023. Discussions were held with members, suppliers, manufacturers, Duke Energy and nationally through APPA. The shared information and combined efforts did bring benefits in identifying new vendors for some padmount transformers. Sourcewell was identified as a likely source for most products. This also reduces staff time for purchasing since they meet bid requirements.	Total Benefit = \$250/NC member = \$250 x 70 = \$ 17,500
Distribution Services	Performance Indicators	\$52,800	Staff researched and compiled a report of industry Performance Indicators and trends for the members, resulting in savings to the members due to avoided use of member staff resources.	Total Benefit = Avoided city effort x City rate x Number of cities = 8 hrs x \$100/hr x 66 = \$52,800
Distribution Services	Reliable Public Power Provider (RP3)	\$16,000	Staff provides data needed for RP3 applications as well as assistance with completing the applications, resulting in a reduction in member staff time to complete the applications. There were 10 members that completed their RP3 applications in 2023	Total Benefit = Avoided assistance time x Labor rate x Number of members = 16 hrs x \$100/hr x 10 = \$16,000
Distribution Services	State Wide Service Contracts	\$40,000	Contracts are in place with vendors to provide technical assistance or services to members. The use of Staff to put together a service contract, bid and execute an agreement avoids paying a contractor or consultant. Contracts went through legal review and revision in 2023.	Total Benefit = Avoided vendor cost/use x Number of uses = \$500 x 80 = \$40,000
Distribution Services	System Betterment Funding	\$250,000	The Power Agencies provided \$5,000 in funding to all 51 power agency members to spend on a system betterment project.	Total Benefit = \$5,000 x 50 members used their funding = \$250,000
Distribution Services	Utility Director Meetings & Listserv	\$45,000	Staff provides peer networking for utility directors; asking and answering questions instead of paying consultants or contractors for assistance. It is estimated each member avoids at least \$500 per year in consulting costs.	Total Benefit = Avoided consulting cost x Number of members = \$500 x 90 = \$45,000
Economic Development	Advertising	\$3,988,200	Staff provides advertising services to all 51 members using both print and digital marketing. Print advertising costs are \$35,000 per year and digital advertising costs are \$43,200. These would be the same costs as if a city were to do this on their own. Thus the total benefit per city is \$78,200.	Total Benefit = Number of cities x (Cost per ad x Adds per year) = 51 x 78,200 = \$3,988,200
Economic Development	Business Recruitment	\$1,275,000	Staff used ESRI ArcGIS software to provide market analyses and up to 18 different reports for business recruitment process at no direct cost to members.	Total Benefit = Number of cities x Avoided cost per analysis = 51 x \$25,000 = \$1,275,000
Economic Development	Economic Development Staff	\$750,000	Staff includes a person with applicable skills to manage economic development activities for 30 members. Otherwise, each city would need at least 0.50 FTE at \$50,000/FTE to provide this service. (Note: Monroe and High Point have ED staff)	Total Benefit = Number of cities x (City FTE x Cost per FTE) = 30 x (0.5 x \$50,000) = \$750,000

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Economic Development	Prospect / Client Leads	\$510,000	Staff pursues an average of over 200 inquiries/leads regarding new business opportunities in North Carolina each year. These come from trade shows, advertising, mission trips with Regional Partnerships, County EDCs and the Dept. of Commerce. Targeted listing includes company names, addresses, CEOs/owner/email/phone. It is assumed that members would otherwise purchase 1 list per quarter at \$2,500 each.	Total Benefit = Number of cities x (Cost per quarterly listing x 4 quarters/year) = 51 x \$2,500 x 4 = \$510,000
Economic Development	Retail / Commercial Development	\$1,020,000	Proposals were made by Staff to retail/commercial establishments for recruitment purposes. Without such support, each city would pay for consultant reports of around \$60,000 each and would need 0.50 FTE to manage the retail recruitment process.	Total Benefit = Number of cities x (Consulting cost x .50 FTE) = 34 x \$30,000 = \$1,020,000
Economic Development	Retail Strategies Program	\$120,000	Program to develop retail strategic plans for six (6) communities at a savings of \$20,000 for each community.	Total Benefit = Number of cities x savings per city = \$20,000 x 6 = \$120,000
Economic Development	Retail Strategies Program	\$75,000	Program to help with years 2 and 3 of the retail recruitment program for six (6) communities at a savings of \$12,500 for each community.	Total Benefit = Number of cities x savings per city = \$12,500 x 6 = \$75,000
Economic Development	Site Assist Program	\$60,000	This program identifies new parcels of land for industrial parks	Total Benefit = Number of cities x savings per city = \$10,000 x 6 = \$60,000
Economic Development	Smart Communities Matching Grants	\$125,000	Staff assisted with providing \$5,000 matching grants for 25 cities.	Total Benefit = Number of grants x (Matching grant amount) = 25 x \$5,000 = \$125,000
Economic Development	Smart Sites / Shovel Ready Program	\$150,000	Shovel-ready suite qualification program designed to support economic development opportunities for the members.	Total Benefit = Number of cities x (cost) = 6 x \$25,000 = \$150,000
Economic Development	Strategic Economic Development Plans	\$344,000	Staff provides strategic economic development plans for the members at no additional charge versus each city paying an average cost of \$20,000/ plan and implementation costs of 12 work days for each member @ \$1,200/ work day.	Total Benefit = Number of cities x (Cost of plan + (Number of work days x Cost per work day)) = 10 x (\$20,000 + (12 x \$1,200)) = \$344,000
Economic Development	Webinars	\$15,300	Staff provides webinars for the members on retail/commercial/industrial development including IECC/SEDC webinars.	Total Benefit = Number of cities x 1 webinar per city x cost per project = 51 x 1 x \$300 = \$15,300

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Legal	Government Relations	\$54,057,317	The ElectriCities Government Relations staff protects the interests of all NC Public Power communities at the NC General Assembly including municipalities ability to grow their electric load and charge reasonable fees for use of their infrastructure. Staff also mitigates the harm of potentially costly mandates such as renewable energy and recent changes to how sales of electricity are taxed.	Total Benefit = \$54,057,317.08 represents the total distribution amount public power cities and towns received from the NC Department of Revenue for the Electric Franchise/ Natural Gas Excise tax for the 2015-2016 fiscal year that ended on June 30, 2016. Under tax reform legislation passed in the 2013 General Assembly, effective on July 1, 2014, the gross receipts franchise tax on sales of electricity and the reimbursement of a portion of that tax to cities was repealed. However, cities that were served by investor owned utilities were protected by a "hold harmless" provision in the law that provided that those cities would receive the same amount of money despite the repeal of the gross receipts franchise tax. Power Agency cities were initially left out of the "hold harmless" provision. Staff and our contract lobbyists successfully lobbied legislators and legislative staff on behalf of the Power Agency cities so that Power Agency cities are also protected by the "hold harmless" provision. Value held constant since 2015.
Legal	Government Relations	\$16,206,000	ElectriCities contract lobbyists provide additional manpower to the ElectriCities Government Relations staff. They are an extension of the internal government affairs team and expand our lobbying footprint at the federal and state levels.	Total Benefit = (Four Contract lobbyist rot = \$18,500 x 12 months = \$222,000 x 73 members) = \$16,206,000
Legal	Government Relations	\$1,536,650	ElectriCities Government Relations staff identify and sponsor a number of events and newsletters to bolster reputation and name recognition for public power and ElectriCities member communities.	Total Benefit = Business NC - NC Tribune Sponsorship \$3000 + NC Insider Spon- sorship \$12,000 + NC Rural Center Rural Summit \$1250 + Association Executives of NC Legislative Reception \$800 + NC Chamber Legislative Reception \$3000 + NC Free Legislative Luncheon \$1000 = (\$21,050 in Sponsorships x 73 members) = \$1,536,650
Member Communications	Bill Inserts	\$106,286	Bill inserts on public power-related topics were made available to all members free of charge. New inserts added in 2023 and audit/update of existing bill inserts.	Total Benefit = 518,930 bill inserts sent to members x \$0.20 per insert = \$103,786 + ElectriCities (3) staff to create new/audit/ update bill inserts (25/hrs @ \$100 = \$2,500) = \$106,286
Member Communications	Collateral	\$61,476	Annual Report, Understanding EC, Membership Directory	Total Benefit = Estimated ElectriCities (6) staff (379/hrs @ 100 = \$37,900) + Annual Report photography and printing costs (\$23,576) = \$61,476
Member Communications	Communications Task Force	\$237,600	Monthly CTF virtual meetings	Total Benefit = Estimated ElectriCities (2) staff (3/hrs @ 100 = \$300 X 11 = 3,300) X 72 = \$237,600

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Member Communications	Conferences	\$5,112,000	Annual Conference: Developed custom conference design including all physical/printed and digital elements, conference script, conference PowerPoint, conference speeches, program content, presentation content, on-site support, etc.	Total Benefit = Estimated ElectriCities (6) staff (710/hrs @ \$100 = \$71,000) x 72 members = \$5,112,000
Member Communications	Conferences	\$5,112,000	Connections Summit: Applied conference design including all physical/ printed and digital elements, conference script, conference PowerPoint, conference speeches, program content, presentation content, on-site support, etc.	Total Benefit = Estimated ElectriCities (6) staff (710/hrs @ \$100 = \$71,000) x 72 members = \$5,112,000
Member Communications	Custom Bill Inserts	\$8,800	Custom bill inserts for members participating in 2023 Retail Customer Surveys (11 custom inserts created)	Total Benefit = Estimated ElectriCities (2) staff (8/hrs @ \$100 = \$800 X 11 custom inserts = \$8,800)
Member Communications	Customized City Project	\$7,500	Customized City Project: Gastonia	Total Benefit = Estimated ElectriCities (4) staff (75/hrs @ \$100 = \$7,500)
Member Communications	Customized City Project	\$7,500	Customized City Project: Laurinburg	Total Benefit = Estimated ElectriCities (4) staff (75/hrs @ \$100 = \$7,500)
Member Communications	Customized City Project	\$7,500	Customized City Project: Newton	Total Benefit = Estimated ElectriCities (4) staff (75/hrs @ \$100 = \$7,500)
Member Communications	Economic Development	\$9,600	Developments Newsletter: Quarterly publication with industry news promoting the value of public power and the economic development wins of members	Total Benefit = Estimated ElectriCities (3) staff 96/hrs @ \$100 = \$9,600
Member Communications	Economic Development	\$5,000	Industry sector resources, web page resources/updates, trade booth collateral	Total Benefit = Estimated ElectriCities (3) staff 50/hrs @ \$100 = \$5,000
Member Communications	Job Postings	\$2,000	Job postings on behalf of member communities to corporate website throughout the year, updates to posts/statuses, removing when filled, communications to HR and member	Total Benefit = Estimated ElectriCities (1) staff 20/hrs @ \$100) = \$2,000
Member Communications	Member Communication	\$67,200	Weekly Wire: Weekly digital newsletter promoting ElectriCities services, industry news, member highlights, and numerous resources available to members	Total Benefit = Estimated ElectriCities (3) staff (14/hrs @ \$100 = \$1,400 per issue) x 48 issues = \$67,200
Member Communications	P4 Funds	\$54,460	P4 Funds: Designed for Power Agency members, the Public Power Promotional Program (P4) provides funds for member promotion of their utility and community. The amount members receive depends on the number of customers served: • Less than 5,000 customers = up to \$1,500 • 5,000 to 10,000 customers = up to \$2,000 • More than 10,000 customers = up to \$2,500	Total Benefit = Estimated ElectriCities (2) staff (20/hrs @ \$100 = \$2,000) + NCMPA1 Member Funds Provided + NCEMPA Member Funds Provided = \$54,460
Member Communications	Public Power Week Campaign	\$550,689	Staff designed a Public Power Week themed campaign and produced themed promotional products that could be ordered and paid for by members.	Total Benefit = Estimated ElectriCities (3) staff graphic design and swag production (30/hrs @ \$100 = \$3,000) + estimated ElectriCities (2) staff press releases, resolutions, and other member PR resources (24/hrs @ \$100 = \$2,400) + estimated ElectriCities (1) staff website shopping page programmed (10/hrs @ \$100 = \$1,000) + estimated ElectriCities (1) staff communications plan and social media collateral created (7/hrs @ \$100 = \$700) = \$7,100 x 72 members = \$511,200 + city product orders of \$39,489 = \$550,689

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Member Communications	Social Media	\$1,036,800	Social Media content: Monthly social media messaging, graphics, observances, and resources provided for member use (June-December in 2023)	Total Benefit = Estimated ElectriCities (2) staff (12/hrs @ \$100 = \$1,200 month) x 12 months = \$14,400 x 72 members = \$1,036,800
Member Communications	Toolkits	\$72,000	Outage Communications: Refresh of toolkit and web resource page	Total Benefit = Estimated ElectriCities (3) staff (10/hrs @ \$100 = \$1,000) = \$1,000 x 72 members = \$72,000
Member Communications	Toolkits	\$72,000	Hurricane Communications: Refresh of toolkit and web resource page	Total Benefit = Estimated ElectriCities (3) staff (10/hrs @ $$100 = $1,000 = $1,000 \times 72$ members = $$72,000$
Member Communications	Toolkits	\$252,000	Lineworker Appreciation Day Communications: Creation of 2023 PR toolkit	Total Benefit = Estimated ElectriCities (4) staff (35/hrs @ \$100 = \$3,500) x 72 members = \$252,000
Member Communications	Toolkits	\$1,080,000	Public Power Awards of Excellence	Total Benefit = Estimated ElectriCities (5) staff (150/hrs @ \$100 = \$15,000) = \$15,000 x 72 members = \$1,080,000
Member Communications	Toolkits	\$252,000	Sustainability webinar and messaging resources	Total Benefit = Estimated ElectriCities (2) staff (35/hrs @ \$100 = \$3,500) x 72 members = \$252,000
Member Communications	Website Maintenance	\$15,000	Maintenance of ElectriCities.com website to include new page builds, page redesigns, content updates/adds, etc.	Total Benefit = Estimated ElectriCities (4) staff website updates (150/hrs @ \$100 = \$15,000)
Member Infrastructure Support	Customer Information System	\$5,800	Annual CIS software maintenance savings from consolidation of licensing	Total Benefit = (Savings of 4% x \$29,000 per member license fee) x 5 members) = \$5,800
Member Infrastructure Support	Hosted Customer Information/Billing and Financial Systems	\$20,000	Staff provides utility software research and evaluation consultation, vetting product functionality, technical design and integration capabilities aiding members in product comparison and selection for those seeking to acquire CIS, Financial and other utility applications.	Total Benefit = 200 hours of services x \$100/hour = \$20,000
Member Infrastructure Support	Hosted Customer Information/Billing and Financial Systems	\$90,000	Staff provides Tier 1 and 2 application support for hosted NorthStar CIS members, being the first call for user CIS issues, responding to questions, investigating problems & working with the vendor to resolve the most complex application issues.	Total Benefit = 900 hours of services x \$100/hour = \$90,000
Member Infrastructure Support	Hosted Customer Information/Billing and Financial Systems	\$60,000	Staff recommends industry best practices and process improvements for back office operations e.g., CIS software utilization, customer service policies and procedures, third party software integration and workflow automation.	Total Benefit = 600 hours of services provided annually x Estimated average contract services rate of \$100/hour = \$60,000
Member Infrastructure Support	Hosted Customer Information/Billing and Financial Systems	\$60,000	Staff provides professional services including project management, vendor management, technical support, implementation assistance, QA testing, training and more for new system implementations, upgrades, enhancements, add on products and integration.	Total Benefit = 600 hours of services provided annually x Estimated average contract services rate of \$100/ hour = \$60,000
Member Infrastructure Support	Hosted Customer Information/Billing and Financial Systems	\$2,000	Staff provide user training and education for Member Customer Service, Finance, IT and operations staff on CIS/Billing/Financial applications, offering new staff training, webinars, user group meetings and vendor conferences.	Total Benefit = 20 support hours provided annually x Estimated average contract services rate of \$100/hour = \$2,000

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Member Infrastructure Support	Hosted Customer Information/Billing and Financial Systems	\$37,000	Staff provides report writing services, including requirements definition, development and quality assurance for adhcoc and other custom reporting needs. Staff provides data and report writing services to assist with submission of EIA and Member Participation Reporting.	Total Benefit = 370 hours of services x \$100/hour = \$37,000
Member Infrastructure Support	Hosted Customer Information/Billing and Financial Systems	\$143,000	Design and management of a high availability production environment for the hosted applications and a test environment. Services include network and system administration, database administration, security, data storage, web services, VPN connections and desktop/peripheral support.	Total Benefit = 1,430 hours of services provided annually x Estimated average Sr. system administrator contract rate of \$100/hour = \$143,000
Member Infrastructure Support	Surplus Sales Application Support	\$1,231,200	Approximately 24 hours per month are required to support NCMPA1's energy trading system, or 24x12 months = 288 hours at an average rate of \$55/hr. If a third party were to use comparable energy trading software like IB WebTrader to provide power trading services, it would cost each city \$6,720/month or \$80,640/year.	Total Benefit = ((\$6,720/month - (24 hours/month x \$55/hr)) x (12 months) x 19 cities = \$1,231,200
Renewable Services	Resource Mix Program	\$102,000	Provided detailed information on energy resource mix and CO2 output for all Power Agency members. It is estimated that this would have cost each member \$2,000 to calculate on their own or engage with a consultant to complete.	Total Benefit = (Estimated cost to perform analysis x 51 members) = (\$2,000 x 51) = \$102,000
Renewable Services	Solar Interconnection Assistance	\$112,000	Provided support to members who receive requests to interconnect from customers or vendors. Help guide members through the process, or help them adopt our template interconnection standards. Estimate that on average we save each Power Agency member 20 hours/year.	Total Benefit = (Estimated savings using EC assistance and templates x # of Members) = (20 hours x \$110/hr x 51 members) = \$112,200
Residential Energy Services	Apogee's Weather Insights	\$103,000	By negotiating a statewide license agreement for this online energy auditing tool, Staff was able to provide the tool at an annual license cost of \$30,000 versus having each of 30 cities pay \$6,500 and avoid \$10,000 maintenance cost.	Total Benefit = (Number of cities x Cost/city) - Group cost-maintenance cost = (22 x \$6,500) - \$30,000 - \$10,000 = \$103,000
Residential Energy Services	Energy Forecast online Energy Audit/ Information	\$116,500	Contract with vendor allows NC members to use the service under ElectriCities umbrella.	Total Benefit = (22 of members using the service \times \$7,500 cost if members had to purchase it separately) - (cost of ElectriCities contract) = \$165,000 - \$48,500 = \$116,500
Residential Energy Services	Energy Kits	\$31,483	Renegotiation of energy kit contract price reduced cost from \$13 to \$12.25 per kit. Provided members energy kits at \$12.25 per kit	Total Benefit = 2,570 kits distributed at \$12.25/kit = \$31,482.50
Residential Energy Services	Residential Energy Audits	\$50,250	Staff performed 134 energy audits for Power Agency Participants' residential customers in 2022. Market rate of an audit is \$375/audit.	Total Benefit = Number of audits x Outside audit cost = 134 x \$375 = \$50,250
Safety & Training	Accident Investigations	\$16,000	If an independent consultant conducted an accident investigation, it would cost \$200 per hour for 80 hours. Staff investigates accidents at no additional charge.	Total Benefit = Cost of investigations (assuming one/year) = (80 hr x \$200/hr)= \$16,000
Safety & Training	Apprenticeship Training Program	\$781,200	Staff has a new Lineman Career Development Apprenticeship Program to provide city electric employees training at a cost of \$1,600 per student compared to the market price of \$14,000. Currently there are 252 students enrolled in the program and the program has 4 level and it usually takes 4 years to complete.	Total Benefit = Market price of program - EC cost of program = \$14,000 - \$1,600 = \$12,400/4 = \$3,100 x 252 = \$781,200
Safety & Training	Lineworker Audits	\$66,000	If an independent consultant were to conduct 110 field audits of member cities' line workers, it would cost \$150 per hour for about 4 hours per audit. This service is provided at no extra charge to member cities.	Total Benefit = (Time per audit x Consultant rate) x Number of audits = (4 hr x \$150/hr) x 110 audits = \$66,000

VALUE CATEGORY	VALUE AREA	2023 YEAR END BENEFITS	DETAILS	CALCULATIONS
Safety & Training	Meter Technician Career Development Program	\$29,790	If vendors maintained and administered the Meter Technician Career Development Program, the cost would be approximately \$150 per hour for a 40 hour week of instruction for a total of \$6000. Member cities instructors administer the entire program at a cost of \$1035. A savings of \$4,965.	Total Benefit = Savings per class x Number of classes = (\$6,000 - \$1,035) x 6 = \$29,790
Safety & Training	OSHA 300 Logs	\$6,000	Staff tracks and compiles members' Annual OSHA 300 Logs at no additional charge to the members. If the members were to hire a consultant to perform this service, it would cost approximately \$150 per hour for a total of 40 hours.	Total Benefit = Consulting time x Consultant rate = 40 hrs x \$150/hr = \$6,000
Safety & Training	OSHA Participation	\$175,000	Staff participates in OSHA committees as a voting member and keeps the members informed of changes in the workplace involving tools and protective equipment for lineworkers at no additional charge. If a consultant were to provide this service, it would cost approximately \$2,500 for each of the 70 members.	Total Benefit = Consulting cost x Number of cities = \$2,500 x 70 = \$175,000
Safety & Training	Safe Operating Practices	\$504,000	Safety and training services provided by Staff resulted in a Lost Workday rate of 1.03% for member cities versus the APPA average of 4.75%. This represents 12 lost work day accidents at an average industry cost of \$42,000/accident.	Total Benefit = Lost work day accidents x Cost/accident = 12 x \$42,000 = \$504,000
Safety & Training	Safety Awards	\$7,200	If a consultant were to provide "No Lost Work Day Safety Award" meeting presentations to electric workers and management, the average cost would be approximately \$150 per hour for 48 cities. Staff provides this service at no additional cost to the members.	Total Benefit = (Consulting time x Consultant rate) x Number of cities = (1 hr x \$150/hr) x 48 = \$7,200
Safety & Training	Safety Guidelines Manual	\$175,000	Staff has found it more cost-effective to monitor regulations affecting the electric industry and report to each of our members on an annual basis at no additional charge. If the members were to do this individually, the cost would be \$2,500 for each of the 70 members.	Total Benefit = Consulting cost x Number of cities = \$2,500 x 70= \$175,000
Safety & Training	Safety Investigations	\$175,000	Staff has found it to be more cost-effective to monitor OSHA regulations and accident/near-miss investigations on behalf of our members and report to each of our members on an annual basis at no additional charge. If the members were to do this individually, the cost would be \$2,500 for each of the 70 members.	Total Benefit = Consulting cost x Number of cities = \$2,500 x 70 = \$175,000
Safety & Training	Safety Meetings	\$8,700	If a consultant were to provide instruction and/or material for members' safety meetings. They require approximately one hour each for 58 meetings @ \$150/hour. Staff conducts the meetings and at their work location at no additional cost to the members.	Total Benefit = (Time per meeting x Consultant rate) x Number of meetings = (1 hr x \$150/hr) x 58 = \$8,700
Safety & Training	Substation Career Development	\$25,000	If vendors administered the Substation Career Development apprenticeship program to 25 electric department employees, it would cost approximately \$2,400 each for a total of \$60,000. Member cities instructors administer the ElectriCities apprenticeship program at \$1,400 each for a total of \$35,000.	Total Benefit = Savings per student x Number of students = (\$2,400 - \$1,400) x 25 = \$25,000
Technology Services	Billing System Reviews	\$819,180	Retail Billing Assessments provided to members as needed. Benefits typically include correcting metering or billing inaccuracies, process improvements, and mitigating future billing errors. Total benefits include one time benefits and previous year annual benefits. Annual benefits will be reduced by 25% each year.	Total Benefit = (2023 one time benefits + 2023 annual benefits + 2022 annual benefits x 75%) = \$332,267 + \$192,566 + (\$392,462 x 0.75) = \$819,180
Technology Services	CIS/Billing Advising Services	\$9,000	Provide best practices for successful CIS Migration and lessons learned from past migrations.	Total Benefit = \$1,000 per member assisted x 9 members = \$9,000

VALUE CATEGORY	VALUE AREA	2023 YEAR END BENEFITS	DETAILS	CALCULATIONS
Technology Services	Emerging Technologies	\$61,600	ElectriCities assisted members with projects related to emerging technologies. This includes a smart thermostat pilot, drone services, data analytics, and more.	Total Benefit = (Avoided cost for free Smart Thermostat Pilot x Number of Members participating) + (Avoided cost of drone service x Number of Members participated) + (Avoided cost of data analytics x Number of Members participated) + (GIS hours x hourly rate x Number of Members participated) = (\$5,000 x 3) + (\$2,000 x 0) + (\$20,000 x 2) + (20 x 110 x 3) = \$61,600
Technology Services	SECC Membership	\$215,000	Annual membership for all members with 15,000 or fewer customers. Members receive access to SECC research, educational tools, webinars, etc.	Total Benefit = (Avoided Membership Price x Members Covered) = $($2,500 \times 76) + ($5,000 \times 5) = $215,000$
Technology Services	Smart Grid - Business Cases	\$10,000	ElectriCities assisted 5 members with the analysis of smart grid business cases, thereby avoiding consultant fees estimated to be \$2,000/member.	Total Benefit = Avoided consultant cost x Number of cities assisted = \$2,000 x 5 = \$10,000
Technology Services	Smart Grid - EC Discount	\$110,000	ElectriCities members receive 5% off Nexgrid products through ElectriCities MSA. Members also receive a \$0.50/device/year discount on support services.	Total Benefit = Total spent on Nexgrid products x 5% + support savings = \$36,000 + \$77,000 = \$110,000
Technology Services	Smart Grid - Member LM-Only Shared License	\$33,000	ElectriCities negotiated with Nexgrid to allow our Members to share a server if they are implementing load management only projects. This saves the Members on license costs.	Total Benefit = Avoided license costs x Number of Members on shared license = (\$18,000 x 1) + (\$5,000 x 3) = \$33,000
Technology Services	Smart Grid - Project Management and Coordination	\$70,400	ElectriCities assisted with smart grid projects amongst our members. ElectriCities' involvement helps ensure expectations are met, issues are resolved, etc., reducing the risk associated with these projects for our members.	Total Benefit = Avoided member staff hours x Labor rate x Number of members with smart grid projects = 40 hrs x \$110/hr x 16 = \$70,400
Technology Services	Utility Billing & Financials - EC Discount	\$112,000	ElectriCities members receive 15% off licensing costs for Tyler Technologies Incode and Tyler cloud hosting solutions.	Total Benefit = Average annual SaaS Discount (\$8000) x 14 Members = \$112,000
Technology Services	Utility Billing & Financials - Evaluation Process	\$154,000	ElectriCities organized various quotes, demos, provided analysis, reference checks, etc. on multiple utility billing and financial system solutions. This saved the members interested in upgrading their CIS or FINS a lot of time investigating solutions.	Total Benefit = (Avoided assistance time x Labor rate x Number of members assisted) = 200 hours x \$110/hour x 7 members = \$154,000
Technology Services	Utility Billing & Financials - PM and Coordination	\$49,500	ElectriCities' involvement in Tyler Tech implementations helps ensure expectations are met, issues are resolved, etc., reducing the risk associated with these projects for our members.	Total Benefit = Avoided Member staff hours x Labor rate x Number of Projects Com- pleted = \$110/hour x (420 CIS hours + 30 hosting hours) = \$49,500
Utility Business Services	Connections Summit	\$122,000	Connections Summit provided training for members staff on a variety of subjects at a minimal cost. Sponsorships help defray the cost. Conference registration is about \$400 less than similar conferences. Revenue from sponsors also helps with costs.	Total Benefit = (Individual APPA fee - Conference fee) x Attendees + Sponsorship Revenues = \$32000 + \$90,000 = \$122,000
Utility Business Services	Customer Service Best Practices	\$9,000	Staff provides peer networking to improve members' policies, procedures and legal compliance and to reduce research and legal costs. Direct savings due to lower cost for developing and maintaining appropriate procedures is at least \$100 per member per year.	Total Benefit = Avoided consulting cost x Number of members = \$100 x 90 = \$9,000
Utility Business Services	Efficiency Grant	\$35,500	Energy efficiency grants provided for Agency 1 commercial/industrial clients. Two projects selected in 2023. Total of both projects.	Total Benefit = cumulative grant payout = \$35,500

VALUE CATEGORY	VALUE AREA	2023 YEAR END BENEFITS	DETAILS	CALCULATIONS
Utility Business Services	ElectriCities Annual Meeting	\$192,800	The annual meeting hosted by Staff provides training, peer networking, legislative clout and opportunities to discuss utility business in an efficient manner. The registration fees are typically about \$200/person less than the industry standard (e.g., APPA). Benefit includes \$200 difference per paying attendee plus sponsor revenues.	Total Benefit = (Individual APPA fee - Conference fee) x Attendees + Sponsorship Revenues = \$34,800 + \$158,000 = \$192,800
Utility Business Services	Load Management Analysis/Distributed Generation Review	\$20,250	Staff performed load management analysis/distributed generation review for NCEMPA member and/or their retail customer. This includes analysis of retail/wholesale cost savings associated with the project and calculations of realized savings to existing customers.	Total Benefit = number of analyses x \$750 per analysis = 27 x \$750 = \$20,250
Utility Business Services	Training Classes for Member Staff	\$32,000	Staff provides training through webinars and workshops for customer service, marketing and technical/regulatory compliance. The estimated difference between market price (or outsourced city cost) of this service and the cost charged to the cities by Staff is \$100/person. There were 160 attendees logged in 2023. The estimated savings difference has since increased to \$200/person since classes were free.	Total Benefit = (Estimated savings for EC training/attendee) x Number of attendees = \$200/person x 160 attendees = \$32,000
Utility Services	Catawba Site Representation Services	\$66,889	Staff provides contract administration services to PMPA and NCEMC as they relate to their Catawba ownership interest. Staff bills PMPA and NCEMC for these services, reducing NCMPA1's cost of contract administration by sharing these services with the other Catawba Owners.	Total Benefit = Sum of PMPA + NCEMC invoices from NCMPA1 = \$66,889
Utility Services	Economic Development Rates / Retail Rate Assistance	\$67,500	As NCMPA1 Members receive inquiries regarding economic development opportunities, Staff collects customer data and works with the Participant to develop economic development rates to provide the prospective customer. Staff develops and performs rate analysis.	Total Benefit = Number of studies x External study cost = 27 x \$2,500/study = \$67,500
Utility Services	Economic Development Rates/ Retail Rate Assistance	\$52,500	As NCEMPA Members receive inquiries regarding economic development opportunities, Staff collects customer data and works with the Participant to develop economic development rates to provide the prospective customer. Staff develops and performs rate analysis.	Total Benefit = Number of studies x External study cost = 21 x \$2,500/study = \$52,500
Utility Services	EIA Report Assistance	\$52,250	Staff assisted each NCMPA1 Participant with gathering data and filling out forms for the annual EIA report. Each city would otherwise need at least 0.05 FTE to gather and ensure accuracy of the data. This helps to avoid possible non-compliance penalties.	Total Benefit = Number of cities x City FTE usage x City FTE cost = 19 x 0.05 x \$55,000 = \$52,250 or Total Benefit = Number of cities x Savings/city = 19 x \$2,750 = \$52,250
Utility Services	EIA Report Assistance	\$88,000	Staff coordinates data collection and city reports for filing with EIA for NCEMPA Members at no additional charge. It is estimated that a vendor would charge \$2,750/city/year.	Total Benefit = Number of cities x Savings/city = 32 x \$2,750 = \$88,000
Utility Services	Operational Expertise	\$63,000	Staff provided SCADA support, hosting services and project management to Fremont, Pineville, Cornelius and Huntersville during 2023.	Total Benefit = Number of Cities using SCADA services x City FTE usage x City FTE cost = (4 x 25% x \$63,000) = \$63,000
Utility Services	Operational Expertise	\$504,000	Staff provides NCEMPA Members with operations expertise and assistance in areas of common interest such as NERC compliance coordination, EPA related to generators, delivery point facilities and other operational issues with Duke. It is estimated that it would cost each city about 0.25 FTE in staff to provide equivalent services.	Total Benefit = Number of cities x City FTE usage x City FTE cost = 32 x 25% x \$63,000 = \$504,000
Utility Services	Operational Expertise	\$299,250	Staff provides NCMPA1 Participants with operations expertise and assistance in areas of common interest such as compliance coordination, EPA related to generators, delivery point facilities and other operational issues with Duke. It is estimated that it would cost each city about 0.25 FTE in staff to provide equivalent services.	Total Benefit = Number of cities x City FTE usage x City FTE cost = 19 x 25% x \$63,000 = \$299,250

VALUE CATEGORY	VALUE AREA	2023 YEAR END BENEFITS	DETAILS	CALCULATIONS
Utility Services	Retail Billing Program	\$437,500	Staff provides billing services for 297 of NCEMPA's retail customers in 25 cities, resulting in savings of \$17,500/city/year versus estimates of what the cities would have paid if such services were outsourced.	Total Benefit = Number of cities x Savings/city = 25 x \$17,500 = \$437,500
Utility Services	Retail Billing Services	\$262,500	Staff provides billing and data management services to NCMPA1 Participants whose billing systems and/or staff resources for certain types of retail C/I customers are limited. Without Staff support, each city would spend about \$17,500 per year on this service.	Total Benefit = Number of cities using EC service x External service cost = 15 cities x \$17,500/city = \$262,500
Utility Services	Retail Rate Studies	\$170,000	Staff develops and performs retail rate studies for NCMPA1 Participants, including identifying and recommending necessary and efficient changes in retail rate levels and billing structures. Without Staff assistance, each Participant that receives the service would need to hire outside consultants.	Total Benefit = Number of studies x External study cost = 17 x \$10,000/study = \$170,000
Utility Services	Retail Rate Studies	\$130,000	Staff develops and performs retail rate studies for NCEMPA Members, including identifying and recommending necessary and efficient changes in retail rate levels and billing structures.	Total Benefit = Number of studies x External study cost = 13 x \$10,000/study = \$130,000
VOPP Advertising	Advertising	\$16,268,680	Corporate ads promoting the Value of Public Power: Digital, radio, broadcast, print)	Total Benefit = EC staff time + vendor strategy/creative/copywriting + cost of ad placements across platforms = \$16,268,680
VOPP Advertising	Radio Ad Contest	\$11,892	Creation, promotion, and deployment of radio ad contest	Total Benefit = Estimated ElectriCities (2) staff (75/hrs @ 100 = \$7,500) + \$4,392 air time = \$11,892
VOPP Resource	VOPP Dashboard	\$1,080,000	Creation and population of VOPP dashboard resource	Total Benefit = Estimated ElectriCities (3) staff (150/hrs @ 100 = \$15,000) = 15,000 x 72 members = \$1,080,000
VOPP Sponsorships	Sponsorships	\$3,240,000	Event and virtual/digital sponsorships	Total Benefit = Estimated ElectriCities (3) staff (100/hrs @ 100 = \$10,000) + (Sponsorship cost = \$35,000) = \$45,000 x 72 members = \$3,240,000
FINANCE BE	ENEFIT			
Finance	Bond Refunding	\$716,295	In 2016, Staff refunded Series 2009 bonds for NCMPA1 and replaced them with lower cost bonds. This provides significant reductions in financing costs for the Agency every year through 2030.	Total Benefit = Reduced financing costs = \$716,295
Finance	Bond Refunding/ Defeasance	\$10,831,793	In 2019, Staff defeased and refunded portions of Series 2009A, 2009C, 2010A, 2010B, 2012B, 2012C, 2015A and 2015C bonds for NCMPA1 and replaced them with lower cost bonds. This provides significant reductions in financing costs for the Agency every year through 2032.	Total Benefit = Reduced financing costs = \$10,831,793
Finance	Capital Additions	\$517,000	In 2009, Staff secured the ability to finance \$68,650,000 of capital additions for NCMPA1 using Build America Bonds instead of traditional financing. In 2014, \$3,125,000 of bonds were repurchased leaving \$65,525,000 outstanding. After the repurchase, this results in savings of \$517,000/year during the life of the bonds.	Total Benefit = \$517,000
Finance	Decommissioning Deposits	\$45,100,000	Change due to funds to AGPIP.	Total Benefit = \$45,100,000
Finance	Interest on Margin Account	\$210,910	In 2018, Staff worked with ADM to begin earning interest on the margin account for Surplus Sales.	Total Benefit = Interest on margin account = \$210,910

VALUE CATEGORY	VALUE AREA	2023 YEAR END BENEFITS	DETAILS	CALCULATIONS			
Finance	Investment Portfolios	\$20,802,433	In accordance with state law and bond resolutions, Staff prudently invests the Power Agencies' funds in safe, diversified instruments in a manner that emphasizes safety of principal and liquidity and maximizes return on investment. Permitted investments include U.S. Treasury notes and bonds, federal agency notes, obligations of the State of North Carolina, prime quality commercial paper, certificates of deposit, bankers' acceptances, repurchase agreements, money market funds and mortgage-backed securities guaranteed by federal agencies. Investment revenues are used to offset expenses and reduce wholesale electricity rates.	Total Benefit = Investment revenues = \$20,802,443			
CONTRACT ADMINISTRATION BENEFIT							
Contract Administration	DOE Settlement - Spent Nuclear Fuel	\$2,484,340	The 16th Annual Submission to DOE for reimbursement was filed on January 31, 2023. This is a reimbursement of costs incurred as a result of the DOE not accepting spent nuclear fuel when required and Catawba having to make accommodations to store the fuel on site.	Total Benefit = Credit reimbursement from DOE received on the Operating Statement dated August 2023 for \$2,484,340			
Contract Administration	FRPPA - 10th Amended Agreement	\$1,520,064	The 10th Amended FRPPA was agreed to with DEP and approved by FERC. This agreement included a refund of the capacity penalty charged to NCEMPA during 2023.	Total Benefit = (Amount of the capacity penalty refund) = \$1,520,064			
Contract Administration	FRPPA - 10th Amended Agreement	\$16,131,150	The 10th Amended FRPPA was negotiated with Duke Energy Progress. Its effective date is 1/1/23 and it allows for an additional 25MW of qualified resources to be constructed behind the delivery point. In addition, it allows for qualified resources to be operated at their full nameplate/inverter rating of 38MW.	Total Benefit = (Value associated with potential battery capacity (25MW) and additional qualified resource capability (38MW) to peak shave the month coincident peaks. FR-7 Demand rate of \$21.84/kW for Jan-Mar; FR-8 Demand Rate of \$21.17 for Apr-Dec.) = \$16,131,150			
Contract Administration	FRPPA - Interest Reduction, Prepayment	\$500,000	\$40M of the 2022 Annual energy true up was prepaid to save on 7 months of interest expenses. The savings was realized in the first half of 2023. The net savings is \$500,000	Total Benefit = (Net savings of interest expenses) = \$500,000			
Contract Administration	FRPPA Amendment - Coal Ash Settlement	\$3,760,817	The FRPPA Amendment - Coal Ash Settlement of 2017 with DEP allowed for NCEMPA to contract 18MW of DG at Greenville and receive power supply benefits each month when the units operate. The savings are passed to the Members on the Wholesale Power billing statement as a DG credit (Rider 6B). The 2023 savings is a summation of the DG credits provided to the Members.	Total Benefit = Sum of 12 months of DG Credits = \$3,760,817			
Contract Administration	FRPPA Settlement - ROE Reduction	\$7,200,000	Settlement with Duke Energy Progress completed in May 2021 to reduce the Return on Equity percentage in the full requirements formula rate from 11% to 9.85%. Benefits of this settlement were received in a reduction to the annual capacity rate in the 2021 annual true-up process and going forward are reflected in a lower capacity rate. This reduction is worth approximately \$7.2M/year per GDS Analysis.	Total Benefit = (Settlement received as a lower capacity rate) = \$7,200,000			
Contract Administration	FRPPA Settlement of Challenge Issues	\$399,876	Settlement of 2020 and 2021 challenge items from the review of the formula rate true-up and credit received on August 2023 FRPPA invoice.	Total Benefit = \$399,876			
Contract Administration	Full Requirements Power Purchase Agreement (FRPPA), Transmission Billing Statements	\$960,000	Staff continuously reviews all provisions of the FRPPA and Transmission invoices (e.g., billing, contract interpretation, cost allocations, etc.) as these contracts are implemented to ensure that NCEMPA's power supply costs are as low as possible. It is estimated that each member would require 0.3 FTE of internal staff or consultants to provide similar services.	Total Benefit = ((0.3 FTE x \$100,000/FTE) x 32 members) = \$960,000			

VALUE CATEGORY	VALUE AREA	2023 YEAR END BENEFITS	DETAILS	CALCULATIONS
Contract Administration	Merger Agreement	\$2,677,463	The Merger Agreement of 2011 with DEP allowed for NCEMPA to construct 20MW of DG at Greenville and receive power supply benefits each month when the units operate. The savings are passed to the Members on the Wholesale Power billing statement as a DG Credit (Rider 6A). The 2023 savings is a summation of the DG credits provided to the Members.	Total Benefit = Sum of 12 months of DG Credits = \$2,677,463
Contract Administration	NEIL Insurance Distribution Credit	\$777,710	Staff reviews the insurance requirements and premiums for NCMPA1 as Owners of the Catawba Nuclear Station. Each year Nuclear Electric Insurance Limited (NEIL) calculates a potential credit distribution based on claims experience and investment performance. The credit's in 2023 are for NEIL Primary Property Insurance, NEIL Excess Property Insurance, Catawba NEIL extra expense replacement power and McGuire extra expense replacement power.	Total Benefit = Sum total of NEIL credits. NEIL Primary Property and Excess Property credit - \$428,361. Catawba and McGuire NEIL Extra Expense replacement power credit - \$349,349 Total NEIL insurance refunds = \$777,710
Contract Administration	Operating and Fueling Agreement, Interconnection Agreement, and Transmission Billing Statements	\$950,000	Staff continuously reviews all provisions of the Operating and Fueling Agreement, the Interconnection Agreement, and Transmission invoices (e.g., billing, contract interpretation, cost allocations, etc.) as these contracts are implemented to ensure that NCMPA1's power supply costs are as low as possible. It is estimated that each member would require 0.5 FTE of internal staff or consultants to provide similar services.	Total Benefit = ((0.5 FTE x \$100,000/FTE) x 19 members) = \$950,000
Contract Administration	Power Supply Billing Review	\$605,462	Staff challenged several items in the OATT formula rate true up from DEC (Jun 2023). In addition, staff identified a billing error that was corrected (Apr 2023).	Total Benefit = Disallowed costs lowering overall transmission charges = (\$541,522 + \$63,940 (billing error)) = \$605,462
LOAD AND	DEMAND SID	E MANAGEMEN	NT (DSM) BENEFIT	
DSM	DSM/Load Management	\$68,851,182	Staff monitors system conditions, sends out load management notifications, and operates load management systems to obtain savings for the NCEMPA Members.	Total Benefit = Jan - \$6,115,484; Feb - \$5,645,062; Mar - \$6,350,695; Apr - \$5,764,795; May - \$6,191,816; Jun - \$6,405,327; Jul - \$6,512,083; Aug - \$6,149,114; Sep - \$6,725,594; Oct - \$6,618,838; Nov - \$6,405,327; Dec - \$6,405,327 (Total of all 12 months \$75,289,462 Less Rider 6A (\$2,677,463) and 6B (\$3,760,817) credits) = \$68,851,182
DSM	DSM/Load Management	\$803,250	Staff monitors system conditions, sends out load management notifications, and operates load management systems to obtain savings for the NCMPA1 and NCEMPA Members. It is estimated that it would cost each city about 0.25 FTE in staff to provide the equivalent services.	Total Benefit = Number of Cities x City FTE usage x City FTE cost = 51 x 25% x \$63,000 = \$803,250
DSM	DSM/Load Management	\$84,000	Staff assisted Members in Belhaven, Benson, Farmville, Hertford, Laurinburg, Louisburg, Lumberton, Red Springs, Robersonville, Southport, and Tarboro with engineering and project support related to load management device installations.	Total Benefit = Total hours spent supporting load management in these cities x average hourly rate of an engineering consultant = 700 hrs x \$120/hr = \$84,000

TOTAL: \$665,459,341