

**GDS Associates, Inc.** Engineers and Consultants

## ANNUAL ENGINEERING REPORT FISCAL YEAR ENDED DECEMBER 31, 2022

Prepared for: PIEDMONT MUNICIPAL POWER AGENCY



May 2023

GDS Associates, Inc. 111 North Orange Avenue Suite 710 Orlando, FL 32801 www.gdsassociates.com

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This report was prepared by GDS Associates expressly for the purposes set forth herein. In preparing this report, GDS Associates has relied upon certain information furnished by PMPA and derived from data reported to regulatory authorities and reports of Duke Energy and its subsidiaries, PMPA's Independent Auditor and other independent consultants to PMPA, all of which are believed to be reliable, accurate, and reasonable for purposes of this report. Given that this report contains observations, evaluations, analyses, projections, summary statements, opinions and/or conclusions that are based on what GDS Associates believes is reliable information and reasonable assumptions and conditions, GDS Associates makes no assurances with respect thereto. Accordingly, GDS Associates in no way warrants or represents that any such observations, evaluations, analyses, projections, summary statements, opinions will not vary as a result of changes in such assumptions or conditions.

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#### **EXECUTIVE SUMMARY**

Pursuant to its duties as Consulting Engineer to Piedmont Municipal Power Agency ("PMPA"), GDS Associates, Inc. ("GDS Associates") has prepared an annual engineering report with respect to the Catawba Project (as defined in Section 1.2.1 of this Report) for the fiscal year ended December 31, 2022. Such report includes (with respect to the Catawba Project), to the extent applicable: (i) a report on the operations of PMPA; (ii) a report on the management of the Catawba Project; (iii) a report on the sufficiency of rates and charges for services; (iv) a report on requirements of the Participants for future power supply; and (v) a report as to changes in operation and the making of repairs, renewals, replacements, extensions, betterments and improvements.

The following are summaries of the various subjects of the report:

**Operations of PMPA.** In January 2022, PMPA made the scheduled principal payment of \$26.0 million on its outstanding debt, which was accrued from operations during 2021. During 2022, PMPA accrued monies from operations to make the scheduled principal payment of \$51.3 million on its outstanding debt in January 2023. As of December 31, 2022, PMPA's Bond ratings of A- (Standard & Poor's), A3 (Moody's), and A- (Fitch) are unchanged from those reported as of December 31, 2021. PMPA supplied approximately 88% of its energy requirements, net of allocations from the Southeastern Power Administration, from its ownership entitlements from the Catawba Project during 2022. As a result of 2022 operations, PMPA's total Working Capital decreased by \$5 million, resulting in a year-end 2022 total Working Capital balance of \$78 million.

**Management of the Project.** The 2022 capacity ratings for the Catawba Project units under the Project Agreements with Duke remained unchanged from the 2021 ratings. The Nuclear Regulatory Commission reported, as of the date of this Report, only baseline inspections as part of the Reactor Oversight Process are planned for Catawba Units 1 and 2, as well as McGuire Units 1 and 2. During 2022, Catawba Units 1 and 2 operated with capacity factors of 101% and 86%, respectively, with only Catawba Unit 2 conducting a refueling outage. McGuire Units 1 and 2 achieved capacity factors of 91% and 101%, respectively during 2022, with only McGuire Unit 1 conducting a refueling outage. The Catawba Nuclear Station operated with total production costs of approximately \$17/MWh during 2020-2022 (less than the previously reported 2019-2021 average); which is 1% higher than the first quartile average of non-merchant nuclear plants operating in the United States during this period.

**Sufficiency of Rates and Charges.** PMPA's Basic All Requirements rate remained unchanged during 2022. PMPA implemented a temporary \$10.8 million credit applied to Base Billing Demand charges over the period June 1, 2022 through December 31, 2022. This credit terminated January 1, 2023. PMPA's All Requirements rates were reviewed, and projections updated in late 2022. These projections indicated projected costs which were very similar to those projected in early 2022, and that PMPA could (i) maintain the Basic All Requirements rate level in 2023, with a plan for no further rate level adjustments through 2026. The rate levels described above are projected to provide revenues sufficient to pay all Catawba Project and Supplemental Power Costs and maintain the desired Working Capital balances through 2027.

**Requirements for Future Power Supply.** The energy requirements of PMPA's Participants (net of allocations of energy from the Southeastern Power Administration) are projected to increase on average 0.6% per year over the next ten years. Entitlements to capacity and energy from the Catawba Project, together with the other power supply arrangements described in this Report are projected to be sufficient to provide the Participants' All Requirements Bulk Power Supply through the projected period.

**Changes in Operation and Capital Improvements.** Based on our review of the information provided by Duke and PMPA, and our general understanding of the scope of Catawba capital additions projects currently being undertaken by Duke, GDS Associates has reached the conclusion that the renewals, extraordinary repairs, replacements, modifications, capital additions and betterments related to the capital additions projects currently being undertaken by Duke, for which PMPA is responsible under the Operating Agreement, are necessary or desirable to achieve design capability, improve operating reliability of the Catawba Nuclear Station, comply with regulatory requirements, or for safety, public health, or environmental purposes.

#### **PURPOSE AND BACKGROUND**

#### 1.1 **PURPOSE AND SCOPE**

Piedmont Municipal Power Agency ("PMPA"), pursuant to its Catawba Project Power Sales Agreements and its General Bond Resolution, is required to retain on a continuous basis, as Consulting Engineer, an independent consulting engineer or engineering firm to, upon request, advise PMPA and render opinions on matters relating to the electric utility industry, rates and charges, financing and budgets, among other things. In addition to the other duties of the Consulting Engineer, PMPA shall cause the Consulting Engineer to prepare an annual engineering report within 160 days following the close of each Fiscal Year (defined as the twelve-month period ending December 31<sup>st</sup>) with respect to the Catawba Project (as defined later in this Report) for the immediately preceding Fiscal Year (the "Report"). Such Report is required to contain a copy of PMPA's annual audit report and shall include (with respect to the Catawba Project), to the extent applicable:

- 1. a report on the operations of PMPA;
- 2. a report on the management of the Catawba Project;
- 3. a report on the sufficiency of rates and charges for services;
- 4. a report on requirements of the Participants for future power supply; and
- 5. a report as to changes in operation and the making of repairs, renewals, replacements, extensions, betterments and improvements.

GDS Associates, Inc. ("GDS Associates") has been designated Consulting Engineer to PMPA by its Board of Directors and has prepared this Report with respect to PMPA's Fiscal Year 2022. This Report is intended to provide engineering, financial, and management information to PMPA, its Participants, and the Bond Fund Trustee. PMPA has advised GDS Associates that a copy of this Report may be used as a supplement to information that is required by the Securities and Exchange Commission to be provided to various municipal securities information repositories.

For purposes of this Report, GDS Associates has relied upon PMPA's audited financial statements, certain financial, management, and operating data provided by the staff of PMPA (including PMPA's Board of Directors meeting minutes), reports of Duke Energy Carolinas, LLC ("Duke"), a subsidiary of Duke Energy Corporation ("Duke Energy"), and certain closing documents provided in connection with the issuance of PMPA's Bonds. GDS Associates has not made any site visits for purposes of inspecting the Catawba Nuclear Station, facilities of PMPA or facilities of its Participants; as such site visits are beyond the scope of this Report.

Any capitalized term used in this Report, to the extent not defined herein, indicates that such term is defined in the particular agreement or document being discussed. Any summary descriptions of agreements or other documents in this Report: (i) are based on our understanding of such agreements; (ii) are not to be regarded as full statements, and consequently do not purport to be complete in every respect; and (iii) are qualified by reference to such agreement or document.

#### 1.2 BACKGROUND AND OVERVIEW OF PMPA ARRANGEMENTS

## 1.2.1 **PMPA**

PMPA is a public body and body corporate and politic of the State of South Carolina that was incorporated under the Joint Municipal Electric Power and Energy Act (Section 6-23-10 through 6-23-340, Code of Laws of South Carolina 1976, as amended) on January 11, 1979. PMPA has an undivided ownership interest of 25% in Unit 2 of the Catawba Nuclear Station (the "Catawba Project"), which was constructed and is being operated by Duke. Duke, North Carolina Municipal Power Agency No. 1 ("NCMPA1") and North Carolina Electric Membership Corporation ("NCEMC") also have various undivided ownership shares in the Catawba Nuclear Station. NCMPA1 owns the remaining 75% of Catawba Unit 2, while NCEMC and Duke own approximately 61.5% and 38.5% of Catawba Unit 1, respectively. Collectively, PMPA, NCMPA1, and NCEMC are referred to as the "Buyers." The following table sets forth PMPA's entitlement share of the Catawba Project, after giving effect to the Catawba and McGuire Reliability Exchanges as discussed later in this section.

	Commercial	Maximum Net Dependable	PMP Entitlem	PA ent [2]
	Operation	Capability (MW) [1]	Share	(MW)
Catawba Nuclear Station	:			
Unit 1	1985	1,145	6.25%	71.6
Unit 2	1986	1,145	6.25%	71.6
Total Catawba Station			_	143.1
McGuire Nuclear Station:	:			
Unit 1	1981	1,105	6.06% <b>[3]</b>	67.0
Unit 2	1984	1,105	6.06% <b>[3]</b>	67.0
<b>Total McGuire Station</b>				134.0
Total Catawba Project				277.2

#### Table 1-1: Catawba Project

[1] Maximum Net Dependable Capability ("MNDC") is the main unit capability less auxiliaries and is intended to be a dependably attainable value. MNDC ratings pursuant to the Project Agreements, which may be different than Duke's reported maximum dependable capability.

[2] After reflecting the Catawba and McGuire Reliability Exchanges as discussed later in this section.

[3] Effective percentage after reflecting the differences in original design MNDC ratings of the Catawba and McGuire units of 1,145 MW and 1,180 MW, respectively.

On June 21, 1985, PMPA commenced supplying power and energy to ten South Carolina cities (the "Participants") located in the Piedmont region of South Carolina. The Participants own electric distribution systems and nine of these Participants receive all of their power deliveries through Duke's transmission system. The tenth Participant, the City of Union, receives power deliveries through Lockhart Power Company's transmission system.

The following figure is a map of the state of South Carolina with the locations of the Participants and the Catawba Nuclear Station identified.



Figure 1-1: Participant and Catawba Project Map

The Participants have entered into the Catawba Project Power Sales Agreements and the Supplemental Power Sales Agreements with PMPA (collectively, the "Power Sales Agreements").

The Participants' Shares of Catawba Project Output under the Catawba Project Power Sales Agreements are as follows:

Participant	Percentage (%)
Abbeville	2.6786
Clinton	7.8438
Easley	13.2426
Gaffney	10.0467
Greer	9.3416
Laurens	6.4878
Newberry	10.4723
Rock Hill	28.0374
Union	10.0134
Westminster	1.8358
PMPA Total	100.0000

Table 1-2: Participants	' Catawba	<b>Project Shares</b>
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Pursuant to its General Bond Resolution dated August 14, 1980, as amended (the "Resolution"), PMPA has issued Electric Revenue Bonds ("Bonds") to finance and refinance the Costs of Acquisition and Construction of its ownership interest in the Catawba Project. Through December 31, 2022, PMPA has issued \$6.071 billion aggregate principal amount of Bonds. Approximately \$5.481 billion in aggregate principal amount of such Bonds has been refunded, retired, or paid at maturity, leaving \$590 million in net Bonds outstanding as of December 31, 2022.

Pursuant to the terms of the Supplemental Power Sales Agreements, PMPA is required to sell, and each Participant is required to purchase from PMPA, such Participant's All Requirements Bulk Power Supply. All Requirements Bulk Power Supply means, with respect to a particular Participant, all electric power and energy required by such Participant, exclusive of any purchases of power and energy from the Southeastern Power Administration ("SEPA") and power and energy derived from the generating capacity of such Participant, if any. PMPA is responsible for planning, negotiating, designing, financing, acquiring or constructing, contracting for, administering, operating and maintaining all generation and transmission arrangements and facilities and power purchases necessary to affect the delivery and sale of All Requirements Bulk Power Supply to the Participants.

Subject to the arrangement between PMPA and Union described further in this section, PMPA fulfills its obligations to supply the Participants with All Requirements Bulk Power Supply by supplying Catawba Project Output, including the power and energy available through the Catawba Reliability Exchange and the McGuire Reliability Exchange, pursuant to the Project Agreements, described below, and through purchases of Supplemental Capacity and Energy pursuant to a power purchase agreement with the South Carolina Public Service Authority ("Santee Cooper").

PMPA is governed by a Board of Directors consisting of one representative for each Participant and an alternate representative who performs the duties of the Participant's Director in the absence of that Director. Each Participant appoints its representatives who serve at the pleasure of such Participant. The Board meets monthly for purposes of conducting PMPA business, including setting rates and charges for All Requirements Bulk Power Supply to the Participants.

## **1.2.2 PROJECT AGREEMENTS**

The relationship between PMPA and Duke with respect to the Catawba Project and certain other power supply matters results from four contracts between PMPA and Duke: (i) a Purchase, Construction and Ownership Agreement (as amended, the "Sales Agreement"); (ii) an Operating and Fuel Agreement (as amended, the "Operating Agreement"); (iii) the Catawba Nuclear Station Joint Ownership Support Agreement (the "JOSA"); and (iv) the McGuire Reliability Exchange Agreement (the "MREA," and collectively with the Sales Agreement, the Operating Agreement and the JOSA, the "Project Agreements").

## 1.2.2.1 Purchase, Construction, and Ownership Agreement

The Sales Agreement provided for the construction of the Catawba Nuclear Station and the sale by Duke to PMPA of a 25% undivided ownership interest in Catawba Unit 2. The closing under the Sales Agreement occurred on December 20, 1984.

#### 1.2.2.2 **Operating and Fuel Agreement**

The Operating Agreement establishes the terms and conditions between Duke and PMPA under which Duke operates and maintains the Catawba Nuclear Station, provides the fuel therefor, and makes capital additions thereto.

**Operation, Maintenance and Fueling of the Project.** Duke, as operator and independent contractor, operates and maintains PMPA's ownership interest in Catawba Unit 2 and provides Support Facilities services and furnishes all supervision, labor, equipment, tools, materials and incidentals necessary to operate and maintain the Catawba Nuclear Station. Subject to applicable regulatory requirements, Duke agrees to operate and maintain the Catawba Nuclear Station in accordance with Usual Utility Practice. Duke is responsible for making all regulatory filings relating to the Catawba Nuclear Station.

As operator, Duke determines outage schedules and shut-down and start-up times for the Catawba Nuclear Station. Duke dispatches output from the Catawba Nuclear Station and operates the Catawba Nuclear Station as part of its combined system. Duke has agreed that there will be no pattern of adverse distinction between operation of the Catawba Nuclear Station and Duke's other generating facilities.

**Nuclear Fuel.** PMPA makes advances to Duke for PMPA's share of the cost of nuclear fuel material (i) acquired by Duke for uranium and (ii) converted by Duke and anticipated to be used for the Catawba Project's fuel core. Such advances are credited to a "Uranium Advance Account" and a "Conversion Advance Account," respectively, established for PMPA. When nuclear fuel material is shipped by Duke to be enriched for fueling of Catawba Unit 2, Duke deducts the value of the shipped material on the basis of the average cost of all un-enriched nuclear material then held by Duke and charges the Uranium Advance Account and the Conversion Advance Account accordingly. Duke likewise makes withdrawals, as required, of nuclear fuel materials from the Uranium Advance Account and the Conversion Advance Account accordingly. Duke likewise makes withdrawals, as required, of nuclear fuel materials from the Uranium Advance Account and the Conversion Advance Account at the then average cost of such nuclear fuel material for fueling at other nuclear units on the Duke system. Duke provides the fuel management services of acquiring nuclear fuel material and obtaining nuclear fuel services, such as arranging for the enrichment of uranium, contracting for fuel assemblies and other fuel-related hardware, and the handling and storing of spent fuel. For providing fuel material, fuel services, and fuel management services, PMPA pays Duke an annual fee, which was approximately \$115,200 in 2022.

PMPA also makes advances to Duke for its share of funds expended by Duke for exploration, mining and other ventures undertaken for purposes of attempting to obtain nuclear fuel material. Such funds are credited to a "Uranium Venture Account" established for PMPA. If any such venture undertaken by Duke results in the securing of nuclear fuel materials, funds advanced by PMPA for such venture will be credited to the Uranium Advance Account.

Duke provides PMPA with a ten-year nuclear fuel procurement plan annually. This plan describes the existing and proposed contractual arrangements (and estimated costs thereof) for providing all nuclear fuel material and nuclear fuel services required at the Catawba Nuclear Station.

**Capital Additions.** Pursuant to the Operating Agreement, either Duke or PMPA (or NCMPA1 or NCEMC, under their respective operating and fuel agreements with Duke) may propose any capital addition for the Catawba Nuclear Station that it believes is needed for

regulatory, safety, environmental, economic or reliability reasons. If the estimated cost of such capital addition is less than \$46 million (\$10 million in 1977 escalated based on certain cost indices, and which is subject to further adjustment into the future), the "capital additions agreement threshold", Duke will arrange for its design and construction. If the estimated cost of such addition exceeds the capital additions agreement threshold, Duke, PMPA, NCMPA1 and NCEMC will enter into an "Additions Agreement" providing for the design and construction of such addition and for the procurement of any goods or services incident thereto. An Additions Agreement may provide for Duke to design or construct the capital addition, or both. Disputes concerning the need for, or cost of, a capital addition, or involving an engineer or contractor for such an addition, may be submitted to arbitration. Notwithstanding PMPA's right to challenge capital additions approved by Duke, Duke may proceed with the planning, design or construction of any proposed capital addition, and PMPA is required to pay its proportionate share of the costs of such addition, unless and until the matter is resolved in PMPA's favor by arbitration.

As noted above, PMPA makes monthly advances to Duke as required for capital additions. If PMPA demonstrates to the reasonable satisfaction of Duke that funds are not available to it to pay its share of the cost of a capital addition, PMPA and Duke will enter into an agreement to provide for the payment by Duke of PMPA's share of the cost of the capital addition and the repayment thereof within two years.

Operating Advances and Fees. PMPA's cost responsibility for fuel, operating and maintenance, and capital additions, under the Operating Agreement is 12.5% of all such costs incurred by Duke at the Catawba Nuclear Station. PMPA makes monthly advances to Duke for the costs of operating and maintaining the Catawba Nuclear Station based on an annual statement of estimated monthly costs for the ensuing calendar year. As originally structured, as actual costs become known, variances between actual and estimated costs result in reductions or credits to a "Working Capital Fund" established for PMPA and held by Duke. The Working Capital Fund was created with the deposit by PMPA of an amount equal to onesixth of PMPA's estimated annual costs of operation and maintenance, nuclear fuel material and fuel management, capital additions and additions to operating inventory, and was replenished by PMPA annually, as necessary, at the time Duke provided PMPA with its annual estimate of monthly costs. PMPA is obligated to maintain such amount in the Working Capital Fund during the term of the Operating Agreement; provided, however, that such obligation is relieved for so long as PMPA's Bonds are rated equal to or better than two of the three following unenhanced ratings: A- by Standard & Poor's, A3 by Moody's Investors Service, Inc., or A- by Fitch IBCA, Inc. During any such period of relief from the obligation of the Working Capital Fund, certain of such variances will be paid by, or credited to, PMPA. As noted in Section 2.5 Bond Ratings later in this Report, PMPA's bond ratings satisfy the criteria specified above, and as such, as of the date of this Report, PMPA is relieved of the Duke Working Capital Fund obligation.

PMPA also pays Duke a fee equal to 12.5% of 12.5% (i.e., 1.5625%) of the direct and indirect labor expenses of operating and maintaining the Catawba Nuclear Station.

**Role of PMPA.** All contracts with third parties relating to the operation and maintenance of, and capital additions to, the Catawba Project and all changes or amendments to existing contracts are subject to approval by PMPA. PMPA may have a site representative with additional support personnel at the Catawba Nuclear Station to observe operation,

maintenance and fueling of the Catawba Nuclear Station and the costs thereof. Duke has agreed to provide PMPA with reasonable access to its books and records concerning the costs and operation of the Catawba Nuclear Station pursuant to the Operating Agreement.

Duke, PMPA, and the other owners of the Catawba Nuclear Station have formed an Operations Review Committee to meet periodically and review operation, maintenance and fueling of, and capital additions to, the Catawba Nuclear Station and the costs thereof. Duke has agreed to consider the Operations Review Committee's recommendations and make available information reasonably requested by the committee. However, Duke retains control and responsibility for operation, maintenance and fueling of the Catawba Nuclear Station.

**Spent Nuclear Fuel.** PMPA assumes responsibility for, and bears all costs and will derive all benefits arising from, a portion of all spent nuclear fuel on the Duke system as of the closing in June 1985, and an ownership share of nuclear fuel consumed at the Catawba Nuclear Station after the closing.

Duke may utilize the spent fuel storage capability of the Catawba Nuclear Station for the storage of spent nuclear fuel from any of Duke's other nuclear units. Duke shall compensate PMPA for such use and will remain liable for such usage and indemnify and hold harmless PMPA and the Participants in respect thereto.

**Decommissioning.** Either Catawba Unit 1 or Catawba Unit 2 or the entire Catawba Nuclear Station may be decommissioned if Duke, PMPA, NCMPA1 and NCEMC so agree or if an arbitrator orders decommissioning pursuant to the terms of the Sales Agreement. Decommissioning will be carried out pursuant to a separate agreement. The owners shall bear all costs of decommissioning in proportion to their respective ownership shares.

**Term of Agreement.** Unless terminated earlier in connection with an Event of Default or Force Majeure, the Operating Agreement shall continue in effect until all costs associated with the decommissioning of Catawba Units 1 and 2 and all "back-end" services (i.e., spent fuel storage, waste disposal, etc.) are paid or otherwise provided for.

#### 1.2.2.3 Joint Ownership Support Agreement

The Joint Ownership Support Agreement generally provides for (i) the interconnection of the Catawba Project and Duke's system and (ii) the Catawba Reliability Exchange pursuant to which Project Output is provided in approximately equal amounts from Units 1 and 2 of the Catawba Nuclear Station. The purpose of the Catawba Reliability Exchange is to make the supply of capacity and energy to which PMPA is entitled pursuant to its ownership interest in Catawba Unit 2 more reliable, and to mitigate potential adverse economic effects on PMPA and the Participants from unscheduled outages of Catawba Unit 2. Correspondingly, PMPA bears the risks of unscheduled outages of either of the Catawba units.

**Role of Duke.** Duke has sole responsibility for the scheduling, commitment, and dispatch of the available capacity of the Catawba units under the JOSA.

**Role of PMPA.** PMPA, or its designated agent, schedules energy from Catawba, and McGuire if applicable, on an hourly basis pursuant to its transmission agreements.

**Catawba Reliability Exchange.** The owners of Catawba Unit 1 exchange 50% of the capability and output of Catawba Unit 1 for 50% of the capability and output of Catawba Unit 2. The owners of Catawba Unit 2 exchange 50% of the capability and output of Catawba Unit 2 for 50% of the capability and output of Catawba Unit 1. This is known as the Catawba Reliability Exchange.

**Exchange Payments.** PMPA and Duke effect certain exchange payments as consideration for the Catawba Reliability Exchange, the Support Facilities services to be provided by Duke, and PMPA's agreement to permit Duke to use the spent fuel storage associated with Catawba Unit 2 for purposes other than the storage of spent fuel from that unit. Such exchange payments (in the form of adjustments to payments otherwise due under the Project Agreements) are designed to make PMPA's payments for the costs of construction of, capital additions to, operation and maintenance of, and fueling of the Catawba Project equal to the average of such costs for the Catawba Nuclear Station as a whole. Exchange payments were made at the closing under the Sales Agreement and are made monthly thereafter in the amount of the sum of the difference, if any, between the "discrete costs of Catawba Unit 2" and "average unit costs" with respect to closing costs, construction costs, deposits to the Working Capital Fund, fuel costs and operation and maintenance costs and additional capital costs, with certain limited exclusions specified in the JOSA. In general, "discrete costs of Catawba Unit 2" are calculated on the basis of 25% of such costs of Catawba Unit 2, and "average unit costs" are calculated on the basis of 12.5% of such costs of Catawba Units 1 and 2 and the Support Facilities.

**Default Generator Balancing Provisions.** Similar to a generator balancing agreement, if at any time PMPA is not covered by a separate balancing agreement, the provisions under the JOSA will apply. A generator balancing agreement provides for replacement (or purchased) power if the actual generator output is less than the scheduled output or provides payment for actual generator output that is greater than scheduled.

**Term of Agreement.** The JOSA continues until the last Catawba unit, either Catawba Unit 1 or Unit 2 is retired.

## 1.2.2.4 McGuire Reliability Exchange Agreement

The MREA generally provides for an exchange of capability and output from Catawba Units 1 and 2 for capability and output from McGuire Units 1 and 2. The purpose of the McGuire Reliability Exchange is to make the supply of capacity and energy to PMPA in the amounts to which PMPA is entitled pursuant to its ownership interest in Catawba Unit 2 more reliable, and to mitigate potential adverse economic effects on PMPA and the Participants from unscheduled outages of Catawba Units 1 and 2. Correspondingly, PMPA bears the risks of unscheduled outages of either of the McGuire units.

**Role of Duke.** Duke has sole responsibility for the scheduling, commitment, and dispatch of the available capacity of the McGuire units under the MREA.

**Energy Exchange.** As with the Catawba Reliability Exchange, the McGuire Reliability Exchange swaps a percentage of capability and output from the McGuire Nuclear Station with a percentage of capability and output with the Catawba Nuclear Station. Due to the McGuire units having a lower maximum net dependable capability ("MNDC") rating than the Catawba units, the exchange gives slightly more power to Duke than is received from the McGuire units.

**Special Reserve Fund.** PMPA has established a "Special Reserve Fund" to provide a source of funds to be available to Duke in the event of a default by PMPA under the MREA. PMPA, Duke and an agent bank have entered into an escrow agreement, under which PMPA deposited the sum of \$1.6 million in the Special Reserve Fund held by the agent bank. If the amount on deposit in the Special Reserve Fund at the beginning of any fiscal quarter is less than \$1.6 million, PMPA will deposit an amount equal to such difference within 10 days. If, as of the first business day of any year, the amount on deposit in the Special Reserve Fund is in excess of the required balance, PMPA may withdraw the excess. If PMPA should default under the MREA by failing to make a required payment to Duke, the funds, or an appropriate portion of the funds, in escrow in the Special Reserve Fund will be paid to Duke by the agent bank pursuant to the escrow agreement.

**Term of Agreement.** The MREA continues until the last Catawba unit or McGuire unit is retired. However, either party may terminate the MREA with a written three-year notice given to the other party.

## 1.2.3 CATAWBA PROJECT

PMPA's 25% ownership in Catawba Unit 2, taken together with the Catawba and McGuire Reliability Exchanges, form the basis for PMPA's output entitlements from the Catawba Project. Since PMPA's entitlement to power comes from both the Catawba and McGuire Nuclear Stations, a description of each has been included.

## 1.2.3.1 Catawba Nuclear Station

The Catawba Nuclear Station ("Catawba") is a two-unit nuclear-fueled electric generating station located on the west shore of Lake Wylie in York County, South Carolina, approximately 19 miles southwest of Charlotte, North Carolina. Catawba Unit 1 began commercial operation on June 29, 1985 and Catawba Unit 2 began commercial operation on August 19, 1986. The current operating licenses for both Catawba Units 1 and 2 expire on December 5, 2043. Catawba Units 1 and 2 currently have a maximum dependable capability rating of 1,160 MW and 1,150 MW, respectively.

Each unit at Catawba utilizes a four-loop pressurized water reactor nuclear steam supply system for steam production supplied by Westinghouse Electric Corporation, with the exception of the Catawba Unit 1 replacement steam generators, which are of Babcock & Wilcox design and manufacture. The system is similar in power rating and general design to the steam supply systems employed currently in 28 other units with operating licenses in the United States, including Duke's McGuire Units 1 and 2. The major components of this system are the reactor vessel, pressurizer, four steam generators, and four reactor coolant pumps. Steam from this system drives a turbine-generator supplied by the General Electric Company. Each turbinegenerator consists of one high-pressure turbine with four moisture separator reheaters, three low-pressure turbines, an exciter, and a generator with a nameplate rating of 1,205 MW.

Two reactor buildings enclose the containment structures, which in turn house the nuclear steam supply systems. The containment structures also house the ice condenser refrigeration systems. This system is designed to reduce pressure within the containment structure during a loss-of-coolant accident. This system is similar to those employed currently in eight other nuclear-fueled generating units with operating licenses in the United States, including Duke's McGuire Units 1 and 2.

Two turbine buildings house the turbine-generators and associated equipment. The auxiliary building houses the nuclear steam supply system auxiliary equipment, electrical equipment, control room, fuel storage pools, and related piping and electrical cabling. The service building houses auxiliary equipment necessary for operation of the non-nuclear portion of both units.

Each Catawba unit has three mechanical draft cooling towers whose purpose is to cool the water which, in turn, condenses the steam after it turns the turbine blades. Lake Wylie is the source of water to replace water lost to evaporation from the cooling towers.

Catawba also has many other facilities and systems that are necessary for both the nuclear and non-nuclear operation of the units. Some of these are as follows: standby nuclear service water pond and dam, low-pressure service water system, nuclear service water system, diesel generator building, administration buildings, 230 kilovolt ("kV") switchyard, water chemistry building, monitor tank storage building, various water supply and treatment facilities, the fire protection system, and a technical training facility.

## 1.2.3.2 McGuire Nuclear Station

As mentioned under the Project Agreements, the McGuire Reliability Exchange provides for PMPA's entitlement to capacity and associated output from the McGuire Nuclear Station in amounts approximately equal to PMPA's entitlement to capacity and associated output from the Catawba units. Accordingly, although PMPA's Catawba Project does not include an ownership interest in the McGuire Nuclear Station, McGuire nevertheless comprises an integral part of PMPA's bulk power supply resources.

The McGuire Nuclear Station ("McGuire") is a two unit, nuclear-fueled electric generating station located near Cowans Ford Dam on Lake Norman approximately seventeen miles north of Charlotte, North Carolina. McGuire Units 1 and 2 began commercial operation on December 1, 1981, and March 1, 1984, respectively. The current operating licenses for McGuire Units 1 and 2 expire on June 12, 2041, and March 3, 2043, respectively. McGuire Units 1 and 2 each currently have a maximum dependable capability of 1,158 MW.

Both McGuire units utilize pressurized water reactor nuclear steam supply systems and turbinegenerators supplied by Westinghouse, with the exception of the eight replacement Babcock & Wilcox steam generators, which were installed in 1997. McGuire and Catawba are "sister" plants, with many physical and technical similarities. The McGuire and Catawba containment vessels are alike, the nuclear steam supply systems are the same vintage (with the exception of the Catawba Unit 1, McGuire Unit 1, and McGuire Unit 2 replacement steam generators), and much of the basic plant layout is similar. The major difference between the plants is the use of mechanical draft cooling towers at Catawba, while Lake Norman is used for condenser cooling at McGuire.

## 1.2.4 SUPPLEMENTAL AND TRANSMISSION ARRANGEMENTS

## 1.2.4.1 Supplemental Power Contracts

Since January 1, 2014, PMPA has purchased its supplemental power requirements from Santee Cooper, pursuant to a Power Sales Agreement ("Santee Cooper PSA"). The contract requires that PMPA purchase power from Santee Cooper to meet all of its load demand beyond: (i) the amounts served by Catawba Nuclear Station (including reliability exchanges and backstand requirements); (ii) the Participants' share of electricity from SEPA hydroelectric facilities; and

(iii) load requirements met by individual generating resources owned by any Participants (i.e., supplemental capacity and energy requirements). The term of the Santee Cooper PSA is from January 1, 2014 until such time as either party gives ten years' notice. As discussed further in Section 1.2.5.2, three Participants (Greer, Rock Hill, and Westminster), provided PMPA with 10 years' written notices to terminate their respective Supplemental Power Sales Agreements with PMPA effective at midnight on December 31, 2028. PMPA provided notice to Santee Cooper in January 2019 to terminate the classification of these three Participants as Included Members pursuant to Section 3.1(C) of the Santee Cooper agreement effective at midnight on December 31, 2028. Similarly, the remaining seven Participants (Abbeville, Clinton, Easley, Gaffney, Laurens, Newberry, and Union), provided PMPA with 10 years' written notices to terminate their respective Supplemental Power Sales Agreements with PMPA effective at midnight on December 31, 2029. PMPA provided notice to Santee Cooper in January 2020 to terminate the classification of six of these seven Participants as Included Members pursuant to Section 3.1(C) of the Santee Cooper agreement effective at midnight on December 31, 2029. Union is not an Included Member due to the unique and indirect nature of the wholesale electric service arrangement between Union and PMPA. PMPA also states in its January 2020 written notice to Santee Cooper that with the removal of all Included Members, the Santee Cooper PSA between PMPA and Santee Cooper will effectively terminate at midnight on December 31, 2029.

PMPA's backstand services for the Catawba Project are provided through a Resource Management Agreement with The Energy Authority, Inc. ("TEA"), which became effective January 1, 2021. Under the TEA agreement, TEA (i) purchases wholesale energy as needed to supply PMPA's load when one or more of the Catawba or McGuire units are operating at reduced output or offline due to outages, either planned or unplanned, and (ii) is responsible for arranging transmission, ancillary services, and scheduling/tagging for such transactions. If market power or transmission is not available when needed, PMPA will purchase imbalance energy through the Duke's Open Access Transmission Tariff. The TEA agreement has an initial term of three years and, unless terminated, shall renew on an annual basis for successive one-year terms, starting in 2024.

Effective August 1, 2015, Duke and PMPA entered into a Master Power Purchase and Sale Agreement allowing PMPA to make real-time surplus energy sales to Duke. This agreement was extended in March 2020, and the current term of this agreement extends through December 31, 2023. PMPA sells surplus energy to both Santee Cooper and Duke.

#### 1.2.4.2 Transmission Arrangements

Duke provides PMPA with network integration transmission service to transmit power and energy from its Catawba Project and supplemental network resources to its Participants' delivery points pursuant to a Network Integration Transmission Service Agreement ("NITSA"). The NITSA provides the necessary arrangements to PMPA for transmission service under Duke's Open Access Transmission Tariff ("OATT"), on file at the Federal Energy Regulatory Commission ("FERC").

#### **1.2.5 POWER SALES AGREEMENTS**

PMPA sells, and the Participants purchase, the All Requirements Bulk Power Supply requirements of the Participants. Catawba Project Output is sold and purchased pursuant to the Catawba Project Power Sales Agreement, and Supplemental Bulk Power Supply is sold and

purchased pursuant to the Supplemental Power Sales Agreement. PMPA is responsible for making all generation and transmission arrangements, including acquisition of facilities, and power purchases necessary to furnish All Requirements Bulk Power Supply to each Participant in accordance with its Supplemental Power Sales Agreement.

Each Participant has covenanted to fix, charge and collect rates for electric power and energy furnished through its electric system sufficient to provide revenues adequate to meet its obligations under its Catawba Project Power Sales Agreement and under its Supplemental Power Sales Agreement, and to pay, together with any other available funds or monies, all other amounts payable from or constituting a charge and lien upon such revenues, including amounts sufficient to pay the principal of, and interest on, any bonds, notes or other evidences of indebtedness that are secured by a pledge of the revenues of its electric system.

## 1.2.5.1 Catawba Project Power Sales Agreement

Each Participant has entered into a Catawba Project Power Sales Agreement with PMPA under which the Participant is obligated, in exchange for its Participant Share of Catawba Project Output, to pay to PMPA its Participant Share of Monthly Catawba Project Power Costs. Catawba Project Output is power and energy generated from PMPA's Catawba Project, as affected by the Catawba and McGuire Reliability Exchanges, less any Surplus Energy.

Monthly Catawba Project Power Costs are comprised of PMPA's cost of owning the Catawba Project, including, but not limited to, debt service on Bonds issued to fund PMPA's costs of acquisition and construction, the costs of fuel, operation and maintenance, and making capital additions to the Catawba Nuclear Station. Revenues received from sales of Surplus Energy and investment income on reserve funds are both used to offset Monthly Catawba Project Power Costs that are billed to the Participants.

Under the Catawba Project Power Sales Agreements, the obligation of each Participant to pay its share of Monthly Catawba Project Power Costs is an operating expense of its electric system. No Participant is required to make any payments to PMPA under its Catawba Project Power Sales Agreement except from the revenues of its electric system, and each Participant is prohibited by the Act from pledging its full faith and credit or taxing power to the payment of its obligations to PMPA.

Each Participant is to make the payments to PMPA under its Catawba Project Power Sales Agreement on a "take-or-pay" basis, that is, whether the Catawba Project is operable or operating and notwithstanding the suspension, interruption, interference, reduction or curtailment of Catawba Project Output, or the power and energy contracted for, in whole or in part, for any reason whatsoever. Such payments are not subject to any reduction, by offset or otherwise, and are not conditioned upon the performance by PMPA or any other Participant under the Catawba Project Power Sales Agreements or any other agreement or instrument.

The term of the Catawba Project Power Sales Agreements extends until all payments on all Bonds and all obligations under the Project Agreements have been provided for, but in any event not later than August 1, 2035.

#### 1.2.5.2 Supplemental Power Sales Agreement

Each Participant has entered into a Supplemental Power Sales Agreement with PMPA under which each Participant has agreed to pay, in exchange for its Supplemental Bulk Power Supply, its share of Supplemental Power Costs. Supplemental Bulk Power Supply is that portion of All Requirements Bulk Power Supply required by each Participant in excess of that supplied from Project Output of the Catawba Project. Supplemental Bulk Power Supply shall include all transmission services to deliver All Requirements Bulk Power Supply to the Participant's delivery points, provision of all reserves and other backstand services, supplemental capacity and energy, and all other types of purchases and interchange service necessary to integrate Project Output from the Catawba Project into PMPA's overall bulk power supply arrangement and deliver All Requirements Bulk Power Supply to the Participants. Supplemental Power Costs are equal to PMPA's charges for All Requirements Bulk Power Supply less PMPA's costs with respect to the Catawba Project, any Additional Project which PMPA may undertake in the future or any other future project of PMPA.

Supplemental Bulk Power Supply shall be obtained and furnished by PMPA in the manner it determines most economical, dependable and otherwise feasible. PMPA is appointed each Participant's sole agent for the purpose of carrying out PMPA's rights and obligations under its Supplemental Power Sales Agreement. PMPA and the Participant may enter into a separate contract for the furnishing by PMPA of all or any portion of such Participant's Supplemental Bulk Power Supply requirements from facilities acquired or constructed by PMPA in addition to the Catawba Project. No Participant shall undertake any project of self-generation or enter into any new contract to supply any portion of its power and energy requirements from any source other than PMPA or SEPA without the prior written agreement of PMPA.

**Rates and Charges.** PMPA shall establish rates and charges for All Requirements Bulk Power Supply sufficient to pay: (i) all Monthly Catawba Project Power Costs; (ii) all monthly project power costs for any Additional Project and any project financed as a separate system; and (iii) all Supplemental Power Costs.

Amounts billed for Monthly Catawba Project Power Costs and monthly project power costs for any Additional Project and any project financed as a separate system shall be deducted from the monthly payments required under such schedule of rates and charges for All Requirements Bulk Power Supply, and the balance shall be the amount due and payable in such month for Supplemental Bulk Power Supply.

PMPA may establish different rates and charges for all requirements, supplemental power or other types of service to entities other than the Participants or for service to Participants that do not enter into project power sales agreements with PMPA for Additional Projects or projects financed as a separate system. PMPA shall review the rates and charges at least once a Contract Year and shall revise them if necessary.

The obligation of each Participant to pay for Supplemental Bulk Power Supply is an operating expense of its electric system, and a Participant shall not be required to make any payments to PMPA except from revenues of its electric system. Each Participant is prohibited by the Act from pledging its full faith and credit or taxing power to the payment of its obligations to PMPA.

**Payments by the Participant.** All monies received in each month for All Requirements Bulk Power Supply shall be applied pro rata to the separate charges for Monthly Catawba Project Power Costs, monthly project power costs for any Additional Project and any project financed as a separate system, and Supplemental Power Costs in the ratio each bears to the total monthly bill. The resulting amounts are to be applied solely to the obligations which were the basis for the separate charges on the monthly bill, subject to the provisions of the Bond Resolution as to the application of Revenues.

**Miscellaneous.** Each Participant shall be responsible for all costs of distribution delivery stations required to supply to it All Requirements Bulk Power Supply, which are not included in the rates and charges for All Requirements Bulk Power Supply.

**Term.** Each Supplemental Power Sales Agreement became effective on December 20, 1984, and was scheduled to terminate 50 years from that effective date (December 20, 2034). Any Participant may terminate its Supplemental Power Sales Agreement at the end of any Contract Year upon 10 years' written notice to PMPA. In December 2018, three Participants (Greer, Rock Hill, and Westminster) provided their 10 years' written notices to terminate their respective Supplemental Power Sales Agreements with PMPA effective at midnight on December 31, 2028. In December 2019, the remaining seven Participants (Abbeville, Clinton, Easley, Gaffney, Laurens, Newberry, and Union) provided their 10 years' written notices to terminate their respective Supplemental Power Sales Agreements with PMPA effective at midnight on December 31, 2029. In all cases, the terms and conditions of the Catawba Project Power Sales Agreements between PMPA and the Participants are unaffected by such terminations.

All amounts received by PMPA pursuant to the Supplemental Power Sales Agreements, including amounts owed by PMPA to Duke under the Project Agreements, are Revenues and are pledged under the Resolution. Once the Supplemental Power Sales Agreements are terminated, PMPA will continue to receive Revenues from all Participants equal to the Monthly Catawba Project Power Costs. These amounts include all of PMPA's costs that are paid or incurred by PMPA resulting from or attributable to ownership in the Catawba Project, including but not limited to debt service on all Bonds Outstanding under the Resolution, and giving effect to the arrangements provided for under the Project Agreements, and the providing of reserves for such purposes.

## 1.2.6 PMPA-UNION BILLING ARRANGEMENT

The City of Union is a wholesale customer of Lockhart Power Company ("Lockhart") and is the only Participant not directly connected to the Duke transmission system. Lockhart has hydroelectric resources that provide approximately 20% of its total requirements and purchases the remaining approximately 80% of its requirements from Duke. At PMPA's inception, Union and PMPA entered into a billing arrangement that is intended to provide to Union the same proportionate risks and benefits of the PMPA arrangement, relative to alternative wholesale power purchases from Duke, as PMPA's other Participants experience through their purchases of All Requirements Bulk Power Supply service from PMPA. This arrangement has allowed Union to participate in the PMPA arrangement while retaining the benefits of the hydroelectric power generation on the Lockhart system and avoiding the additional expense associated with directly connecting to the Duke system. This arrangement generally calls for (i) Union's continued receipt of, and payment for, all requirements wholesale service from Lockhart and (ii) billing of net charges or payments of net credits by PMPA to Union under the PMPA-Union billing arrangement.

Union and Lockhart have entered into service agreements under which Lockhart continues to supply full requirements service to Union on substantially the same terms as those contained in prior service agreements. As was the case under such prior agreements, both Union and Lockhart have the right to terminate the agreements upon written notice given 30 months prior to the expiration of any one-year term.

#### 1.2.7 BOND RESOLUTION

PMPA's Bonds are issued pursuant to the Resolution and supplemental resolutions thereto. Bonds issued under the Resolution are payable solely from and secured solely by the Revenues derived by PMPA from its ownership and operation of the Catawba Project, subject to prior payment therefrom of operating expenses, and any other monies and securities pledged under the Resolution. Under the Resolution, PMPA may issue Bonds, subject to certain conditions, only to make provision for: (i) the purpose of paying all or part of the Costs of Acquisition and Construction of the Catawba Project, or of other Projects, including studies thereof; (ii) refunding of any Bonds or notes or subordinated indebtedness; or (iii) making the deposit of proceeds required to be made into any fund or account pursuant to the Resolution.

Under and subject to the terms and provisions of the Resolution and the Supplemental Power Sales Agreements, PMPA may undertake one or more Additional Projects and finance the same through the issuance of bonds under the Resolution which would be on a parity as to security and source of payment with the Bonds issued or to be issued for the Catawba Project. In order to issue bonds for any such Additional Project, other than an Additional Project comprising renewals, replacements, modifications and additions to the Catawba Project, among other things, PMPA must first have entered into power sales agreements with the Participants covering the purchase and sale of the entire output of such Additional Project. Such power sales agreements shall be identical in all material respects affecting the security afforded thereby to the payment of the Bonds to the provisions of the Catawba Project Sales Agreements.

PMPA has periodically issued Bonds under the Resolution to finance capital projects comprising renewals, replacements and additions to the Catawba Project, which projects comprise Additional Projects. Specifically, PMPA has issued the Series 2008A-2 Bonds, Series 2009B Bonds (Federally Taxable BABs), Series 2012A Bonds, and Series 2015A Bonds to finance PMPA's 2008 Additional Project, 2009 Additional Project, 2012 Additional Project, and 2015 Additional Project of the Catawba Project, respectively (see Section 6.2 Capital Additions for further information).

Under the Resolution, PMPA may issue subordinate lien obligations and may also issue obligations not secured by Revenues of the Power System to finance facilities that constitute a separate utility system. As of December 31, 2022, PMPA did not have any outstanding subordinate debt and has not issued any separate system bonds.

#### 1.2.7.1 Funds Established Under the Resolution

The Resolution established special funds to hold proceeds from debt issuances, such proceeds to be used for Costs of Acquisition and Construction of the Catawba Project and to establish and maintain certain reserves. The Resolution also established special funds into which

Catawba Project revenues from Participants are to be deposited and from which Catawba Project operating costs, debt service and other specified payments are to be made.

The following table summarizes the funds established pursuant to the Resolution.

Fund	Held By		
Bond Fund	Bond Fund Trustee [1]		
Principal Account			
Interest Account			
Bond Retirement Account			
Reserve Account			
Construction Fund [2]	Construction Fund Trustee [1]		
Decommissioning Fund	Decommissioning Fund Trustee [1]		
Operating Fund	PMPA		
Fuel Account			
Reserve and Contingency Fund	PMPA		
Revenue Fund	PMPA		
Supplemental Power Fund	РМРА		

Table 1-3: Funds Established Pursuant to the Resolution

[1] U.S. Bank Trust Company, Columbia, SC.

[2] The Construction Fund was closed effective September 1, 2020.

Revenues received by PMPA, including payments from the Participants for their share of the costs of the Catawba Project and for Supplemental Bulk Power Supply, are paid into the Revenue Fund. Amounts in the Revenue Fund are used by PMPA to make deposits into the Operating Fund (to pay operating expenses of the Catawba Project), the Bond Fund (to pay debt service on Bonds), the Reserve and Contingency Fund (to pay for renewals, replacements, extraordinary operation and maintenance, and certain other costs as permitted by the Resolution), the Decommissioning Fund (for transfer in whole or part to an external decommissioning trust fund), and the Supplemental Power Fund (to pay Supplemental Power Costs). PMPA has established an external decommissioning trust fund into which it periodically deposits amounts from Revenues, together with interest earnings thereon and, to the extent needed, available amounts in certain reserve accounts to pay the estimated decommissioning costs of its ownership share of the Catawba Project. Monies from Bond proceeds have been deposited to certain of the foregoing funds as required or permitted under the Resolution for reserves and working capital purposes, as well as to the Construction Fund to pay the Costs of Acquisition and Construction of (and capital additions to) the Catawba Project, including the payment of interest on Bonds.

The following figure shows the disposition of Revenues under the Resolution.



Figure 1-2: Disposition of Revenues Under the Resolution

#### 1.2.7.2 Reserve Account

The Reserve Account was established under the Resolution to provide a reserve for the payment of principal of and interest on Bonds in the event of a deficiency in the Bond Fund. The Resolution provides that there shall be deposited in the Reserve Account at the time of issuance of each series of Bonds an amount equal to the Reserve Account Requirement for such series of Bonds, unless such amount has been previously deposited therein. The Reserve Account Requirement for a series of Bonds, determined as of the date of issuance of such series or, in the event of a refunding of a portion of such series, immediately after such refunding, is equal to 110% of the greatest amount of interest accruing in any calendar year on the Bonds of such series. If variable rate bonds are issued, PMPA may use, for the purpose of determining the Reserve Account Requirement therefor, such interest rate or rates or formula as it determines at the time of issuance to be reasonable and proper. The Aggregate Reserve

Account Requirement for all the Bonds is equal to the sum of the Reserve Account Requirements for each series of Bonds.

If the monies and value of investments in the Reserve Account attributable to any Project shall be less than the Reserve Account Requirement for the Bonds issued for such Project, the deficiency shall be made up by deposits to the Reserve Account from Revenues attributable to such Project in the Revenue Fund. Transfers may also be made from the Reserve and Contingency Fund to make up any deficiency.

If, as a result of any refunding of outstanding Bonds, the amount on deposit in the Reserve Account exceeds the Reserve Account Requirement, the excess may be withdrawn to pay or provide for payment of the refunded Bonds.

According to PMPA, after reflecting the financing activities during 2022, the Reserve Account Requirement at December 31, 2022 was \$47,670,548, which was unchanged from the year-end 2021 requirement.

## 1.2.7.3 Reserve and Contingency Fund

The Reserve and Contingency Fund Requirement is, as of any date of calculation, an amount equal to one-tenth of the Reserve Account requirement or from time to time such greater amount which, in the opinion of the Consulting Engineer, is required to be on deposit therein for the purpose of such Fund.

Monies in the Reserve and Contingency Fund are to be used to make up any deficiency in the Bond Fund to the extent funds therefor are not available in the Revenue Fund. To the extent not required to make up any deficiencies in the Bond Fund, monies on deposit in the Reserve and Contingency Fund may be applied to the payment of: (i) costs to PMPA of renewals, replacements, modifications, capital additions, betterments and extraordinary repairs; (ii) costs to PMPA of the operating inventory pursuant to the Operating Agreement; (iii) costs to PMPA of decommissioning to the extent monies in the Decommissioning Fund are insufficient; (iv) costs to PMPA of extraordinary operation and maintenance and of preventing or correcting unusual loss or damage (including major repairs); (v) fuel costs to the extent not paid from the Fuel Account in the Operating Fund or Bond proceeds; and (vi) costs to PMPA of complying with any order or decision of any state or federal governmental agency requiring installation of facilities or modifications.

Each year, PMPA deposits into the Reserve and Contingency Fund an amount equal to the greater of (i) 10% of debt service or (ii) amounts budgeted to be paid out of such Fund. If, as of the last business day of any Fiscal Year, the uncommitted monies and value of Investment Securities in the Reserve and Contingency Fund shall exceed the Reserve and Contingency Fund Requirement, the amount of such excess shall be transferred to the Reserve Account to the extent of any deficiency therein and any balance shall be transferred to the Revenue Fund.

According to PMPA, after reflecting the financing activities during 2022, the Reserve and Contingency Fund Requirement at December 31, 2022 was \$4,767,055, which was unchanged from the year-end 2021 requirement.

#### 1.2.8 ADDITIONAL BONDS

Under the Resolution, additional bonds may be issued, subject to certain conditions, to (i) pay the Costs of Acquisition and Construction of the Catawba Project and any Additional Projects, including the payment of principal or interest on any obligations issued in anticipation of the issuance of bonds for such purpose and (ii) refund Bonds.

#### 1.2.9 BONDS OUTSTANDING/SUMMARY OF ISSUANCES SINCE CLOSING

Table 1-4 shows that, as of December 31, 2022, PMPA had issued forty-seven separate series of Bonds in aggregate principal amount of \$6.071 billion, of which thirty-five series were no longer outstanding as of December 31, 2021. After giving effect to approximately \$5.481 billion in aggregate principal amount of Bonds that have been refunded, retired, or paid at maturity, the net amount of Bonds outstanding as of December 31, 2022, was an aggregate principal amount of \$590 million.

Series	Date of Issue	Principal Amount Issued [1]	Refunded / Retired / Matured [2]	Outstanding as of Dec. 31, 2022	
Bonds Previously Issued and No Longer Outstanding as of December 31, 2021		\$ 5 219 651	\$ 5 219 651	\$ -	
1993 Refunding Series	05/06/93	142,525	110,340	* 32,185	
2004A Refunding Series [3][4]	08/12/04	205,970	110,879	95,091	
Series 2009B [5]	12/16/09	26,490	-	26,490	
2012C Refunding Series [4]	03/22/12	4,485	-	4,485	
Series 2015A	09/16/15	51,935	1,475	50,460	
2017A Refunding Series	03/07/17	15,850	6,285	9,565	
2017B Refunding Series	10/11/17	38,115	15,490	22,625	
2021A Refunding Series	06/23/21	55,370	16,500	38,870	
2021B Refunding Series	10/27/21	97,420	-	97,420	
2021C Refunding Series	10/27/21	90,520	-	90,520	
2021D Refunding Series	10/27/21	91,410	-	91,410	
2021E Refunding Series	10/27/21	31,165		31,165	
Total		\$ 6,070,906	\$ 5,480,620	\$ 590,286	

#### Table 1-4: Bonds Issued and Outstanding as of December 31, 2022 Amounts Shown in (\$000)

 Amounts do not reflect bond anticipation notes in aggregate principal amount of \$200 million that were paid at maturity and the fixed rate conversion of the Series 2008C and the Series 2008D Bonds in the aggregate principal amount of \$90 million and \$30 million, respectively (issued concurrent with the Series 2011A Bonds).

[2] Includes approximately \$4.489 billion that was refunded, \$38.2 million that was subject to extraordinary call from surplus monies in the Construction Fund and the Bond Retirement Fund, and \$848 million that was paid at maturity. Amounts do not include \$51.3 million principal paid at maturity on January 1, 2023.

[3] Amounts do not reflect accretion on the portion of these Bonds that were issued as Capital Appreciation Bonds.

[4] All or a portion of these Bonds were issued as federally taxable.

[5] These Bonds were issued as federally taxable Build America Bonds ("BABs"), which allows PMPA to receive up to a 35% interest subsidy payment from the United States Treasury. Table 1-5 provides the disposition of net proceeds of Bonds and certain subordinate lien obligations issued by PMPA through December 31, 2022, plus other available funds, used to finance the Costs of Acquisition and Construction of the Catawba Project and to refund certain Bonds.

Table 1-5: Disposition of Net Proceeds of Bonds and Certain Subordinate Lien Obligations
Amounts Shown in (\$000) [1]

	Totals at				Totals at			
Line	Description	Dece	mber 31, 2021	December 31, 2022				
	Net Proceeds and Other Available Funds							
	Net Proceeds:							
1	Principal Amount Issued [2]	\$	6,390,906	\$	6,390,906			
2	Purchase Price Premium		110,311		110,311			
3	Accrued Interest at Closing		20,237		20,237			
	Less:							
4	Underwriters' Discount		(69,111)		(69,111)			
5	Original Issue Discount		(140,119)		(140,119)			
6	Insurance Premium		(63,238)		(63,238)			
7	Bank Fees Paid at Closing		(1,970)		(1,970)			
8	Net Proceeds		6,247,015		6,247,015			
	Other Available Funds:							
	Transfers from:							
9	Construction Interest Account		40,265		40,265			
10	Reserve Account [3]		169,539		169,539			
11	Reserve and Contingency Fund [4]		16,802		16,802			
12	Bond Fund		62,385		62,385			
13	Equity Contributions		85,044		85,044			
14	Total Other Available Funds		374,036		374,036			
	Total Net Proceeds and Other							
15	Available Funds	\$	6,621,051	\$	6,621,051			
	Disposition of Net Proceeds and Other	Availa	<u>ble Funds</u>					
	Deposit to:							
16	Construction Interest Account	\$	285,988	\$	285,988			
17	Bond Fund		174,956		174,956			
18	Refunding Trust Fund		5,037,909		5,037,909			
19	Note Interest Account		50,317		50,317			
20	Reserve Account [3]		238,101		238,101			
21	Reserve and Contingency Fund [4]		12,771		12,771			
22	Construction or Revenue Fund [5]		821,007		821,007			
	Total Disposition of Net Proceeds							
23	and Other Available Funds	\$	6,621,051	\$	6,621,051			

[1] Based on information provided by PMPA.

[2] Amounts shown include \$200,000,000 in aggregate principal amount of notes that were paid at maturity and the fixed rate conversion of the Series 2008C and the Series 2008D Bonds in the aggregate principal amount of \$90,000,000 and \$30,000,000, respectively (issued concurrent with the Series 2011A Bonds). Amounts exclude accretion on bonds issued as Capital Appreciation Bonds.

[3] The Reserve Account requirement at December 31, 2022 was \$47,670,548.

[4] Amounts shown reflect initial deposits that were made from the proceeds of Bonds. Certain transfers were made from the Revenue Fund to the Reserve and Contingency Fund to satisfy the Reserve and Contingency Fund Requirement. The Reserve and Contingency Fund requirement at December 31, 2022 was \$4,767,055.

[5] Amounts shown include Yield Reduction Payments associated with the Series 2009A Refunding Bonds.

Table 1-6 sets forth the total annual debt service for all outstanding Bonds issued through December 31, 2022 that are expected to be paid from revenues.

Accrual Year	Interest Payments [1]	]	Principal Installments	Total Debt Service
2022	\$ 36,857	\$	51,290	\$ 88,147
2023	33,335		52,086	85,421
2024	18,855		66,565	85,420
2025	56,245		27,064	83,309
2026	46,276		37,397	83,673
2027	45,807		37,863	83,670
2028	45,168		38,507	83,675
2029	44,464		39,207	83,671
2030	43,594		40,050	83,644
2031	38,915		44,718	83,633
2032	6,654		76,975	83,629
2033	5,069		78,563	83,631
Total		\$	590,286	

 Table 1-6: Total Debt Service for Bonds Issued Through December 31, 2022

 Amounts Shown in (\$000)

 Amounts shown reflect interest on bonds issued as Capital Appreciation Bonds. Interest payable on the Series 2009B Build America Bonds is net of anticipated interest subsidy receipts.

The following figure shows the aggregate principal amount of Bonds outstanding (subsequent to the Bond principal payment on January 1<sup>st</sup> of each year) through 2034, based on debt service shown in Table 1-6.





#### **2 OPERATIONS OF PMPA**

#### 2.1 BOARD OF DIRECTORS

As discussed earlier, PMPA is governed by a Board of Directors, consisting of one representative for each Participant. Approval of any action by the Board of Directors requires an affirmative vote by a majority of the Board of Directors present, with each Director having one vote, with some exceptions. Action by the Board of Directors authorizing the issuance of indebtedness, fixing rates and charges, or amending the by-law provisions related to weighted voting, requires an affirmative vote of the holders of a majority of the votes entitled to be cast by all Directors. With respect to any such action, the total number of votes which all Directors are entitled in the aggregate to cast is equal to 200. These 200 votes are allocated annually among the Participants so that each Director has ten votes in such cases plus a proportionate share of the remaining 100 votes, which share is determined by reference to the Participant that such Director represents.

The following table lists the Board of Directors during 2022, along with their occupations or positions.

Participant	Director	Occupation/Position
Abbeville	Blake Stone, Chairman	City Manager
Clinton	Thomas J. Brooks, Jr.	City Manager
Easley [1]	Joel D. Ledbetter	General Manager – Combined Utilities
Gaffney [1]	Donnie L. Hardin	General Manager – Board of Public Works
Greer [1]	Michael D. Richard	General Manager - Commission of Public Works
Laurens [1]	John M. Young	General Manager - Commission of Public Works
Newberry	Timothy Baker	Utilities Director
Rock Hill	James G. Bagley Jr.	Deputy City Manager
Union	Joe F. Nichols, Vice Chairman	City Administrator
Westminster	Kevin Bronson	City Administrator

#### Table 2-1: Board of Directors

[1] Board or Commission of Public Works.

#### 2.2 COMMITTEES

The PMPA Board of Directors has created an Executive Committee to conduct the business of the Board of Directors during intervals between board meetings. The membership of the Executive Committee consists of the Chairman and Vice Chairman of the Board of Directors, the immediate past Chairman, and two other Directors selected by the Board of Directors. If the immediate past Chairman is no longer a Director, or is the Vice Chairman, then the membership of the Executive Committee will consist of the Chairman and Vice Chairman of the Board of Directors and three other Directors.

#### 2.3 MANAGEMENT AND STAFF

During 2022, Mr. David "Andy" Butcher, served as General Manager of PMPA and Ms. JulieAnne London served as Finance Director of PMPA. The General Manager of PMPA serves as the Secretary of the Board of Directors, while the Finance Director serves as the Treasurer of the Board of Directors.

As of December 31, 2022, the PMPA staff was comprised of 14 employees. This consisted of three people in the executive department, four in the finance department, two in engineering, four in information technology, and one in public affairs.

Subsequent to year-end 2022, on March 30, 2023, Mr. Butcher provided notice of his resignation from the position of General Manager of PMPA effective June 27, 2023. On April 20, 2023, the Board of Directors announced that Mr. Joel Ledbetter, the Easley Combined Utilities General Manager, had been appointed as PMPA's next General Manager effective July 1, 2023.

## 2.4 FINANCING ACTIVITIES IN 2022

PMPA did not issue any Bonds during 2022.

Table 2-2 summarizes the total principal amount of Bonds issued, refunded, called, or retired during 2022, and the net outstanding principal amount of Bonds as of December 31, 2021 and December 31, 2022.

# Table 2-2: Principal Amount of Bonds Issued, Refunded, Called and Retired Amounts Shown in (\$000)

Principal Amounts		As of December 31, 2021		Activity in 2022		As of December 31, 2022	
Total Issued	\$	6,070,906 <b>[1]</b>	\$	-	\$	6,070,906	
Less:							
Refunded Bonds		4,589,490		-		4,589,490	
Other Called Bonds		38,235		-		38,235	
Retired Amounts		826,936		25,959		852,895	
Total Defeased or Retired		5,454,661		25,959		5,480,620	
Net Issuance		616,245	\$	(25,959)	\$	590,286	

[1] Amounts do not reflect bond anticipation notes in aggregate principal amount of \$200 million that were paid at maturity.

## 2.5 BOND RATINGS

PMPA has received ratings on its Bonds from three investment services groups comprised of Standard & Poor's, a division of The McGraw-Hill Companies, Inc. ("Standard & Poor's"), Moody's Investors Service, Inc. ("Moody's") and Fitch IBCA, Inc. ("Fitch").

Table 2-3 shows the ratings that PMPA's Bonds have been assigned as of December 31, 2022 by the three investment services groups identified above.

	0				
	Standard & Poor's	Moody's	Fitch		
Rating	A-	A3	A-		
Outlook	Negative	Stable	Stable		

Table 2-3: Bond Ratings

The ratings by Standard & Poor's, Moody's and Fitch reflect only the views of such organizations and any desired explanations of the significance of such ratings and any outlooks should be obtained only from the respective organizations. Generally, a rating agency bases its rating on the information and materials furnished to it and on investigations, studies, and assumptions of its own. There is no assurance such ratings will continue for any given period of time or that such ratings will not be revised downward or withdrawn entirely by the respective rating agencies, if, in the judgment of such rating agencies, circumstances so warrant. Any downward revision or withdrawal of such ratings may have an adverse effect on the market price of PMPA's outstanding indebtedness.

#### 2.6 POLICIES

PMPA maintains a variety of policies covering different operational aspects of the organization. Several of these policies that are most closely related to the Catawba Project are discussed in more detail in this section.

#### 2.6.1 INVESTMENT POLICY

The Board of Directors has adopted, and PMPA maintains, an Investment Policy applicable to all transactions involving PMPA's funds (including all funds and accounts established by the Resolution). The policy provides that PMPA's Treasurer is charged with the responsibility to prudently and properly manage PMPA's funds. Investment of Bond proceeds shall be subject to the conditions and restrictions of the Resolution and United States Treasury regulations related to arbitrage restrictions on tax-exempt bonds. Although the policy states that it governs Bond proceeds investment, the provisions of the Resolution and resolutions supplemental thereto and United States Treasury regulations shall control.

No changes were made to this policy during 2022.

#### 2.6.2 TRANSMISSION PROJECT POLICY

The Board of Directors has adopted a Transmission Project Policy to establish guidelines for transmission projects which PMPA will construct, own, operate, and maintain. Such policy has been amended at times since its inception. PMPA does not place limitations on projects which a Participant chooses to build. However, PMPA does place limitations on those projects for which PMPA is expected to pay.

No changes were made to this policy during 2022.

## 2.6.3 NET BILLING POLICY

The Board of Directors has adopted a Net Billing Policy. This policy allows Participants to interconnect with, and provide net metering/billing of, eligible customer-owned renewable generation. The policy is directed toward eligible customers of the Participants who intend to operate customer-owned renewable generation in parallel with the Participant's electric distribution system and which is primarily intended to offset all or part of the customer's electric consumption at the specific site where the customer-owned renewable generation is installed.

No changes were made to this policy during 2022.

## 2.7 2022 CAPACITY AND ENERGY REQUIREMENTS AND RESOURCES

PMPA's annual peak demand requirement net of SEPA allocations and Union in 2022 was 515 MW as measured at the generation level. PMPA's annual energy requirements net of SEPA allocations and Union during 2022 were 2,417 gigawatt-hours ("GWh") also as measured at the generation level.

PMPA met its demand requirements in 2022 through its ownership in the Catawba Project (277 MW after giving effect to the McGuire Reliability Exchange) and power purchases from Santee Cooper. PMPA met its energy requirements in 2022 through its ownership entitlement to output from the Catawba Project, as well as supplemental energy purchased from Santee Cooper. Specifically, during 2022 PMPA's ownership entitlement to the Catawba Project supplied 2,361 GWh, of which 236 GWh was Surplus Energy in excess of PMPA's energy requirements. The remaining energy requirements of 293 GWh was supplied by a combination of purchases from Santee Cooper, TEA and Laurens Electric Membership Cooperative (to serve a portion of the City of Greer's load, known as the "Greer Annex"), as well as distributed generation operated by certain PMPA Participants.
The following table conveys these requirements, as well as the resources which met these requirements.

	Capacity (MW)	Energy (GWh)	Capacity / Load Factor [1]
Requirements [2]	(112 11 )	(0,11)	
Total PMPA (Annual)	544	2,550	54%
Less: Union	(29)	(133)	52%
Net Served by PMPA	515	2,417	54%
Resources			
Catawba Project			
Catawba Station			
Unit 1	72	643	103%
Unit 2	72	543	87%
Total Catawba	143	1,186	95%
McGuire Station			
Unit 1	67	557	95%
Unit 2	67	618	105%
Total McGuire	134	1,175	100%
Total Catawba Project	277	2,361	97%
Less: Surplus Energy		(236)	
Net Retained		2,125	
Total Supplemental [3]	238	293	14%
Total Resources	515	2,417	

Table 2-4: 2022 Requirements and Resources Amounts Shown at the Generation Level, Net of SEPA

 Calculated based on ratings utilized by Duke under the Project Agreements, which are different from those ratings reported by Duke as discussed later in Section 3.3 Capacity Ratings.

- [2] Includes load met by distributed generation operated by certain PMPA Participants and Laurens Electric Membership Cooperative (for the Greer Annex).
- [3] Includes: (i) supplemental capacity and energy purchased from Santee Cooper, (ii) backstand energy purchased from TEA, (iii) output of distributed generation operated by certain PMPA Participants, and (iv) purchases from Laurens Electric Membership Cooperative to serve the Greer Annex.

#### 2.8 BUDGET TO ACTUAL COMPARISON FOR 2022

As compared to PMPA's 2022 Budget, actual total revenues were approximately \$6 million lower than budgeted, primarily due to lower sales to Participants created by the temporary credit provided back through the AR rate. Total expenses were lower than budgeted by approximately \$0.6 million, primarily due to lower transmission and administrative and general expenses, mostly offset by higher purchased power expenses. The net result was a decrease in the Working Capital of \$4.6 million, as compared to the budgeted increase of \$0.6 million.

The following table reflects more detail on the 2022 actual operations as compared to the 2022 Budget.

	Budget	Actual	Act / (1	tual Higher Lower) than Budget
Revenues:				
Sales to Participants	\$ 230,048	\$ 215,668	\$	(14,380)
Sales to Utilities	2,792	10,654		7,862
Interest Income [1]	1,483	2,097		614
Excess Fund Valuation	-	-		-
Other Income/Reserve Releases [2]	1,412	1,532		120
Total Revenues	\$ 235,735	\$ 229,951	\$	(5,784)
Expenses:				
Operation and Maintenance	\$23,782	\$24,987	\$	1,205
Nuclear Fuel	13,717	13,335		(382)
Net McGuire Reliability Exchange	529	788		259
Payments in Lieu of Taxes	8,247	8,005		(242)
Administrative & General	17,567	15,996		(1,571)
Debt Service	88,762	87,962		(800)
Transfers to:				
Reserve and Contingency Fund	15,778	14,822		(956)
Decommissioning	9,505	8,652		(853)
Other [3]	6,237	6,671		434
Interconnection Services:				
Purchased Power	38,994	45,035		6,041
Transmission	11,411	7,671		(3,740)
Distribution	593	590		(3)
Total Expenses	\$ 235,122	\$ 234,514	\$	(608)
Increase/(Decrease) in Working Captial	\$ 613	\$ (4,563)	\$	(5,176)

## Table 2-5: 2022 Actual to Budget Comparison Amounts Shown in (\$000)

[1] Excludes earnings on Decommissioning Fund and Construction Fund.

[2] Other Income includes: (i) Leased Facilities (ii) Customer Charges and (iii) Supplemental Power Reserve Transfers.

[3] Other Expenses includes: (i) Other Administrative and General, (ii) General Plant, (iii) Catawba Inventory, and (iv) Miscellaneous Expenses.

## 2.9 OPERATION OF PROJECT FUNDS DURING 2022

The following table sets forth PMPA's reported operation during 2022 of the Project Funds established under the Resolution.

	Balance at December 31, 2021	Net Activity In/(Out)	Balance at December 31, 2022						
Bond Fund:									
Principal/Interest/Retirement	\$ 45,377	\$ 31,823	<b>\$</b> 77,200						
Reserve	47,671	(2,947)	44,724						
Total Bond Fund	93,048	28,876	121,924						
Decommissioning Fund	109,285	9,445	118,730						
Operating Fund:									
Fuel Account	7,354	531	7,885						
Reserve and Contingency Fund	4,767	-	4,767						
Revenue Fund:									
Working Capital [2]	101,942	(4,571)	97,371						
Supplemental Power Fund	1,600	_	1,600						

# Table 2-6: Project Fund Operations During 2022 Amounts Shown in (\$000) [1]

[1] Amounts per Independent Auditors' Report for December 31, 2022 and 2021.

[2] Amounts are net of liabilities.

## 2.10 MATTERS SPECIFIC TO 2022

## 2.10.1 PARTICIPANT LITIGATION

In early 2019 and thereafter by separate notice letters, PMPA reported that it received letters from two of its Participants (Rock Hill and Greer) alleging that PMPA is in default of the Catawba Project Power Sales Agreements and Supplemental Power Sales Agreements. These allegations relate primarily to the provisions in the respective power sales agreements that address PMPA's rates and charges to its Participants. The letters stated that Rock Hill and Greer may commence legal action. PMPA reports that it has consistently responded to these letters with its position that the bills in question were calculated correctly pursuant to the All Requirements Rate Schedule of PMPA, which was developed and adopted by the PMPA Board of Directors, correctly applying the terms of the Catawba Project Power Sales Agreements and Supplemental Power Sales Agreements between PMPA and the Participants.

In June 2019, PMPA was named as a defendant in a lawsuit (captioned the City of Newberry, Laurens Commission of Public Works, Gaffney Board of Public Works and Easley Combined Utilities brought an action in the South Carolina Court of Common Pleas, Greenville County, Civil Action No. 2019-CP-36-00303 (the "Action"), against Rock Hill, Greer, PMPA and certain other PMPA Participants. The plaintiffs in the Action sought various declaratory and

injunctive relief regarding the conduct of Rock Hill and Greer and challenged their assertions as to the billing practices and the allocation of charges to the PMPA Participants. PMPA reports that it answered the complaint and asserted, among other things, that PMPA has implemented and invoiced the Participants only the rates that have been duly adopted and, as such, PMPA's rates are lawful; further, PMPA requested a judicial declaratory judgement determination that it is acting in conformity with its responsibilities and obligations under the Catawba Project Power Sales Agreements or Supplemental Power Sales Agreements. Other defendants named in the Action filed motions to dismiss, primarily directed at the claims between the Participants. Those motions were ultimately resolved by agreement of the parties. On December 31, 2021, the plaintiffs filed an amended complaint limited only to the declaratory judgment claims that: (i) PMPA accurately calculated all monthly bills that were submitted to Greer and Rock Hill, respectively, during the calendar years 2019, 2020, and 2021, according to the rates then in effect and, therefore, no amount is owed by PMPA to either Rock Hill or Greer from their payment of those monthly bills, and, (ii) PMPA is not in default of the respective Catawba Project Power Sales Agreements or Supplemental Power Sales Agreements with Rock Hill or with Greer. Former defendants Clinton and Union joined the plaintiffs and seek the same rulings.

On January 28, 2022, PMPA filed its response to the amended complaint consistent with PMPA's position in its answer to the initial complaint. PMPA asserts that its billings were accurate and based on duly adopted rates and the provisions of the controlling agreements between it and the Participants. Rock Hill and Greer answered the amended complaint, continuing to claim that PMPA has not properly billed pursuant to the terms of their respective agreements with PMPA. Rock Hill and Greer asked for declarations via cross-claims regarding its positions as to PMPA. PMPA has responded to those cross-claims and asserts multiple affirmative defenses. All parties have now filed and briefed motions for summary judgment. A hearing has not yet been scheduled on those motions.

PMPA reports that all Participants are current on monthly bills presented by PMPA for Participants' All Requirements Bulk Power Supply and no Participant has threatened not to pay monthly bills presented by PMPA for payment. If PMPA were on the non-prevailing side of this litigation, PMPA could become subject to a significant monetary judgment and may be required to change its existing rate structure/methodology. The combination of an adverse monetary judgment and a new rate setting methodology based solely upon the Participant's Shares may have an adverse impact on the financial condition of certain of the Participants. PMPA is not able to predict the outcome of these proceedings or the impact such proceedings may have on the financial condition of any of the Participants. PMPA would normally expect to conclude the case, assuming that it does not get appealed, within three years from the date of the filing of the complaint; however, given the uncertainties presented by the COVID-19 outbreak and the amount of time that has already passed after the initial filing, PMPA is not able to predict a timeframe for conclusion of these proceedings.

## 2.10.2 OPERATING LICENSE RENEWAL EXTENSIONS

In September 2019, Duke Energy announced their intent to seek additional 20-year operating license renewals from the Nuclear Regulatory Commission for all Duke Energy-owned and operated nuclear plants in the Carolinas beginning in 2021. PMPA will work with Duke to ensure PMPA's interests are represented as details and the timeline evolve. Whether or not

such operating license renewal extensions for the Catawba and McGuire Nuclear Stations are ultimately granted by the NRC cannot be predicted at this time.

## 2.10.3 ELECTRICITY MARKET REFORM

The State of South Carolina enacted a law during 2020 to create a committee that will study electricity market reform in South Carolina. The study committee shall study whether to recommend any of a broad range of electricity market reforms including, but not limited to, establishing or joining a Regional Transmission Organization ("RTO"); establishing an energy imbalance market; divestiture of vertically integrated electrical utilities; enabling retail consumer choice on electric service; and community choice aggregation, among other items. The study committee shall also decide whether the South Carolina General Assembly should require any electrical utility, electric cooperative or Santee Cooper to take actions necessary to implement one or more of the studied electricity market reform measures and study the costs and benefits to consumers and the financial and operational impacts to integrated service providers of any market reform measures recommended.

The study committee issued its final report to the South Carolina General Assembly in April 2023. The study committee recommended that South Carolina consider wholesale market reform by initiating processes to join, create, or integrate with a regional RTO marketplace, while seeking coordination with other states and utilities across the Southeast, particularly North Carolina. The study committee also recommended that South Carolina policymakers consider an incremental introduction over time of competition within resource planning. With regard to retail market reforms, the study commission recommended that South Carolina pursue additional retail rate choices, including partial retail choice for large commercial and industrial customers, as well as a path for community choice aggregation, but defer consideration of retail choice for residential and small business customers at this time. Lastly, the report states that the study committee does not "recommend South Carolina pursue generation divestiture, full reliance on market-based investments for resource adequacy, or full retail choice for all customers at this time." PMPA is unable to predict the effect on the Participants or PMPA of any requirements that may be adopted in furtherance of any Electricity Market Reform.

## 2.10.4 SOUTHEAST ENERGY EXCHANGE MARKET

A number of Southeast utilities have been working to develop a new market across the region, known as the Southeast Energy Exchange Market ("SEEM"). Founding member utilities of the SEEM include Duke Energy Carolinas, Duke Energy Progress, Southern Company, Dominion Energy South Carolina, the Tennessee Valley Authority, Santee Cooper, and NCMPA1, among others.

Southeastern utilities can already buy and sell power from each other. It is reported that SEEM would simply be an upgrade to the current system (by automating the matching of buyers and sellers), not a move to a full, structured market, and would not involve any new governing board or authority that could enforce sales or require transmission be set aside for sales. All sales would remain voluntary and would be ultimately up to each utility.

SEEM became effective as of October 12, 2021, and SEEM reports that it initiated operations on November 9, 2022. The independent market auditor's report indicated trading volumes were generally low during the initial weeks of operation over November and December 2022.

SEEM may help reduce wholesale electricity costs and/or integrate renewable resources by more efficiently utilizing existing transmission capacity across the Southeast. PMPA is unable to predict the effect on the Participants or PMPA of the SEEM.

## 2.10.5 RESILIENCY PLANNING

In March 2021, the Public Service Commission of South Carolina ("PSCSC"), at the request of the South Carolina Office of Regulatory Staff ("ORS"), opened a docket to receive comments from regulated and non-regulated electric and natural gas utilities in order to provide information to the PSCSC regarding measures that have been, or will be taken, to: (i) mitigate the negative impacts of ice storms and other dangerous weather conditions to the provision of safe and reliable utility service, and (ii) ensure peak customer demands on the utility system can be met during extreme weather scenarios.

PMPA reports that it responded to the initial inquiry from ORS in July 2021. In addition, PMPA reports that it intends to make itself available to ORS and the PSCSC to answer any questions relevant to its operations that will assist ORS and the PSCSC in making a full review of the measures that may be taken to mitigate any impact or threats to safe and reliable electric utility services in South Carolina. In December 2021, the ORS released its final report. The report indicated that (i) South Carolina utility providers were adequately prepared for ice storms and winter weather events, (ii) a number of actions should be considered to enhance utilities' ability to respond to winter weather events and meet peak customer demand, and (iii) South Carolina has diversified generation resources to meet high winter demands. PMPA is not able to predict if such report, and any recommendation contained therein will have any impact on PMPA or its Participants.

## 2.11 SUMMARY OF OPERATIONS

In January 2022, PMPA made the scheduled principal payment of \$26.0 million on its outstanding debt, which was accrued from operations during 2021. During 2022, PMPA accrued \$51.3 million to make the scheduled principal payment in January 2023. As of December 31, 2022, PMPA's Bond ratings are unchanged from those reported as of December 31, 2021. PMPA supplied approximately 88% of its energy requirements, net of allocations from the Southeastern Power Administration, from its ownership entitlements from the Catawba Project during 2022. As a result of 2022 operations, PMPA's total Working Capital decreased by \$5 million, resulting in a year-end 2022 total Working Capital balance of \$78 million.

## MANAGEMENT OF THE CATAWBA PROJECT

## 3.1 OVERVIEW

3

As discussed previously, PMPA employs Duke as operator of the Catawba Project. PMPA monitors the operations of the Catawba Project through their Catawba site representative, as well as participation in Operations Review Committee meetings and provides status reports to the Board of Directors on a monthly basis.

## 3.2 MERGER ACTIVITIES AND FLEET INITIATIVES

In connection with the merger between Duke Energy and Progress Energy Inc., Duke consolidated the nuclear and fossil generating fleets of the respective combined utilities. PMPA reviewed Duke's methodologies for allocating costs, including fleet costs, to the Catawba Project, and in September 2019, PMPA, along with NCMPA1 and NCEMC, initiated an arbitration proceeding against Duke, disputing Duke's nuclear fleet cost allocation methodologies. In May 2021, a settlement agreement was developed which resolved all issues in the dispute and provided for a reduction in the operating fees paid to Duke as operator of the Catawba Nuclear Station for the life of the station (effective January 2021). This settlement agreement was approved by Duke's management as well as the governing boards of PMPA, NCMPA1, and NCEMC. Amendments to the Operating Agreement) to effectuate the settlement agreement were also approved by Duke and PMPA.

## 3.3 CAPACITY RATINGS

The design MNDC ratings of the Catawba and McGuire units were 1,145 MW and 1,180 MW, respectively. Catawba Units 1 and 2 currently have a maximum dependable capability rating of 1,160 MW and 1,150 MW, respectively and for McGuire Units 1 and 2 at 1,158 MW for each unit. Notwithstanding Duke's reported maximum dependable capability ratings, Duke recognizes 1,105 MW for each of the McGuire units and 1,145 MW for each of the Catawba units for the purposes of establishing capacity entitlements to PMPA under the Project Agreements.

## 3.4 NUCLEAR REGULATORY COMMISSION ASSESSMENTS

The Nuclear Regulatory Commission ("NRC") utilizes a Reactor Oversight Process ("ROP") to provide a structure for conducting review monitoring of nuclear-fueled electric generating units in the performance areas of reactor safety, radiation safety, and safeguards. Within each performance area are cornerstones that reflect the essential safety aspects of facility operation. The NRC reports that satisfactory licensee performance in these cornerstones provides reasonable assurance of safe facility operation.

The NRC evaluates plant performance through the use of inspection findings resulting from NRC's inspection program and performance indicators ("PIs"), which are reported by the licensee. Both inspection findings and PIs are evaluated and given a color designation (Green, White, Yellow or Red) based on their safety significance. The NRC indicates that a Green color designation represents acceptable performance in which cornerstone objectives are fully met with very low risk significance and therefore have little or no impact on safety. Both Green inspection findings and PIs allow for licensee initiatives to correct performance issues before increased regulatory involvement is warranted. According to the NRC, White, Yellow, or Red

inspection findings or PIs each, respectively, represent a greater degree of safety significance and therefore trigger increased regulatory attention.

The NRC reports that it is engaged in an effort to enhance the ROP by focusing inspection activities and resources on areas of greater safety significance. The NRC indicates it will cover these areas through refining the baseline inspection program and inspectors' ability to quickly address emerging issues, as well as reviewing agency policies to see where the NRC can increase nuclear plant operators' incentive to promptly resolve inspection findings. This effort is currently in progress and its outcome, and any potential changes to operations at the Catawba and McGuire Nuclear Stations cannot be determined at this time.

## **3.4.1 САТАШВА**

On March 1, 2023, the NRC released its end-of-cycle performance review of the Catawba Units 1 and 2 as part of the ROP. The NRC states it reviewed performance indicators, inspection results, and enforcement actions over the period January 1, 2022 through December 31, 2022 and concluded that Catawba's overall performance preserved public health and safety. The NRC reports that the performance at Catawba Units 1 and 2 during the most recent quarter was within the Licensee Response Column of the ROP Action Matrix (the highest performance category), due to all inspection findings having very low safety significance (Green), and all PIs being within the expected range (Green). As a result, the NRC indicates that for both Catawba Units 1 and 2, it plans to conduct ROP baseline inspections.

## 3.4.2 MCGUIRE

As part of the ROP, on March 1, 2023, the NRC released its end-of-cycle performance review of the McGuire Units 1 and 2. The NRC states it reviewed performance indicators, inspection results, and enforcement actions over the period January 1, 2022 through December 31, 2022 and concluded that McGuire's overall performance preserved public health and safety. The NRC reports that the performance at McGuire Units 1 and 2 during the most recent quarter was within the Licensee Response Column of the ROP Action Matrix (the highest performance category), due to all inspection findings having very low safety significance (Green), and all PIs being within the expected range (Green). As a result, the NRC indicates that for both McGuire Units 1 and 2, it plans to conduct only ROP baseline inspections.

## 3.5 **REPORT ON OUTAGES DURING 2022**

Catawba Unit 1 did not have a refueling outage during 2022. Catawba Unit 2 completed a 46day refueling outage that ended on October 26, 2022. McGuire Unit 1 completed a 37-day refueling outage that ended on May 9, 2022. McGuire Unit 2 did not have a refueling outage during 2022.

## 3.6 PLANT PERFORMANCE

Catawba Unit 1 achieved a 100% availability factor during 2022. As mentioned earlier, Catawba Unit 2 conducted a refueling outage during 2022, resulting in an availability factor of 86%. McGuire Unit 1 conducted a refueling outage during 2022, resulting in an availability factor of 90%. McGuire Unit 2 achieved an availability factor of 99%.

During 2022, Catawba Units 1 and 2 operated at capacity factors of 101% and 86%, respectively. In addition, McGuire Units 1 and 2 operated at capacity factors of 91% and 101%,

respectively. These capacity factors are based on the maximum dependable capability ratings of the Catawba and McGuire units, which are different from the ratings utilized by Duke under the Project Agreements as discussed in Section 3.3 Capacity Ratings.

The capacity, energy, capacity factors and availability factors for the Catawba and McGuire units during 2020, 2021, and 2022, and the three-year 2020-2022 averages, as well as the United States ("U.S.") average nuclear unit capacity factors are summarized in the following table.

				2020-22
Unit	2020	2021	2022	Average
Net Capacity (MW) [1]				
Catawba Unit 1	1,160	1,160	1,160	
Catawba Unit 2	1,150	1,150	1,150	
McGuire Unit 1	1,158	1,158	1,158	
McGuire Unit 2	1,158	1,158	1,158	
Total	4,626	4,626	4,626	
Net Energy (GWh) [2]				
Catawba Unit 1	9,236	9,571	10,278	9,695
Catawba Unit 2	10,121	9,014	8,685	9,274
McGuire Unit 1	9,434	10,361	9,222	9,672
McGuire Unit 2	9,613	9,301	10,229	9,714
Total	38,404	38,248	38,413	38,355
Capacity Factor (%) [3]				
Catawba Unit 1	91%	94%	101%	95%
Catawba Unit 2	100%	89%	86%	92%
McGuire Unit 1	93%	102%	91%	95%
McGuire Unit 2	95%	92%	101%	96%
U.S. Average	91%	91%	91%	91%
Availability Factor (%) [4]				
Catawba Unit 1	91%	94%	100%	95%
Catawba Unit 2	100%	90%	86%	92%
McGuire Unit 1	91%	100%	90%	94%
McGuire Unit 2	94%	91%	99%	94%

Table 3-1: Nuclear Unit Performance

 Calculated based on Maximum Dependable Capacity (gross) less the normal station service loads at December 31st of each year.

[2] Calculated based on total energy generated less station service loads.

[3] Calculated based on net capacity ratings reported by Duke, which are different from the ratings utilized in the Project Agreements as discussed in Section 3.3 Capacity Ratings.

[4] Calculated based on number of hours the generator was available to be on-line.

## 3.7 **PRODUCTION COSTS**

## 3.7.1 OPERATIONS AND MAINTENANCE

The following figure summarizes the total non-fuel operations and maintenance ("O&M") expenses for 2020, 2021, and 2022, and the 2019-2021 average for the Catawba Nuclear Station, as well as the average for non-merchant nuclear plants in the United States.





[1] Based on FERC Form 1 data.

As shown above, Catawba's non-fuel O&M expenses during 2022 were \$78/kW. The threeyear 2020-2022 non-fuel O&M expenses at the Catawba Nuclear Station averaged \$91/kW.

#### 3.7.2 FUEL

The following figure summarizes the total nuclear fuel expenses for 2020, 2021, and 2022, and the 2020-2022 average for the Catawba Nuclear Station, as well as the average for non-merchant nuclear plants in the United States.





[1] Based on FERC Form 1 data.

As shown above, Catawba operated in 2022 with an average nuclear fuel amortization rate of \$5.91/MWh. The three-year 2020-2022 nuclear fuel expenses at the Catawba Nuclear Station averaged \$5.86/MWh.

## 3.7.3 TOTAL PRODUCTIONS COSTS

The following figure conveys the total O&M and fuel expenses (the "total production costs") stated on a \$/MWh basis for the Catawba Nuclear Station, as well as for various national averages. For purposes of this comparison, the national averages are shown in "quartiles," as measured by the average of the total production cost of non-merchant nuclear units in the United States. For example, the 25% of nuclear units in the United States with the lowest production cost have been averaged and presented as "Quartile 1." Likewise, "Quartile 4" conveys the average of the 25% of the nuclear units with the highest production cost.





As shown above, over the three-year period 2020-2022, the Catawba Nuclear Station operated with total production costs of approximately \$17/MWh (lower than the previously reported 2019-2021 average); which is 1% higher than the first quartile average of non-merchant nuclear plants operating in the United States during this period.

<sup>[1]</sup> Based on FERC Form 1 data.

#### 3.8 SUMMARY OF MANAGEMENT OF THE PROJECT

The 2022 capacity ratings for the Catawba Project units under the Project Agreements with Duke remained unchanged from the 2021 ratings. The Nuclear Regulatory Commission reported, as of the date of this Report, only baseline inspections as part of the Reactor Oversight Process are planned for Catawba Units 1 and 2, as well as McGuire Units 1 and 2. During 2022, Catawba Units 1 and 2 operated with capacity factors of 101% and 86%, respectively, with both Catawba Units 1 and 2 conducting refueling outages. McGuire Units 1 and 2 achieved capacity factors of 91% and 101%, respectively during 2021, with only McGuire Unit 2 conducting a refueling outage. The Catawba Nuclear Station operated with total production costs of approximately \$17/MWh during 2020-2022 (lower than the previously reported 2019-2021 average); which is 1% higher than the first quartile average of non-merchant nuclear plants operating in the United States during this period.

## SUFFICIENCY OF RATES AND CHARGES

## 4.1 **RATE POLICIES/OBJECTIVES**

4

The authority of PMPA to determine, fix, impose and collect rates and charges for electric power and energy sold and delivered is not subject to the regulatory jurisdiction of the South Carolina Public Service Commission or the FERC, and there is no other governmental or regulatory body with authority to limit or restrict such rates and charges except to the extent purchases of electric energy from and sales of electric energy to qualifying cogeneration and small power production facilities may be regulated under Section 210 of the Public Utility Regulatory Policies Act.

Under the Supplemental Power Sales Agreements, PMPA is responsible for setting rates and charges to the Participants for All Requirements ("AR") Bulk Power Supply sufficient to pay all Monthly Project Power Costs and all Supplemental Power Costs of PMPA. PMPA has established a Finance Committee comprised of certain members of PMPA's Board of Directors. The Finance Committee, assisted by staff and consultants, advises the Board of Directors with respect to the determination of rate policy and the methodology for setting PMPA's All Requirements Bulk Power Supply rates for the Participants. All rates are reviewed annually and adjusted as necessary in accordance with the Board of Directors approval process.

For purposes of determining PMPA's rate setting policy, the Finance Committee has established a list of rate design policies and objectives that are considered when the rates for All Requirements Bulk Power Supply are developed or adjusted. The policies and objectives in effect during calendar year 2022 were as follows:

- 1. Rates should be adequate to cover PMPA's cost of providing service.
- 2. Rates to the Participants should be fair and reasonable.
- 3. Rates should reflect the impact of a Participant's load additions or reductions on PMPA's cost of providing service.
- 4. Rates should assist Participants in the ability to attract and retain customers in order to promote Participant strength and stability in a competitive market.
- 5. Rates or other programs should allow PMPA and its Participants to maintain stable cash flow through matching revenues and costs.
- Differences among Participants' average annual wholesale charges should be minimized, such that each Participant's average cost should be within (plus or minus) 10% of PMPA's average charge to all Participants.

## 4.2 WORKING CAPITAL

PMPA's Bond Resolution and the Catawba Project Power Sales Agreements provide that PMPA may set aside monies in the Revenue Fund to provide for the working capital requirements of the Catawba Project, and PMPA has established the Working Capital Account within the Revenue Fund for that purpose. The Working Capital Account was established to address the nature of PMPA's cost structure under the Project Agreements (including the timing of certain payments to Duke under the Project Agreements throughout the calendar year), its debt obligations under the Bond Resolution, and the seasonal variability of All Requirements Bulk Power Supply revenues from its Participants. The Working Capital Account can also be used as contingency funds for unexpected Catawba Project plant outages. Working Capital includes both restricted and unrestricted monies, as well as amounts associated with materials & supplies. For purposes of All Requirements rate setting and planning purposes, PMPA utilizes a portion of its Working Capital, defined as total Working Capital less the balance associated with materials & supplies (\$19 million at year-end 2022). During 2022, PMPA's actual month-end Working Capital balance for rate setting purposes (as defined above) ranged from a low of \$78 million to a high of \$93 million. The year-end 2022 balance was \$78 million (or approximately 198 days working cash).

## 4.3 AR RATE STRUCTURE AND RIDERS

PMPA's current AR rate structure was established in the late-1990's and is based upon the following objectives: (i) recover the necessary fixed costs of PMPA; (ii) send accurate demandside management price signals to its Participants; and (iii) provide its Participants the incentive to attract new load. A key consideration in establishing PMPA's AR rate structure was to allow Participants the ability to individually retain the benefits of load growth and accept the risk of load loss.

PMPA's current AR rate structure consists of: (i) a base billing demand component that recovers a "base load" portion of PMPA's fixed costs; (ii) an additional billing demand component that is based on PMPA's marginal cost of capacity; (iii) a base energy rate that is related to recovery of base load energy costs; and (iv) an additional energy rate that is intended to track PMPA's marginal energy costs. From 2006 through 2011, the base billing demand for each Participant was based on a transition, over a 15-year period (from 2006 through 2020), from: (i) a load ratio share based allocation of base demands, which were established based on metered loads in the mid-1990s to (ii) Participant Shares pursuant to the Catawba Project Power Sales Agreements. Starting in 2012, PMPA changed the basis for allocating base billing demands to reflect a blending of each Participant's current load ratio share and its Participant Share of the Catawba Project, and updates allocated base billing demands every three years. In June 2018 the Board approved fixing the allocated Base Billing Demand quantities assigned to each Participant, at the then current levels.

The AR Bulk Power Supply rates are designed to distinguish between base load usage, which rates are designed to recover Catawba Project costs, and additional demand and energy rates that are based on PMPA's marginal capacity and energy costs in order to provide appropriate marginal pricing signals to its Participants. In December 2016, PMPA's Board voted to make a change to PMPA's AR Bulk Power Supply rates to include an optional Time-of-Use energy rate component available for any Participant with a retail customer with an annual average monthly peak demand of at least 100 kW.

In addition to PMPA's Basic All Requirements Rate Schedule, PMPA has three rate riders, which as of the date of this Report, are not open to new participation. The following table describes these AR rate riders.

Rider Title	Rider Description
Economic Development Rider	PMPA's economic development rate is intended to assist the Participants in attracting large commercial and industrial loads. PMPA's economic development rate is designed with the intent that PMPA's Participant will be able to offer rates to prospective new customers that are competitive with Duke's comparable retail rate. PMPA elected to temporarily suspend offering the Economic Development Rider to new customers effective October 1, 2022.
Additional Credits Rider	Available for service to customers qualifying for the economic development rider, but also meeting certain other criteria related to workforce additions or capital investment in PMPA's service area. PMPA elected to temporarily suspend offering the Additional Credits Rider to new customers effective October 1, 2022.
Load-Side Generation Rider	Applicable to Participants with load-side generation operated in parallel during peak or emergency conditions. PMPA provides avoided cost credits for those generators enrolled in PMPA's Load-Side Generation Program. This rider is currently closed for new applicants.

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The costs of other special obligations of the Participants that are not covered by PMPA's All Requirements rates and charges, including, but not limited to, the costs of leasing distribution delivery substation equipment and/or metering equipment from Duke are passed directly through to the applicable Participants each month.

#### 4.4 RATE ACTIVITY DURING 2022

PMPA reviewed its power cost projections in early 2022. Projections prepared at that time reflected a continuation of lower projected Catawba operating cost, as well as the addition of a new large electric load customer taking service under PMPA's Economic Development Rider in early 2022. Due to lower projected Catawba operating costs, the Board of Directors also approved a temporary credit of \$10.8 million for 2022. The credit was established at \$6.17 per kW-month of Base Billing Demand (June 1, 2022 – December 31, 2022). This credit applied only to service over the 7-month period June 1, 2022 through December 31, 2022 and terminated January 1, 2023. The projections at that time indicated that after expiration of the credit, no further adjustment to PMPA's Basic All Requirements rate was needed through 2026.

PMPA updated its power cost projections in late 2022. The updated projections reflected very similar cost levels to those projected in early 2022. These updated projections indicated that PMPA could maintain the current Basic All Requirements rate level in 2023, with a plan for no further rate level adjustments through 2026. The rate levels described above are projected to provide revenues sufficient to pay all Catawba Project and Supplemental Power Costs and maintain the desired Working Capital balances through 2026.

#### 4.5 **OPERATING RESULTS**

The following table summarizes the projected operating results for PMPA based on the cost projections from late 2022 discussed in Section 4.4.

	2023 [1]	2024	2025	2026	2027
Revenues:					
Sales to Participants	\$ 232	\$ 233	\$ 234	\$ 236	\$ 238
Sales to Utilities	3	3	4	3	3
Investment Income [2]	2	2	3	4	4
Excess Funds Valuation	-	-	-	-	-
Reserve Releases	5	-	7	-	-
Total Revenues	242	239	248	242	245
Expenses:					
Operation and Maintenance	27	32	29	30	35
Nuclear Fuel	14	13	15	15	15
Net McGuire Reliability Exchange	(1)	1	0	(0)	0
Payments in Lieu of Taxes	8	8	8	8	8
Administrative & General	23	24	24	25	27
Debt Service	85	85	82	84	84
Transfers to:					
Reserve & Contingency Fund	21	16	14	15	15
Decommissioning Fund Deposit	9	9	9	9	9
Interconnection Services:					
Purchased Power	31	28	29	32	34
Transmission & Distribution	9	9	9	9	9
Other	14	13	13	13	12
Total Expenses	240	236	232	239	249
Increase/(Decrease) in Working Capital	2	3	17	4	(4)
Year-end Working Capital [3]	\$ 68	\$ 71	\$ 88	\$91	\$ 87

## Table 4-2: Projected Operating Results Amounts Shown in (\$ Millions)

[1] Reflects operating budget.

[2] Includes Other Revenues and earnings on working capital fund.

[3] Reflects only the portion of Working Capital recognized for AR rate planning purposes.

The following table reflects the development of the projected average All Requirements charges to the Participants based on the projections of Sales to Participants shown in Table 4-2.

	2023	2024	2025	2026	2027
Sales to Participants (\$M)	\$ 232	\$ 233	\$ 234	\$ 236	\$ 238
Total Energy Requirements (GWh) [1]	2,599	2,615	2,624	2,641	2,659
Average Charges (\$/MWh)	\$ 89.4	\$ 89.1	\$ 89.3	\$ 89.2	\$ 89.4

Table 4-3: Projected Average All Requirements Charges

[1] At the delivery point.

#### 4.6 SUMMARY OF SUFFICIENCY OF RATES AND CHARGES

PMPA's Basic All Requirements rate remained unchanged during 2022. PMPA implemented a temporary \$10.8 million credit applied to Base Billing Demand charges over the period June 1, 2022 through December 31, 2022. This credit terminated January 1, 2023. PMPA's All Requirements rate projections were updated in late 2022. These projections indicated projected costs which were very similar to those projected in early 2022, and that PMPA could (i) maintain the Basic All Requirements rate level in 2023, with a plan for no further rate level adjustments through 2026. The rate levels described above are projected to provide revenues sufficient to pay all Catawba Project and Supplemental Power Costs and maintain the desired Working Capital balances through 2027.

## **REQUIREMENTS FOR FUTURE POWER SUPPLY**

## 5.1 HISTORICAL DEMAND AND ENERGY

5

The Participants' requirements are measured at the PMPA delivery point level (the metering points designated for billing to each Participant). The following table provides a summary of historical demand and energy requirements at the PMPA delivery point over the period 2012 through 2022.

Calendar	Annual P	eak Demand	Annu	al Energy
Year	(MW)	Change (%)	(GWh)	Change (%)
2012	521		2,356	
2013	511	(1.9)	2,388	1.4
2014	518	1.4	2,470	3.4
2015	545	5.2	2,500	1.2
2016	565	3.5	2,570	2.8
2017	545	(3.5)	2,451	(4.6)
2018	545	(0.0)	2,586	5.5
2019	551	1.1	2,551	(1.4)
2020	539	(2.2)	2,424	(5.0)
2021	544	1.1	2,464	1.6
2022	584	7.3	2,475	0.5
Compound Average	ge Annual C	hange		
2012 - 2022				0.5
2017 - 2022				0.2

#### Table 5-1: Historical Demand and Energy Requirements Amounts Shown at Delivery Point, Gross of SEPA [1]

 Amounts include the generation from the City of Abbeville hydro unit. Annual amount in 2012 represents peak demands during top 10 hours on the Southern system. 2013 through 2022 represents PMPA's peak demand.

The change in the Participants' demand and energy requirements from year to year reflects the effects of population and economic conditions experienced by the Participants, incremental and decremental load, and the relative effects of actual weather conditions that vary from typical or normal weather.

## 5.2 PROJECTED DEMAND AND ENERGY

Projections of the Participants' delivery point demand and energy requirements were developed by GDS Associates in 2020. After exclusion of SEPA allocations (69 MW and 108 GWh in total to the Participants), such projections are shown for selected years below. Actual energy delivered to the Participants from SEPA will depend upon the generation of the hydroelectric facilities from which the Participants' allocations are obtained. The demand projections reflect the annual peak demands of the Participants coincident with the PMPA annual peak.

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Calendar Year	Annual Peak Demand (MW)	Annual Energy (GWh)	Average Annual Energy Change From Prior Period (%)
2023	524	2,599	-
2028	545	2,684	0.6
2033	565	2,772	0.6
2023-2033 Projec Average Annual	cted Compound Energy Change		0.6

Table 5-2: Projected Demand and Energy Requirements
Amounts Shown at Delivery Point, Net of SEPA

The above projections are based on econometric analysis reflecting an estimate of the historical relationships between energy requirements and economic, demographic, and weather factors expected to affect the Participants' load growth. In addition, these projections also include the impacts of a new large customer load which began taking service in early 2022.

The foregoing projections of the Participants' demand and energy requirements from PMPA assume that the region of South Carolina supplied by PMPA will experience moderate economic growth and a relatively stable economy, that the characteristics of the Participants' systems will be comparable to those experienced in recent years, and that SEPA allocations discussed above will not change. Future load management efforts by PMPA and the Participants may reduce peak loads and improve load factors, but no specific new load management programs have been assumed, nor have their effects been included in the foregoing load forecast.

#### 5.3 REQUIREMENTS AND RESOURCES

The following table summarizes PMPA's requirements and the resources used to meet those requirements over the historical period 2020-2022 and the projected period 2023-2027.

		H	listorica	1					
Line		2020	2021	2022	2023	2024	2025	2026	2027
	Requirements								
	Capacity (MW)								
1	Annual Peak	474	482	544	538	541	546	550	555
2	Less: Union	(25)	(25)	(29)	(28)	(28)	(28)	(28)	(28)
3	Net Served by PMPA	449	457	515	510	513	517	522	527
	Energy (GWh)								
4	Annual Total	2,299	2,388	2,550	2,651	2,667	2,676	2,693	2,712
5	Less: Union	(129)	(131)	(133)	(146)	(146)	(146)	(147)	(147)
6	Net Served by PMPA	2,170	2,257	2,417	2,505	2,521	2,530	2,546	2,565
	Resources								
	Capacity (MW)								
	Catawba Project								
	Catawba Station								
7	Unit 1	72	72	72	72	72	72	72	72
8	Unit 2	72	72	72	72	72	72	72	72
9	Total	143	143	143	143	143	143	143	143
	McGuire Station								
10	Unit 1	67	67	67	67	67	67	67	67
11	Unit 2	67	67	67	67	67	67	67	67
12	Total	134	134	134	134	134	134	134	134
13	Total Retained Catawba Project	277	277	277	277	277	277	277	277
14	Supplemental [1]	172	180	238	233	236	240	245	250
15	Total Capacity Resources	449	457	515	510	513	517	522	527
	Energy (GWh)								
	Catawba Project								
	Catawba Station								
16	Unit 1	578	599	643	561	588	634	589	588
17	Unit 2	633	564	543	634	589	589	634	589
18	Total	1,211	1,163	1,186	1,195	1,177	1,222	1,222	1,177
	McGuire Station								
19	Unit 1	571	627	557	523	572	572	551	572
20	Unit 2	582	563	618	523	572	572	551	572
21	Total	1,153	1,190	1,175	1,046	1,145	1,145	1,103	1,145
22	Total Entitlement	2,364	2,353	2,361	2,241	2,322	2,367	2,325	2,322
23	Less: Surplus Energy	(369)	(307)	(236)	(111)	(141)	(160)	(133)	(126)
24	Total Retained Catawba Project	1,995	2,046	2,125	2,130	2,181	2,208	2,192	2,196
25	Supplemental [1][2]	175	211	293	375	339	322	354	369
26	Total Energy Resources	2,170	2,257	2,417	2,505	2,521	2,530	2,546	2,565

## Table 5-3: Requirements and Resources Amounts Shown at Generation Level, Net of SEPA

 Provided by Santee Cooper. Also includes load met by distributed generation operated by certain PMPA Participants and Laurens Electric Membership Cooperative (for the Greer Annex).

[2] Includes backstand energy purchases.

#### 5.4 SUMMARY OF REQUIREMENTS FOR FUTURE POWER SUPPLY

The energy requirements of PMPA's Participants (net of allocations of energy from the Southeastern Power Administration) are projected to increase on average 0.6% per year over the next ten years. Entitlements to capacity and energy from the Catawba Project, together with the other power supply arrangements described in this Report are projected to be sufficient to provide the Participants' All Requirements Bulk Power Supply through the projected period.

## 6 CHANGES IN OPERATION AND CAPITAL IMPROVEMENTS

## 6.1 OPERATIONAL STATUS OF THE CATAWBA PROJECT

Prior to the merger between Duke Energy and Progress Energy, each of the Catawba and McGuire units were dispatched by Duke to serve the combined loads of PMPA and Duke. Since July 2012, in connection with the Joint Dispatch Agreement between Duke and Progress Energy Carolinas (now known as Duke Energy Progress or "DEP"), the Catawba and McGuire units are being dispatched to serve the combined loads of both Duke's and DEP's combined system. Since the dispatch of nuclear units on both systems takes the form of "must run" baseloaded generation, the Joint Dispatch Agreement has not had, and is not expected to have, any material effect on the operation of the Catawba or McGuire nuclear units. Each of the Catawba and McGuire units operate on an 18-month refueling cycle. The status of refueling outages at each of the units is as follows:

	Most Recent Refueling Outage		Next Refueling to
Unit	Completed In	Duration (days)	Begin In
Catawba Unit 1	Nov. 2021	19	Apr. 2023
Catawba Unit 2	Oct. 2022	46	Mar. 2024
McGuire Unit 1	May 2022	37	Sep. 2023
McGuire Unit 2	Mar. 2023	44	Aug. 2024

## Table 6-1: Refueling Outage Summary

Duke, pursuant to the Operating Agreement, has agreed that there shall be no pattern of adverse distinction and no pattern of undue discrimination in carrying out its obligations relating to Catawba, including the determination of outage schedules, as compared to its other generating units. Effective in July 2012, upon the closing of the merger between Duke Energy and Progress Energy, and pursuant to an amendment to the Operating Agreement, Duke's obligation was extended to apply to Duke's scheduling of outages for all nuclear generating facilities operated by Duke Energy or its affiliates.

Other than the capital improvements discussed in the next section, which are expected to improve the operational reliability of Catawba, GDS Associates is not aware of any operational changes at Catawba.

## 6.2 CAPITAL ADDITIONS

In December 2003, the owners of Catawba were granted a 20-year operating license extension by the Nuclear Regulatory Commission, and Catawba is now licensed to operate through the year 2043. In connection therewith, Duke, the operator and contractor for Catawba has identified and undertaken numerous capital projects at Catawba that are related to plant upgrades to maintain system and equipment reliability, provide for a power uprate, address certain control systems obsolescence, and support plant life extension.

Since 2008, PMPA has periodically issued Bonds to finance portions of its ownership share of the capital improvements to Catawba. In each case, the Consulting Engineer provided opinions to PMPA and the Bond Fund Trustee that such projects were necessary and desirable

to improve the operating reliability of the Catawba Nuclear Station. The proceeds from such prior bond issuances available in the Construction Fund were fully depleted during 2020.

The following are some of the more significant projects at Catawba which Duke completed during 2022:

- 1. Peening of Catawba Unit 2's reactor vessel head;
- 2. Replacement of Catawba Unit 2's reactor vessel head mirror insulation;
- 3. Replacement of main step-up transformer (2B) at Catawba Unit 2;
- 4. Replacement of component cooling pump motor (2A1) at Catawba Unit 2;
- 5. Replacement of component cooling pumps (2A1 & 2A2) at Catawba Unit 2; and
- 6. Replacement of reactor coolant pump seals (2A & 2B) at Catawba Unit 2.

Duke, the operator and contractor for Catawba, is currently undertaking upgrades at Catawba required to: (i) maintain system and equipment reliability; (ii) lengthen service life for obsolescence and plant life extension; and (iii) meet new regulatory requirements. The most significant areas of focus currently are:

- 1. Replacement of main step-up transformers (Catawba Unit 1 (1B) in 2023, and Catawba Unit 1 (1A) and Unit 2 (2A) in 2024);
- 2. Replacement of reactor vessel head insulation (Catawba Unit 1 in 2023);
- 3. Reactor vessel head cavitation peening (Catawba Unit 1 in 2023);
- 4. Replacement of Catawba Unit 1's reactor coolant pump seals (1B, 1C & 1D);
- 5. Replacement of the conventional waste system's piping and pond liners (completion expected in 2024);
- 6. Replacement of reactor coolant pump motors (Catawba Unit 1 (1B) and Catawba Unit 2 (2C) in 2024);
- 7. Replacement of high-pressure turbine diaphragms (Catawba Units 1 and 2 in 2024); and
- 8. Implementation of independent spent fuel storage (dry cask storage) phase IV (2024).

In addition to the major projects discussed above, PMPA has financed numerous other capital projects that Duke is currently planning to implement at the Catawba Nuclear Station, which could be characterized as renewals and replacements of equipment or components that have reached the end of their useful operating life.

Following the earthquake and tsunami at the Fukushima Dai-ichi nuclear powerplant in Japan in March 2011, the NRC formed a senior-level task force to review the NRC regulations and processes to determine if the NRC should make safety improvements taking into consideration the Fukushima event. The task force prepared a report and recommended areas of enhancement. The NRC then prioritized certain suggestions of the task force.

In March 2012, the NRC issued three orders requiring reactors to:

- 1. Implement "mitigation strategies" to maintain reactor and spent fuel pool cooling and containment integrity in a severe event that exceeds design parameters (the "Mitigation Strategies Order" EA-12-049).
- 2. Install a second tier of reliable spent fuel pool level instrumentation (the "Spent Fuel Pool Instrumentation Order" EA-12-051).

3. Install readily accessible hardened vents for heat removal and pressure control in boiling water reactors (the "Hardened Containment Vent System Order" EA-13-109).

In response, Duke formed a Fukushima Response Organization tasked with coordinating and identifying actions needed to address the lessons learned from this event.

During 2016 and 2017, the NRC conducted audits and inspections to verify implementation of the orders mentioned above. As of August 2020, the NRC reported that both Catawba and McGuire are in compliance with the Mitigation Strategies Order and Spent Fuel Pool Instrumentation Order. Catawba and McGuire, as pressurized water reactors, are not subject to the Hardened Containment Vent System Order.

In addition to the orders above, the NRC also directed reactors to re-evaluate their seismic and flooding hazards. The NRC reports that both Catawba and McGuire have submitted the following reports in compliance with the seismic directives: (i) Seismic Hazard and Screening Reports, (ii) Seismic Probabilistic Risk Assessment, (iii) Limited Scope Evaluations, and (iv) Mitigation Strategies Assessment. As a result of the NRC's review of Duke's Flood Hazard Reevaluation Reports for both Catawba and McGuire, Catawba and McGuire were required to submit a focused evaluation ("FE") report to address local intense precipitation and to leverage available physical margin. Duke reports that both Catawba and McGuire submitted their FE reports in 2020. In addition, the NRC reports that both Catawba and McGuire have submitted Mitigation Strategies Assessment for flooding hazards. The NRC indicates that both Catawba and McGuire are in compliance with the seismic and flooding hazards requirements.

The following figure shows the historical level of capital additions costs that PMPA has incurred in connection with Duke's plant upgrades over the last five years, as well as PMPA's 5-year projection of its ownership share of capital additions that will be billed under the Operating Agreement, based on information provided by Duke. Figure 6-1 also shows the portion of capital additions that PMPA has funded with debt.



Figure 6-1: Catawba Project Capital Additions

## 6.2.1 OTHER POTENTIAL CAPITAL IMPROVEMENTS

In addition to the capital projects currently planned, Duke has continued to monitor potential issues at the Catawba Nuclear Station which may involve repair or replacement of critical systems at the plant.

**Catawba Steam Generators.** The original Westinghouse steam generators in Catawba Unit 1 experienced significant stress corrosion cracking ("SCC") in their tubes; an industry-wide problem in steam generators of certain designs, including the original steam generator designs at McGuire and Catawba Unit 1. The original Westinghouse steam generators in Catawba Unit 1 and both McGuire units were replaced with Babcock & Wilcox steam generators in 1996 and 1997. The steam generators in Catawba Unit 2 are Westinghouse design but have certain design differences from the original steam generators installed in Catawba Unit 1 and the McGuire units. In addition, notwithstanding that Catawba Unit 2 steam generator tubes have not shown the degree of stress corrosion cracking found in Catawba Unit 2 steam generator tubes. Duke reports that continued testing of the steam generator tubes in Catawba Unit 2 will be conducted. However, such testing may not be conducted at each refueling outage, due to a license amendment approved by the NRC which allows less frequent inspections if significant SCC was not detected during previous inspections.

Duke reports that it completed eddy current testing and inspections (to identify defects) of all the tubes associated with Catawba Unit 2's steam generator during the most recent refueling outage completed in May 2021. According to Duke no significant tube defects, tube pitting, or cracking was identified. As of the date of this Report, Duke indicates that the inspection results from May 2021 will allow it to skip performing the eddy current testing and inspections at

Catawba Unit 2 during the next refueling outage currently scheduled to begin in September 2022. Although Duke cannot predict the extent to which Catawba Unit 2's steam generators will be affected by the tube cracking in the future, potential consequences of the cracking include extensive tube "plugging" and "sleeving," which could lead to longer refueling outages and forced outages. The economic impacts of such potential consequences would dictate an evaluation of the costs and benefits of replacing the steam generators at Catawba Unit 2. Based on current inspections, Duke does not report any plans to replace Catawba Unit 2's steam generators.

## 6.3 RESERVE AND CONTINGENCY FUND

PMPA has used the Reserve and Contingency Fund over the years to pay for certain Catawba capital additions billed under the Operating Agreement. To the extent PMPA has issued debt to fund its share of ongoing Catawba capital projects, the Reserve and Contingency Fund has been available to PMPA for other purposes.

The operation of the Reserve and Contingency Fund during 2022 is summarized below.

0	•	
Reserve and Contingency Fund		(\$000)
Balance at December 31, 2021	\$	4,767
Disbursements		8,876
Transfers In (Out)		(8,876)
Balance at December 31, 2022		4,767

Table 6-3: Reserve and Contingency Fund

## 6.4 **DECOMMISSIONING**

The Operating Agreement provides that PMPA and the other owners of Catawba will bear their ownership share of decommissioning costs for Catawba. Consequently, PMPA's share of decommissioning costs will equal 12.5% of the costs to decommission Catawba.

Duke reports that the estimated site-specific decommissioning costs of Catawba, including the cost of decommissioning plant components not subject to radioactive contamination, total \$1.803 billion, stated in 2018 dollars and based upon a decommissioning study completed in 2018, and revised in late 2019. Such estimate is subject to revision caused by, among other things, technological and regulatory factors.

The Resolution provides for deposits from Revenues into the Decommissioning Fund in order to pay decommissioning costs, and PMPA has been making deposits since 1985. PMPA deposits annually an amount sufficient, taking into account investment earnings over time, to pay the escalated cost to decommission Catawba (based on Duke's site-specific estimates).

In connection with its certification to the NRC regarding financial assurance for decommissioning its share of Catawba, PMPA has established an external decommissioning trust fund that will be maintained solely to pay decommissioning costs. Deposits into such external decommissioning trust fund are made by transfers from the Decommissioning Fund under the Resolution. In March 2023, PMPA made a required filing with the NRC verifying that funding amounts in its decommissioning trust fund, together with interest earnings, will meet the level of the NRC minimum financial assurance amount as projected to the

decommissioning date. As reported in PMPA's audited financial statements, the balance in the Decommissioning Fund at December 31, 2022 was approximately \$119 million.

#### 6.5 SUMMARY OF CHANGES IN OPERATION AND CAPITAL IMPROVEMENTS

Based on our review of the information provided by Duke and PMPA, and our general understanding of the scope of Catawba capital additions projects currently being undertaken by Duke, GDS Associates has reached the conclusion that the renewals, extraordinary repairs, replacements, modifications, capital additions and betterments related to the capital additions projects currently being undertaken by Duke, for which PMPA is responsible under the Operating Agreement, are necessary or desirable to achieve design capability, improve operating reliability of the Catawba Nuclear Station, comply with regulatory requirements, or for safety, public health, or environmental purposes.

## APPENDIX A: INDEPENDENT AUDITOR'S REPORT FOR 2022

## PIEDMONT MUNICIPAL POWER AGENCY

Financial Statements and Schedules December 31, 2022 and 2021 (With Report of Independent Auditor Thereon)

## PIEDMONT MUNICIPAL POWER AGENCY

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## **Report of independent Auditor**

To the Board of Directors of Piedmont Municipal Power Agency

#### Opinion

We have audited the accompanying financial statements of Piedmont Municipal Power Agency ("PMPA") (a South Carolina corporation), which comprise the statements of net position as of December 31, 2022 and 2021, and the related statements of revenues, expenses, and changes in net position, and cash flows for the years then ended, and the related notes to the financial statements.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of PMPA as of December 31, 2022 and 2021, and the changes in its financial position and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

#### **Basis for Opinion**

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are required to be independent of PMPA and to meet our other ethical responsibilities in accordance with the relevant ethical requirements relating to our audits. We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### **Responsibilities of Management for the Financial Statements**

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about PMPA's ability to continue as a going concern for one year beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

#### Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and, therefore, is not a guarantee that an audit conducted in accordance with generally accepted auditing standards will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with generally accepted auditing standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud
  or error, and design and perform audit procedures responsive to those risks. Such procedures include
  examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of PMPA's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about PMPA's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

#### **Required Supplementary Information**

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 3 through 9 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### Supplementary Information

Our audits were conducted for the purpose of forming an opinion on the financial statements as a whole. Schedules 1 and 2 are presented for purposes of additional analysis and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements themselves, and other records used to prepare the financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, Schedules 1 and 2 are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Cherry Bekaert LLP

Greenville, South Carolina February 28, 2023
Management's Discussion and Analysis

December 31, 2022 and 2021

### **Overview of the Financial Statements**

This section of Piedmont Municipal Power Agency's ("PMPA") annual financial statements presents our analysis of PMPA's financial performance during the fiscal years ended December 31, 2022 and 2021. Please read this discussion and analysis in conjunction with the financial statements that follow this section.

### **Financial Highlights**

Year Ending December 31, 2022:

- PMPA's wholesale rates to Participants remain unchanged in 2022. Sales of electricity to Participants included a \$10.8 million billing credit to return excess working capital generated in prior years to the Participants.
- In 2022, net cash generated from operating activities was \$123.9 million, offsetting cash used in investing and financing activities of \$33.5 million and \$89.8 million, respectively.
- On January 1, 2022, PMPA made a principal payment of \$26.0 million, reducing its long-term debt outstanding. PMPA's next principal payment of \$51.3 million is due on January 1, 2023.

Year Ending December 31, 2021:

- PMPA's wholesale rates to Participants remain unchanged in 2021. Sales of electricity to Participants included a \$28 million billing credit to return excess working capital generated in prior years to the Participants.
- In 2021, net cash generated from operating and investing activities was \$108.6 million and \$27.4 million, respectively, offsetting cash used in financing activities of \$135.6 million.
- PMPA issued the 2021A Series Electric Revenue Bonds totaling \$55.4 million plus other sources of funds, including premiums, totaling \$3.9 million and an equity contribution of \$28.0 million, to refund all remaining outstanding bonds of the 2010A-2, 2010A-3, 2010A-4 and 2010A-5 series in the amount of \$91.3 million. The economic gain from this issuance was \$6.0 million.
- PMPA issued the 2021BC Series Electric Revenue Bonds totaling \$187.9 million plus other sources of funds, including premiums, totaling \$39.7 million and an equity contribution of \$0.2 million, to refund all remaining outstanding bonds of the 2008C, 2008D, 2011B and 2011C series in the amount of \$227.9 million. The economic gain from this issuance was \$44.6 million.
- PMPA issued the 2021DE Series Electric Revenue Bonds totaling \$122.6 million plus other sources of funds, including premiums, totaling \$18.8 million and an equity contribution of \$4.4 million, to refund all remaining outstanding bonds of the 2012A, 2012B and 2008E series in the amount of \$93.0 million; and terminate the floating-to-fixed rate, step-coupon swap in the amount of \$50 million. The economic gain from this issuance was \$18.1 million.
- PMPA's long-term debt obligations were reduced by a \$34.0 million principal payment on January 1, 2021.

Management's Discussion and Analysis

December 31, 2022 and 2021

### **Overview of the Financial Activities**

The following is an overview of the financial activities of PMPA for the years ended December 31, 2022 and 2021.

PMPA's financial statements, which include the statements of net position, the statements of revenues, expenses and changes in net position, and the statements of cash flows, are presented to display information about the reporting entity as a whole in accordance with GASB Statement No. 34, as amended. The statements are prepared using the economic resources measurement focus and the accrual basis of accounting.

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Management's Discussion and Analysis

December 31, 2022 and 2021

## **Financial Information**

The following summarizes the activities of PMPA for the years ended December 31, 2022, 2021, and 2020:

	2022		2021		 2020
			(In th	nousands)	
Revenues:					
Sales of electricity to Participants	\$	215,668	\$	190,501	\$ 188,776
Sales of electricity to other utilities and other operating revenues		23,161		21,165	 20,577
Total operating revenues		238,829		211,666	209,353
Interest income		2,890		2,393	5,700
Net decrease in fair value of investments					
and derivative instruments		(9,143)		(292)	 (703)
Total Revenues		232,576		213,767	 214,350
Expenses:					
Operation, maintenance, and nuclear fuel amortization		38,322		39,308	38,146
Purchased power, transmission, and power delivery		65,683		50,889	52,627
Administrative, general, and payment in lieu of property taxes		24,001		23,480	23,606
Depreciation		10,634		9,609	9,123
Interest and amortization expense		31,894		38,754	45,210
Other		13,882		14,221	 12,035
Total Expenses		184,416		176,261	180,747
Revenues over expenses before deferred items		48,160		37,506	33,603
Net decrease in expenses recoverable from future Participant billings		(48,055)		(100,859)	(13,296)
Postemployment benefits		-		(82)	 (82)
		(48,055)		(100,941)	(13,378)
Revenues over (under) expenses		105		(63,435)	20,225
Net position at beginning of year		116,370		179,805	 159,580
Net position at end of year	\$	116,475	\$	116,370	\$ 179,805

Management's Discussion and Analysis December 31, 2022 and 2021

### **Results of Operations**

### Revenues

- Sales of electricity to Participants, PMPA's primary source of revenue, increased in 2022 by 13.2%, or approximately \$25.2 million. The 2022 billing credit to Participants totaled \$10.8 million, resulting in a \$17.2 million increase in revenue from 2021. The remaining increase was driven by increased energy sold to Participants. Sales of electricity to Participants, increased in 2021 by 0.9%, or approximately \$1.7 million. The 2021 billing credit to Participants totaled \$28 million, resulting in a \$2 million increase in revenue from 2020.
- Surplus energy sales to other utilities increased by 9.4% in 2022 due to an increase in surplus energy rates, partially offset by a decrease in energy available to sell in the market. Surplus energy sales to other utilities increased by 2.9% in 2021 due to an increase in both surplus energy rates and energy available to sell in the market. PMPA's surplus energy was contractually sold to Santee Cooper and The Energy Authority as part of supplemental purchased power agreements and Duke Energy Carolinas, LLC.

### Expenses

- Purchased power, transmission and power delivery expenses increased by 29.1%, or approximately \$14.8 million, in 2022 due to an increase in purchase price coupled with an increase in supplemental energy purchased in the market during 2022. Purchased power, transmission and power delivery expenses decreased by 3.3%, or approximately \$1.7 million, in 2021 due to capacity savings achieved as a result of moving backstand services to The Energy Authority on January 1, 2021. The capacity savings was partially offset by an increase in both purchase price and energy purchased in the market during 2021.
- Nuclear fuel represents costs associated with acquiring and processing reload fuel assemblies as well as the cost of nuclear fuel in the reactor. The amortization of these costs increased by \$0.5 million in 2022 and decreased by \$0.8 million in 2021.

Management's Discussion and Analysis

December 31, 2022 and 2021

#### **Net Position**

Assets, liabilities, and net position are summarized as follows:

	2022		2021		2020	
			(In t	housands)		
Assets:						
Capital assets	\$	403,029	\$	399,965	\$	387,178
Current unrestricted assets		117,133		118,593		142,437
Current restricted assets		240,123		207,968		212,911
Other noncurrent assets		326,671		374,755		475,643
Total Assets	\$	1,086,956	\$	1,101,281	\$	1,218,169
Deferred outflows:	\$	16,366	\$	21,353	\$	29,222
Liabilities:						
Long-term liabilities	\$	739,068	\$	793,845	\$	803,523
Current liabilities		247,779		212,419		210,249
Total Liabilities	\$	986,847	\$	1,006,264	\$	1,013,772
Deferred inflows:	\$	-	\$	-	\$	53,814
Net position:						
Net investment in capital assets	\$	(231,065)	\$	(266,625)	\$	(299,382)
Other restricted assets		1,600		1,600		1,600
Unrestricted		345,940		381,395		477,587
Total Net Position	\$	116,475	\$	116,370	\$	179,805

Current unrestricted assets fluctuate with the changes in working capital. Working capital decreased by \$4.6 million and \$14.6 million in 2022 and 2021, respectively.

Current restricted assets primarily include assets restricted for decommissioning and debt service. Assets restricted for decommissioning increase each year due to PMPA's regular deposits into the decommissioning fund. Assets restricted for debt service fluctuate each year depending on PMPA's debt service obligation on January 1 of the following year. As such, PMPA's assets restricted for debt service increased on December 31, 2022 when compared to December 31, 2021 and decreased on December 31, 2020.

Other noncurrent assets primarily include net costs recoverable from future participant billings, which decreased by \$48.0 million and \$100.8 million in 2022 and 2021, respectively. This decrease was driven by the \$51.3 million and \$54.0 million of principal deposits made during 2022 and 2021, respectively, which were partially offset by the deferrals of interest, depreciation, and amortization expenses. Additionally, in 2021 the termination of the floating-to-fixed rate step-coupon swap resulted in a \$50.4 million decrease in net costs recoverable from future participant billings.

Management's Discussion and Analysis

December 31, 2022 and 2021

Long-term liabilities primarily include bonds payable, net and the reserve for decommissioning. Long-term bonds payable decreased by \$61.9 million and \$16.7 million in 2022 and 2021, respectively, due to bond payments and the amortization of bond premiums. The reserve for decommissioning increased by \$7.0 million and \$6.6 million in 2022 and 2021, respectively, due to the continued accretion to the PMPA's total decommissioning requirement.

Current liabilities primarily reflect PMPA's debt service requirement on January 1 of the following year. As such, current liabilities increased by \$35.4 million and \$2.2 million in 2022 and 2021, respectively.

PMPA calculates net investment in capital assets as the difference between capital assets and bonds payable, including loss on advance refunding of debt. Capital assets includes \$405 million and \$396 million of accumulated depreciation and amortization as of December 31, 2022 and 2021, respectively, causing the net investment in capital assets to reflect a negative balance.

### **Capital Assets**

Capital assets include structures and improvements, reactor plant equipment, turbo-generator units, other equipment, and nuclear fuel. Such amounts are detailed as follows:

	2022		2021		 2020
			(In th	ousands)	
Structures and improvements	\$	174,077	\$	171,977	\$ 169,342
Reactor plant equipment		297,376		289,491	287,802
Turbo generator units		76,988		76,642	75,217
Other equipment		116,233		113,508	103,522
Nuclear fuel		73,348		69,578	70,640
Other		46,625		49,752	56,540
Construction work-in-progress		23,688		25,090	 27,444
Total		808,335		796,038	790,507
Less accumulated depreciation		(405,306)		(396,073)	 (403,329)
Total, net	\$	403,029	\$	399,965	\$ 387,178

PMPA's investment in capital assets on December 31, 2022 totaled \$403.0 million (net of accumulated depreciation), a \$3.1 million increase from 2021. Significant capital transactions during 2022 included \$12.8 million in nuclear fuel purchases and \$15.0 million of capital additions, partially offset by depreciation and amortization expense of \$24.0 million and a construction work-in-progress write off of \$0.8 million.

PMPA's investment in capital assets on December 31, 2021 totaled \$400.0 million (net of accumulated depreciation), a \$12.8 million increase from 2020. Significant capital transactions during 2021 included \$21.2 million in nuclear fuel purchases and \$14.0 million of capital additions, partially offset by depreciation and amortization expense of \$22.4 million.

Management's Discussion and Analysis

December 31, 2022 and 2021

### **Debt Management**

PMPA's total debt decreased by \$29.1 million and \$13.6 million in 2022 and 2021, respectively.

### **Economic Factors and Next Year's Rates**

Because the retail customers of PMPA Participants are primarily residential and small commercial accounts, PMPA is much less affected by economic downturns than a utility with larger commercial and industrial retail customers. The 2023 budget does not include an increase in PMPA's wholesale rates to the Participants.

### **Request for Information**

This financial report is provided as an overview of PMPA's finances. Questions concerning any of the information in this report or requests for additional information should be directed to the Office of the Finance Director, Piedmont Municipal Power Agency, 121 Village Drive, Greer, South Carolina 29651.

Statements of Net Position

### December 31, 2022 and 2021

(Dollars in thousands)

Assets	2022		2021		
Capital Assets (Note 5):					
Utility plant assets being depreciated	\$	784,111	\$	770,412	
Accumulated depreciation and amortization		(405,306)		(396,073)	
Total utility plant assets being depreciated, net		378,805		374,339	
Utility plant assets not being depreciated		24,224		25,626	
Total Capital Assets, net		403,029		399,965	
Current Unrestricted Assets:					
Cash		1,151		552	
Marketable debt securities		78,355		83,308	
Accrued interest receivable		1		1	
Participant accounts receivable		16,813		14,035	
Other accounts receivable		1,427		1,027	
Materials and supplies		19,386		19,670	
Total Current Unrestricted Assets		117,133		118,593	
Current Restricted Assets (Note 7):					
Restricted for debt service		126,691		97,500	
Restricted for decommissioning		111,832		108,868	
Restricted for other		1,600		1,600	
Total Current Restricted Assets		240,123		207,968	
Total Current Assets		357,256		326,561	
Noncurrent Assets:					
Net costs recoverable from future Participant billings (Note 8)		326,615		374,670	
Other		56		85	
Total Other Assets		326,671		374,755	
Total Assets	\$	1,086,956	\$	1,101,281	
Deferred Outflows:					
Redemption loss	\$	5,754	\$	6,578	
Losses on advance refunding of debt, net		10,149		14,199	
Postemployent benefits		463		576	
Total Deferred Outflows	\$	16,366	\$	21,353	

Statements of Net Position (continued)

December 31, 2022 and 2021

(Dollars in thousands)

Long-Term Liabilities (Notes 9 and 10):		
Bonds payable, net	\$ 592,953	\$ 654,830
Reserve for decommissioning (Note 11)	143,992	137,032
Accrued expense OPEB	2,123	1,983
Total Long-Term Liabilities	 739,068	 793,845
Current Liabilities:		
Accounts payable and accrued liabilities	 11,877	 9,277
Current Liabilities Payable from Restricted Assets:		
Accrued interest payable	184,612	177,183
Current installments of bonds payable	51,290	25,959
Total Current Liabilities Payable from Restricted Assets	235,902	203,142
Total Current Liabilities	 247,779	 212,419
Total Liabilities	\$ 986,847	\$ 1,006,264
Net position		
Net investment in capital assets	\$ (231,065)	\$ (266,625)
Restricted for other	1,600	1,600
Unrestricted	 345,940	 381,395
Total Net Position	\$ 116,475	\$ 116,370

Statements of Revenues, Expenses and Changes in Net Position

## Years Ended December 31, 2022 and 2021

(Dollars in thousands)

	2022		2021	
Operating Revenues:				
Sales of electricity to Participants	\$	215,668	\$	190,501
Sales of electricity to other utilities		21,629		19,627
Other		1,532		1,538
Total Operating Revenues		238,829		211,666
Operating Expenses:				
Operation and maintenance		24,987		26,506
Nuclear fuel amortization		13,335		12,802
Purchased power		56,798		41,580
Transmission		8,295		8,696
Power delivery		590		613
Administrative and general		15,996		15,625
Depreciation		10,634		9,609
Decommissioning		6,960		6,623
Payments in lieu of property taxes		8,005		7,855
Total Operating Expenses		145,600		129,909
Net Operating Income		93,229		81,757
Other Income (Expense):				
Interest income		2,890		2,393
Net change in fair market value of				
investments and derivative instruments		(9,143)		(292)
Interest expense		(39,041)		(39,149)
Amortization expense		7,147		395
Other		(6,922)		(7,598)
Total Other Expense, Net		(45,069)		(44,251)
Revenues over expenses before change in net expenses				
recoverable from future Participant billings		48,160		37,506
Net decrease in net costs recoverable				
from future Participant billings		(48,055)		(100,859)
Postemployment benefits		-		(82)
		(48,055)		(100,941)
Revenue over (under) expenses		105		(63,435)
Net position at beginning of year		116,370		179,805
Net position at end of year	\$	116,475	\$	116,370

Statements of Cash Flows

Years Ended December 31, 2022 and 2021

(Dollars in thousands)

	2022		2021	
Cash flows from operating activities:				
Receipts from customers	\$	235,651	\$	210,784
Payments for operations and maintenance		(24,703)		(26,908)
Payments for purchased power, transmission, and power delivery		(73,688)		(58,744)
Payments for administration and general		(13,396)		(16,494)
Net cash from operating activities		123,864		108,638
Cash flows from investing activities:				
Purchase of investment securities		(438,181)		(400,834)
Proceeds from sales and maturities of investments		401,335		428,144
Interest received on investments		3,390		1,461
Net interest paid on derivative instruments		-		(1,390)
Net cash (used in) from investing activities		(33,456)		27,381
Cash flows from capital and related financing activities:				
Payment of bond principal		(25,959)		(446,190)
Payment for swap termination		-		(50,000)
Proceeds from bond issuance		-		428,309
Interest payment on bonds		(30,178)		(25,115)
Expenditures for electric plant in service		(14,963)		(14,032)
Expenditures for nuclear fuel		(12,804)		(21,168)
Payment to Duke Energy for other charges		(5,958)		(5,358)
Debt issuance costs		_		(2,954)
Other		53		903
Net cash used in capital and related financing activities		(89,809)		(135,605)
Net change in cash		599		414
Cash, beginning of year		552		138
Cash, end of year	\$	1,151	\$	552
Non-cash investing and financing activities:				
(Loss) gain on sale of investment	\$	(817)	\$	931
Amortization expense on discounts and premiums	\$	10,587	\$	5,369
Amortization of net redemption loss	\$	(4,874)	\$	(6,595)
Net change in fair value of investments	\$	(9,143)	\$	(292)

Statements of Cash Flows (continued)

Years Ended December 31, 2022 and 2021

(Dollars in thousands)

	2022		2021	
Reconciliation of operating income to net cash from				
operating activities:				
Operating income	\$	93,229	\$	81,757
Adjustments to reconcile operating income to				
net cash from operating activities:				
Depreciation		10,634		9,609
Fuel amortization		13,335		12,802
Accretion of reserve for decommissioning		6,960		6,623
(Increase) decrease in:				
Participant accounts receivable		(2,778)		(412)
Other accounts receivable		(400)		(470)
Materials and supplies		284		(402)
Increase (decrease) in:				
Accounts payable and accrued liabilities		2,600		(869)
Net cash from operating activities	\$	123,864	\$	108,638

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

### (1) Description of the Entity, Industry Restructuring Developments, and Related Uncertainties

### (a) Description of the Entity

Piedmont Municipal Power Agency ("PMPA") was incorporated in 1979 under the South Carolina Joint Municipal Electric Power and Energy Act (the "Act"). The Act, adopted in April 1978, enabled the formation, by South Carolina municipalities and municipal commissions of public works, of a joint agency to plan, finance, develop, own, and operate electric generation and transmission facilities. Ten municipal utility systems ("Participants") comprise PMPA's membership. The Participants, located in northwestern South Carolina, are the cities of Abbeville, Clinton, Easley, Gaffney, Greer, Laurens, Newberry, Rock Hill, Union, and Westminster. PMPA is not a component unit of any other governmental entity.

PMPA has a 25% undivided ownership interest in Unit 2 of the Catawba Nuclear Station ("Catawba"). Pursuant to the Operating and Fuel Agreement between PMPA and Duke Energy Carolinas, LLC ("Duke"), Duke operates both Units 1 and 2 at Catawba. PMPA's power output entitlements (approximately 282 MW) come from both Catawba Units. PMPA pays 12.5% of the costs and receives 12.5% of the power output associated with each of these 1,129 MW units. The operating licenses for Catawba Unit 1 and Unit 2 expire on December 5, 2043.

Additionally, the terms of the McGuire Reliability Exchange Agreement ("MREA") allow transfers of energy between PMPA's entitlements from the Catawba Units and Duke's two nuclear units at the McGuire Nuclear Station ("McGuire"). The result spreads PMPA's entitlements across four similar nuclear units. The operating license for McGuire Unit 1 expires on June 12, 2041 and the operating license for McGuire Unit 2 expires on March 3, 2043.

### (b) Industry Restructuring Developments and Related Uncertainties

There is no deregulation debate underway in the South Carolina General Assembly. The well-publicized complexities of deregulation in other parts of the country have caused the legislators and regulators in South Carolina to continue a regulated retail electricity market.

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

### (2) Summary of Significant Accounting Policies

### (a) Basis of Accounting

The financial statements have been prepared in accordance with the provisions of the Governmental Accounting Standards Board ("GASB") Statement No. 34, *Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments* as amended by GASB Statement No. 37, *Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments: Omnibus*, GASB Statement No. 38, *Certain Financial Statement Disclosures* and GASB Statement No. 61, *The Financial Reporting Entity – Omnibus – An Amendment of GASB Statement No. 14 and No. 34*. Statement No. 34 requires as supplementary information Management's Discussion and Analysis, which includes an analytical overview of PMPA's financial activities.

PMPA's accounting records are maintained on an accrual basis in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") and substantially in conformity with the Federal Energy Regulatory Commission's Uniform System of Accounts.

PMPA follows the accounting practices set forth in U.S. GAAP, Accounting for the Effects of Certain Types of Regulation, as amended. This standard allows PMPA to capitalize or defer certain costs or revenues based on PMPA's ongoing assessment that it is probable that such items will be recovered through future revenues based on the rate-making authority of PMPA's board of directors. The criteria require consideration of anticipated changes in levels of demand or competition during the recovery period for any capitalized cost.

PMPA's General Bond Resolution requires that its rate structure be designed to produce revenues sufficient to pay operating, debt service, and other specified costs. PMPA's board of directors, which is comprised of representatives of the Participants, is responsible for reviewing and approving the rate structure. The application of a given rate structure to a given period's electricity sales may produce revenues not intended to pay that period's costs, and conversely, that period's costs may not be intended to be recovered in period revenues. The affected revenues and/or costs are, in such cases, deferred for future recognition. The ultimate recognition of deferred items is correlated with specific future events, primarily payment of debt principal.

PMPA maintains a single enterprise fund to record its activities, which consists of a selfbalancing set of accounts. Enterprise funds are used to account for activities similar to those found in the private sector, where the determination of net income is necessary or useful for sound financial administration.

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

### (2) Summary of Significant Accounting Policies – Continued

### (b) Losses on Advanced Refundings of Debt and Redemption Losses

Losses on advanced refundings of debt at December 31, 2022 and 2021 of \$15,903 and \$20,777, respectively, (net of accumulated amortization of \$265,804 and \$260,930, respectively) have been deferred in accordance with U.S. GAAP and are being amortized over the term of the debt issued on refunding using the effective interest method. The remaining costs on advanced refundings will be amortized over the next 11 years (2023 through 2033) based on the shorter of the original debt maturity dates or the maturity dates of the new debt.

### (c) Discounts on Bonds Payable

The discounts on bonds payable at December 31, 2022 and 2021 of \$134 and \$186, respectively, (net of accumulated amortization of \$954 and \$902, respectively) are being amortized on the bonds outstanding method, which approximates the effective interest method.

### (d) Premiums on Bonds Payable

The premiums on bonds payable at December 31, 2022 and 2021 of \$54,091 and \$64,730, respectively, (net of accumulated amortization of \$22,285 and \$11,646, respectively) are being amortized on a method that approximates the effective interest method.

#### (e) Income Taxes

PMPA is recognized as a public utility for federal income tax purposes. As such, the gross income of PMPA is excluded from federal income taxes under Internal Revenue Code Section 115.

### (f) Marketable Debt Securities

As authorized by the General Bond Resolution, investment securities at December 31, 2022 and 2021 consist only of direct obligations of the United States government and obligations of United States government agencies. These investments are uninsured and unregistered and are held by PMPA's trustee in PMPA's name.

Marketable debt securities are recorded at fair value based on market prices. Unrealized holding gains and losses on marketable debt securities are included in income. Interest income is recognized when earned.

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

### (2) Summary of Significant Accounting Policies – Continued

#### (g) Capital Assets

Electric plant in service, including unclassified assets, is stated at cost and is depreciated on a straight-line basis at rates calculated to depreciate the composite assets over their respective estimated useful lives. Depreciation begins when assets are placed into service. PMPA's annual provision for depreciation expressed as a percentage of the average balance of depreciable utility plant was 1.4% and 1.3% in 2022 and 2021, respectively.

PMPA's capital assets are currently being depreciated according to the following table:

	Years		Years
Structures and improvements	40	Station equipment	40
Reactor plant equipment	40	Transmission equipment	40
Turbo generator units	40	Other	35-40
Accessory electric equipment	40	Unclassified	40
Miscellaneous plant equipment	40	Nuclear fuel	4-5

### (h) Materials and Supplies

Materials and supplies inventories are stated at the lower of cost or net realizable value using the average cost method.

### (i) Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

## (2) Summary of Significant Accounting Policies – Continued

### (j) Net Position

Equity is classified into net positions and is displayed in three components:

- *Net Investment in Capital Assets* consists of capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets.
- *Restricted* consists of net position with constraints placed on the use either by (1) external groups such as creditors, grantors, contributors, or laws or regulations of other governments or (2) law through constitutional provision or enabling legislation.
- *Unrestricted* all other net position that does not meet the definition of "restricted" or "net investment in capital assets."

### (k) Revenue Recognition

PMPA recognizes revenue on sales when the electricity is delivered to the Participants.

### (1) Operating and Non-operating Expenses

PMPA distinguishes operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services in addition to producing and delivering goods in connection with the principal ongoing operations. The principal operating revenues of PMPA are charges to Participants for sales and services. Operating expenses for PMPA include the costs of sales and services, general and administrative services, and depreciation of capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

### (2) Summary of Significant Accounting Policies – Continued

#### (m) Recent Pronouncements

The GASB issued Statement No. 87, *Leases*. This Statement establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use the underlying asset. As a result, recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources (revenues) or outflows of resources (expenses) based on the payment provisions of the contract. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources. The requirements of this Statement are effective for periods beginning after June 15, 2021, although early adoption is permitted. This Statement was adopted and had no material impact on PMPA.

The GASB issued Statement No. 91, *Conduit Debt Obligations*. This Statement provides state and local governments with a single financial reporting method for conduit debt obligations by users, ending the diversity in reporting. The requirements of this Statement are effective for periods beginning after December 15, 2021. This Statement was adopted and had no material impact on PMPA.

The GASB issued Statement No. 101, *Compensated Absences*. This Statement aligns the recognition and measurement guidance for compensated absences under a unified model and amends certain previously required disclosures. The requirements of this Statement are effective for fiscal years beginning after December 15, 2023. This Statement is not expected to have a material impact on PMPA.

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

#### (3) Power Sales Agreements

#### (a) Catawba Project Power Sales Agreements

PMPA and each Participant are parties to Catawba Project Power Sales Agreements ("Power Sales Agreements"). These Power Sales Agreements obligate PMPA to provide each Participant a share of the undivided 25% interest in Unit 2 of Catawba power output. In turn, each Participant must pay its share of the Catawba costs. Participants make their payments on a "take-or-pay" basis whether or not Catawba is operable or operating. Such payments are not subject to reduction or offset and are not conditioned upon performance by PMPA or any given Participant. The Power Sales Agreements are in effect until the earlier of August 1, 2035 or the completion of payments on the bonds and satisfaction of obligations under the Project agreements.

The Participants' shares of PMPA's Catawba output are as follows:

City of Abbeville	2.68%
City of Clinton	7.84
City of Easley	13.24
City of Gaffney	10.05
City of Greer	9.34
City of Laurens	6.49
City of Newberry	10.47
City of Rock Hill	28.04
City of Union	10.01
City of Westminster	1.84
	100.00%

#### (b) Supplemental Power Sales Agreements

PMPA and each Participant are also parties to Supplemental Power Sales Agreements ("Supplemental Agreements") under which each Participant has agreed to pay, in exchange for All Requirements Bulk Power Supply, its share of All Requirements Bulk Power Supply costs. The Supplemental Agreements terminate on December 20, 2034; however, a Participant may terminate its Supplemental Agreement with ten years advance notice. On December 31, 2018 the Participants Greer, Rock Hill and Westminster turned in the ten-year written notice to terminate their Supplemental Agreements with PMPA. The effective date of termination will be December 31, 2028. In December 2019, the remaining seven Participants turned in the ten-year written notice to terminate their Supplemental Agreements with PMPA. The effective date of terminate their Supplemental Number 2019, the remaining seven Participants turned in the ten-year written notice to terminate their Supplemental Agreements with PMPA. The effective date of terminate their Supplemental Number 2019, the remaining seven Participants turned in the ten-year written notice to terminate their Supplemental Agreements with PMPA. The effective date of terminate their Supplemental Agreements and the supplemental Agreements with PMPA.

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

### (4) **Project and Other Agreements**

Project Agreements between PMPA and Duke consist of the Purchase, Construction, and Ownership Agreement ("Sales Agreement"), the Operating and Fuel Agreement (the "Operating Agreement"), the Joint Ownership Support Agreement, (the "JOSA"), and the MREA.

### (a) Sales Agreement

The Sales Agreement generally provides for (i) the purchase of Catawba by PMPA; (ii) PMPA's contract with Duke to act as engineer contractor for PMPA for completion of construction, initial fueling, and placing Catawba into commercial operation; (iii) PMPA's payment to Duke for construction completed to the date of closing on Catawba and for construction thereafter; and (iv) PMPA's payment to Duke of certain profits and fees.

### (b) Operating Agreement

The Operating Agreement generally provides that PMPA employs Duke, as operator of Catawba, to be responsible for the (i) operation, maintenance, and fueling of Catawba; (ii) making of renewals, replacements, and capital additions to Catawba; and (iii) ultimate decommissioning of Catawba at the end of its useful life.

### (c) JOSA

The JOSA generally provides for certain joint ownership rights and obligations, including the Catawba Reliability Exchange. This agreement became effective on January 1, 2006.

### (d) MREA

The MREA generally provides for the continued exchange of energy from PMPA's entitlements to the Catawba units for energy from Duke's McGuire Nuclear Station units. This agreement became effective January 1, 2006, and can be terminated by either party by giving a three-year written notice.

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

### (4) **Project and Other Agreements – Continued**

### **Other Agreements**

### (a) Requirements Service Agreement

On December 13, 2010, PMPA entered into a Power Sales Agreement with the South Carolina Public Service Authority ("Santee Cooper"). This agreement became effective on January 1, 2014. The contract requires that PMPA purchase power from Santee Cooper, approximately 200 MW, to meet all of its load demand beyond the amounts served by Catawba, the Participants' share of electricity from SEPA ("Southeastern Power Administration") hydroelectric facilities, and load requirements met by individual generating resources owned by certain Participants. On January 28 2020, PMPA provided the required ten-year notice of termination to Santee Cooper for the Requirements Service Agreement. This cancellation is a result of all Participants providing notice to cancel their Supplemental Agreements, as discussed in Note 3.

### (b) Transmission Services

PMPA entered into a service agreement with Duke to begin taking transmission service under Duke's Open Access Transmission Tariff ("OATT") on January 1, 2006.

### (c) The Energy Authority Resource ("TEA") Management Agreement

Effective January 1, 2021, PMPA entered into a Resource Management Agreement with TEA. The Resource Management Agreement generally provides for PMPA to purchase capacity and energy from TEA to obtain backstand services for PMPA's entitlement to capacity and energy from the Catawba and McGuire Nuclear Stations. The TEA agreement has an initial term of three years and, unless terminated, shall renew on an annual basis for successive one-year terms, starting in 2024.

Notes to Financial Statements

December 31, 2022 and 2021

(Dollars in thousands)

# (5) Capital Assets

The following is a summary of capital asset activity for the years ended December 31, 2022 and 2021:

	December 31, 2022							
	Beginning							Ending
	I	Balance	Ir	icrease	D	ecrease		Balance
Utility plant being depreciated:								
Structures and improvements	\$	171,977	\$	2,439	\$	(339)	\$	174,077
Reactor plant equipment		289,491		9,515		(1,630)		297,376
Turbo generator units		76,642		663		(317)		76,988
Accessory electric equipment		65,297		1,470		(241)		66,526
Miscellaneous plant equipment		33,945		2,601		(558)		35,988
Station equipment		8,083		87		(634)		7,536
Transmission equipment		6,183		-		-		6,183
Other		19,832		30		(487)		19,375
Unclassified		29,384		14,019		(16,689)		26,714
Nuclear fuel		69,578		12,804		(9,034)		73,348
Total utility plant assets								
being depreciated		770,412		43,628		(29,929)		784,111
Less accumulated depreciation								
and amortization		(396,073)		(23,969)		14,736		(405,306)
Total utility plant assets								
being depreciated, net		374,339		19,659		(15,193)		378,805
Utility plant assets not being								
depreciated:								
Land		536		-		-		536
Construction work-in-progress		25,090		14,963		(16,365)		23,688
Total utility plant assets								
not being depreciated		25,626		14,963		(16,365)		24,224
Total capital assets, net	\$	399,965	\$	34,622	\$	(31,558)	\$	403,029

Notes to Financial Statements

December 31, 2022 and 2021

(Dollars in thousands)

## (5) Capital Assets – Continued

		December 31, 2021						
	B	eginning						Ending
	1	Balance		Increase		ecrease	Balance	
Utility plant being depreciated:								
Structures and improvements	\$	169,342	\$	3,863	\$	(1,228)	\$	171,977
Reactor plant equipment		287,802		4,863		(3,174)		289,491
Turbo generator units		75,217		2,273		(848)		76,642
Accessory electric equipment		59,504		6,672		(879)		65,297
Miscellaneous plant equipment		29,917		4,175		(147)		33,945
Station equipment		7,918		165		-		8,083
Transmission equipment		6,183		-		-		6,183
Other		19,839		12		(19)		19,832
Unclassified		36,165		15,121		(21,902)		29,384
Nuclear fuel		70,640		21,168		(22,230)		69,578
Total utility plant assets								
being depreciated		762,527		58,312		(50,427)		770,412
Less accumulated depreciation								
and amortization		(403,329)		(22,411)		29,667		(396,073)
Total utility plant assets								
being depreciated, net		359,198		35,901		(20,760)		374,339
Utility plant assets not being								
depreciated:								
Land		536		-		-		536
Construction work-in-progress		27,444		14,032		(16,386)		25,090
Total utility plant assets								
not being depreciated		27,980		14,032		(16,386)		25,626
Total capital assets, net	\$	387,178	\$	49,933	\$	(37,146)	\$	399,965

Unclassified assets are in service and being depreciated but are not yet classified to specific plant accounts.

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

#### (5) Capital Assets – Continued

Nuclear fuel represents costs associated with acquiring and processing reload fuel assemblies as well as the cost of nuclear fuel in the reactor. Nuclear fuel is amortized based on burn rates using a unit of production basis. PMPA regularly removes fully amortized nuclear fuel costs when fuel batches are replaced during core refueling operations. Fully amortized fuel costs of \$9,034 and \$22,230 were removed during 2022 and 2021, respectively.

A summary of accumulated depreciation and amortization on December 31, 2022 and 2021 is as follows:

	 2022	2021
Accumulated depreciation of electric plant in service	\$ 368,285	\$ 363,353
Accumulated amortization of nuclear fuel	 37,021	 32,720
	\$ 405,306	\$ 396,073

The depreciation charge for the year on PMPA's generation plant has been determined based on revised estimated useful lives for these assets. The remaining estimated useful lives were revised to recognize a 19-year extension of the operating license for Catawba Unit 1 and a 17-year extension of the operating license for Catawba Unit 2 through 2043, which Duke received during 2003.

#### (6) Cash and Investments

On December 31, 2022, the carrying value of deposits included in cash was \$1,151. Insured and collateralized bank deposits were \$299 on December 31, 2022.

As of December 31, 2022, PMPA had the following investments (all are listed at fair value):

Time Segmented Distribution															
Investment Type	Under 1 Year		Under 1 Year		UnderType1 Year		1-	2 Years	2-	3 Years	3-	4 Years	>	4 Years	 Total
Cash/Money Market	\$	163,184	\$	-	\$	-	\$	-	\$	-	\$ 163,184				
Government Agency		7,644		3,028		13,505		-		-	24,177				
Government Treasury		-		45,152		26,894		30,409		27,760	130,215				
Mortgage Backed Securities		-		30		101		151		18	300				
Total fair value	\$	170,828	\$	48,210	\$	40,500	\$	30,560	\$	27,778	\$ 317,876				

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

### (6) Cash and Investments – Continued

On December 31, 2021, the carrying value of deposits included in cash was \$552. Insured and collateralized bank deposits were \$783 on December 31, 2021.

As of December 31, 2021, PMPA had the following investments (all are listed at fair value):

	Time Segmented Distribution											
Investment Type		Under 1 Year		1-2 Years		2-3 Years		3-4 Years		>4 Years		Total
Cash/Money Market	\$	137,342	\$	-	\$	-	\$	-	\$	-	\$	137,342
Government Agency		2,335		29,612		3,152		14,520		-		49,619
Government Treasury		861		16,181		34,257		21,892		30,431		103,622
Mortgage Backed Securities		-		-		-		17		388		405
Total fair value	\$	140,538	\$	45,793	\$	37,409	\$	36,429	\$	30,819	\$	290,988

### Interest Rate Risk

Interest rate risk is the risk that rising interest rates will adversely affect the fair value of PMPA's investments. As outlined in PMPA's investment policy, investment maturities shall be less than 20 years and maturities shall be staggered in a way that avoids undue concentration in a specific maturity sector and provides for stability of income and reasonable liquidity.

### **Credit Risk**

PMPA's investment policy for managing credit risk is in accordance with the statutes of the State of South Carolina. The policy allows for the investment of money in the following investments:

- a) Direct obligations of, or obligations for, which the principal and interest are unconditionally guaranteed by the United States or its Agencies.
- b) Direct and general obligations, to the payment of which the full faith and credit of the issuer is pledged, of the State of South Carolina or any political subdivision thereof that at the time of investment are assigned a rating of at least "A."
- c) Certificates of deposit issued by any bank, trust company, or national banking association whose principal place of business is in the State of South Carolina or that is a member of the Federal Reserve System and authorized to do business in any state of the United States.

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

### (6) Cash and Investments – Continued

- d) Bills of exchange or time drafts drawn on and accepted by a domestic or foreign bank, otherwise known as Bankers' Acceptances, which are eligible for purchase by the Federal Reserve, the short-term commercial paper of which is rated in the highest category.
- e) Investments in repurchase agreements and reverse repurchase agreements with any bank, savings and loan association, credit union, or trust company organized under the laws of any state of the United States or any national banking association or government bond dealer reporting to, trading with and recognized as a primary dealer by the Federal Reserve Bank of New York, which are collateralized by securities as set forth in (a) and (b).

PMPA's investments in U.S. Agencies and U.S. Government Sponsored Enterprises including Federal Home Loan Bank System, Federal National Mortgage Association, and Federal Home Loan Mortgage Corporation, are rated AA+ by Standard and Poor's and Aaa by Moody's Investors Service. U.S. Treasury and Agency Mortgage-Backed Securities are unrated but are considered equivalent to an AAA rating.

The following represents securities in an unrealized loss position as of December 31, 2022:

		С	ontin									
	Less than 12 months				12 months or more				Total			
Investment Type	Fai	Unrealized ir Value Loss Fair Value		Ur	realized Loss	Fa	ir Value	Unrealized Loss				
Government Agency	\$	12,547	\$	(530)	\$	91,104	\$	(7,779)	\$	103,651	\$	(8,309)
Total	\$	12,547	\$	(530)	\$	91,104	\$	(7,779)	\$	103,651	\$	(8,309)

The following represents securities in an unrealized loss position as of December 31, 2021:

		Continuous Unrealized Loss Position										
	Less than 12 months				12 months or more				Total			
		Unrealized Unrealized						Un	realized			
Investment Type	Fai	r Value	ie Loss		Fai	Fair Value		Loss		Fair Value		Loss
Government Agency	\$	38,575	\$	(496)	\$	10,049	\$	(251)	\$	48,624	\$	(747)
Total	\$	38,575	\$	(496)	\$	10,049	\$	(251)	\$	48,624	\$	(747)

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

### (6) Cash and Investments – Continued

### **Custodial Credit Risk**

PMPA's policy for managing custodial risk requires all securities owned by PMPA to be held in safekeeping by a third-party custodian bank in PMPA's name under a custody agreement. For an investment, custodial credit risk is the risk that in the event of the failure of the counterparty, PMPA will not be able to recover the value of its investments or collateral that is in the possession of an outside party.

### **Concentration of Credit Risk**

The investment policy of PMPA permits a maximum portfolio percentage of 100% for U.S. Treasuries, Federal Agencies and U.S. Government-sponsored enterprises and permits a maximum portfolio percentage of 50% in any one federal agency or government-sponsored enterprise.

As of December 31, 2022, 7.6% of the portfolio was held in Federal Agency bonds and 0.1% was held in Agency Mortgage-Backed Securities. As of December 31, 2021, 17.1% of the portfolio was held in Federal Agency bonds and 0.1% was held in Agency Mortgage-Backed Securities.

A reconciliation of cash and investments for PMPA on December 31, 2022 and 2021 shown in the statements of net position is as follows:

	 2022	 2021
Fair value of investments	\$ 317,876	\$ 290,988
Accrued interest receivable	 602	288
Total	\$ 318,478	\$ 291,276
Statements of Net Position:		
Marketable debt securities	\$ 78,355	\$ 83,308
Restricted for debt services	126,691	97,500
Restricted for decommissioning	111,832	108,868
Restricted for other	 1,600	 1,600
Total investments, including accrued interest receivable	\$ 318,478	\$ 291,276

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

### (7) Restricted Assets

The General Bond Resolution and Project agreements restrict the use of bond proceeds, PMPA revenues, and PMPA funds on hand. Certain restrictions define the order in which available funds may be used to pay costs; other restrictions require minimum balances or accumulation of balances for specific purposes. On December 31, 2022 and 2021, management believes PMPA was in compliance with all such restrictions and held the following restricted assets:

	2022					2021			
			Α	mortized			Α	mortized	
	Fa	ir Value		Cost	Fa	ir Value		Cost	
Debt services - bond principal	\$	65,388	\$	65,388	\$	26,126	\$	26,126	
Debt services - bond fixed rate interest		11,812		11,812		19,064		19,064	
Debt services - bond retirement principal	-			-		187		187	
Debt service reserve	44,724			47,671		47,356		47,670	
Reserve and contingency	4,767			4,767		4,767		4,767	
Decommissioning		111,832		118,730		108,868		109,285	
Special reserve		1,600	1,600		1,600 1,6			1,600	
	\$	240,123	\$	249,968	\$	207,968	\$	208,699	
Funds are comprised of:									
Marketable debt securities	\$	239,521	\$	249,366	\$	207,680	\$	208,411	
Accrued interest receivable	602		602		2 288		82		
	\$	240,123	\$	249,968	\$	207,968	\$	208,699	

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

### (8) Net Costs Recoverable from Future Participant Billings

As described in Notes 1 and 2, rates charged to Participants are structured to systematically provide for debt requirements and operating costs of PMPA. The expenses and revenues excluded from rates are capitalized and expensed in such periods as they are intended to be included in rates.

Net costs recoverable from future Participant billings on December 31, 2022 and 2021 are as follows:

	2022			2021	 Change
		(Cumulat	ive tota	lls)	
Items to be recovered in future					
Participant billings:					
Interest expense	\$	494,783	\$	480,102	\$ 14,681
Depreciation expense		408,061		404,286	3,775
Amortization of redemption and defeasance losses		361,891		351,678	10,213
Debt issuance costs and amortization of bond discounts					
and premiums		63,975		79,930	(15,955)
Nuclear fuel expenses		873		873	-
Letter of credit fees		5,649		5,649	-
Other		2,390		2,390	 -
		1,337,622		1,324,908	12,714
Items reducing future Participant billings:					
Investment income		(76,528)		(76,528)	-
Reserve and contingency deposits		(117,840)		(117,840)	 -
		(194,368)		(194,368)	 -
Revenues (expenses) recognized:					
Interest, depreciation, amortization expense					
included in Participant billings for					
debt principal payments		(847,444)		(796,154)	(51,290)
Capital appreciation bond interest deposits		(25,426)		(11,496)	(13,930)
Reserve and contingency revenue applied to expenses		56,231		51,780	 4,451
Total		(816,639)		(755,870)	 (60,769)
Net costs recoverable from future					
Participant billings	\$	326,615	\$	374,670	\$ (48,055)

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

### (8) Net Costs Recoverable from Future Participant Billings – Continued

The following expenses will be recognized in future periods when rates charged to Participants produce revenues sufficient to retire the debt that funded those costs:

- Interest expense on PMPA's bonds and variable rate demand obligations along with an associated letter of credit, banking, and remarketing fees (except interest and fees related to capital appreciation bonds) paid from bond proceeds during a defined "Construction Period" (net of income earned on the temporary investment of those bond proceeds);
- Interest expense on capital appreciation bonds accrued but not paid until maturity;
- Debt issuance expenses, amortization of bond discounts and premiums, defeasance losses, redemption losses, and organization costs paid from or included in bond proceeds;
- Depreciation on utility plant constructed with bond proceeds and amortization of nuclear fuel acquired with bond proceeds; and
- Certain other project costs paid from bond proceeds.

Additionally, PMPA's General Bond Resolution requires Participant revenues to be established at levels sufficient to provide specified deposits into a Reserve and Contingency fund. Monies in that fund are used to construct or acquire utility plant assets. The recognition of such revenues is considered unearned until the depreciation is recorded on the assets constructed or acquired with those monies.

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

## (9) Long-Term Liabilities

Long-term liabilities on December 31, 2022 and 2021 consist of the following:

	 2021 Additions		Reductions		 2022		Due within one year	
1993 Refunding Series Electric Revenue Bonds, payable from 2022								
to 2025 with interest at 5.38%	\$ 32,590	\$	-	\$	405	\$ 32,185	\$	425
2004A Capital Appreciation Electric Revenue Bonds, payable annually from 2022 to 2024, 2026 to 2032 and 2034 with interest ranging from 5 280( to 5 800(	102 670				7 570	05 001		8 220
Irom 5.58% to 5.80%	102,670		-		7,579	95,091		8,230
2009B Electric Revenue Bonds (Build America Bonds), payable 2031 to 2034 with interest at 7.036% (35% interest federally refunded vielding net interest at								
4.57%)	26,490		-		-	26,490		-
2012C Refunding Series Electric Revenue Bonds, payable 2023 with interest at 4.25%	4,485		-		-	4,485		4,485
2015A Series Electric Revenue Bonds, payable annually from 2022 to 2034 with interest	51.025				1 475	50.470		5 1 ( 5
ranging from 3.50% to 5.00%	51,935		-		1,475	50,460		5,165
2017A Series Electric Revenue Bonds, payable annually from 2024 to 2025 with interest								
at 5.00%	9,565		-		-	9,565		-
2017B Series Electric Revenue Bonds, payable annually from 2024 to 2025 with interest								
at 5.00%	22,625		-		-	22,625		-

Notes to Financial Statements

December 31, 2022 and 2021

(Dollars in thousands)

# (9) Long-Term Liabilities – Continued

	 2021	Addi	tions	Rec	luctions		2022	Du 0	e within ne year
2021A Refunding Series Electric Revenue Bonds, payable annually from 2022 to 2025 with interest ranging from 3.00% to 4.00%	\$ \$ 55,370		\$-		\$ 16,500		38,870	\$	10,975
2021B Refunding Series Electric Revenue Bonds, payable annually from 2027 to 2034 with interest ranging from 4.00% to 5.00%	97,420		-		-		97,420		-
2021C Refunding Series Electric Revenue Bonds, payable annually from 2027 to 2034 with interest at 5.00%	90,520		9		90,520	-			
2021D Refunding Series Electric Revenue Bonds, payable annually from 2026 to 2034 with interest at 4.00%	91,410		-		-		91,410		-
2021E Refunding Series Electric Revenue Bonds, payable annually from 2023 to 2025 with interest at 5.00%	31,165		_		_		31,165		22,010
Total bonds payable	616,245 - 25,959 590		590,286		51,290				
Less unamortized discount Plus unamortized premium	 (186) 64,730	-		(52) 10,639		(134) 54,091		4)	
Bonds payable, net	\$ \$ 680,789 \$		-	\$	\$ 36,546 \$ 644,2		644,243	3 \$ 51,29	

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

## (9) Long-Term Liabilities – Continued

Long-term liabilities on December 31, 2021 and 2020 consist of the following:

	 2020	Addi	tions	Ree	ductions	2021		Due within one year	
1001 Definiding Series Electric									
Revenue Bonds	\$ 27,240	\$	-	\$	27,240	\$	-	\$	-
1993 Refunding Series Electric Revenue									
Bonds, payable from 2021									
to 2025 with interest at 5.38%	32,975		-		385		32,590	403	5
2004A Capital Appreciation Electric									
Revenue Bonds, payable annually									
from 2022 to 2024, 2026 to									
2032 and 2034 with interest ranging									
from 5.38% to 5.80%	102,670		-		-		102,670	7,579	9
2008E Refunding Series Electric									
Revenue Bonds	60,000		-		60,000		-		-
2009B Electric Revenue Bonds (Build America Bonds), payable									
2031 to 2034 with interest at 7.036% (35% interest federally									
refunded yielding net interest at									
4.57%)	26,490		-		-		26,490		-
2010A-2 Refunding Series Electric									
Revenue Bonds	40,660		-		40,660		-		-
2010A-3 Refunding Series Electric									
Revenue Bonds	18,435		-		18,435		-		-
2010A-4 Refunding Series Electric									
Revenue Bonds	23,385		-		23,385		-		-
2010A-5 Refunding Series Electric									
Revenue Bonds	15,165		-		15,165		-		-

Notes to Financial Statements

December 31, 2022 and 2021

(Dollars in thousands)

# (9) Long-Term Liabilities – Continued

	 2020	Addi	tions	Rec	luctions	202	1	Due wi one y	ithin ear
2008C Refunding Conv Series Electric Revenue Bonds	\$ \$ 90,000		-	\$ 90,000		\$	-	\$	-
2008D Refunding Conv Series Electric Revenue Bonds	30,000		-		30,000		-		-
2011B Refunding Series Electric Revenue Bonds	53,950		-		53,950		-		-
2011C Refunding Series Electric Revenue Bonds	53,950		-		53,950		-		-
2012A Refunding Series Electric Revenue Bonds	13,050		-		13,050		-		-
2012B Refunding Series Electric Revenue Bonds	19,970		-		19,970		-		-
2012C Refunding Series Electric Revenue Bonds, payable 2023 with interest at 4.25%	4,485		-		-		4,485		-
2015A Series Electric Revenue Bonds, payable annually from 2022 to 2034 with interest ranging from 3.50% to 5.00%	51,935		_		-	4	51,935		1,475
2017A Series Electric Revenue Bonds, payable annually from 2024 to 2025 with interest									
at 5.00%	9,565		-		-		9,565		-
2017B Series Electric Revenue Bonds, payable annually from 2024 to 2025 with interest									
at 5.00%	22,625		-		-	2	2,625		-

Notes to Financial Statements

December 31, 2022 and 2021

(Dollars in thousands)

# (9) Long-Term Liabilities – Continued

	2020 Additions Reductions		ductions	2021		Due within one year			
2021A Refunding Series Electric	 								
Revenue Bonds, payable annually from									
2022 to 2025 with interest ranging									
from 3.00% to 4.00%	\$ -	\$	55,370	\$	-	\$	55,370	\$	16,500
2021B Refunding Series Electric									
Revenue Bonds, payable annually from									
2027 to 2034 with interest ranging									
from 4.00% to 5.00%	-		97,420		-		97,420		-
2021C Refunding Series Electric									
Revenue Bonds, payable annually from									
2027 to 2034 with interest at 5.00%	-		90,520		-		90,520		-
2021D Refunding Series Electric									
Revenue Bonds, payable annually from									
2026 to 2034 with interest at 4.00%	-		91,410		-		91,410		-
2021E Refunding Series Electric									
Revenue Bonds, payable annually from									
2023 to 2025 with interest at 5.00%	 -		31,165		-		31,165		-
Total bonds payable	 696,550		365,885		446,190		616,245		25,959
Less unamortized discount	(678)		-		(492)		(186)		-
Plus unamortized premium	9,605		60,598		5,473		64,730		
Bonds payable, net	\$ 705,477	\$	426,483	\$	451,171	\$	680,789	\$	25,959

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

### (9) Long-Term Liabilities – Continued

The bonds are special obligations of PMPA and are secured by future revenue and pledged monies and securities as provided by the Bond Resolution. Proceeds from these bonds provided financing for the construction of Catawba. The bonds are payable solely from electrical net revenues and are payable through 2034.

PMPA has advanced refunded certain bond issues as described in Note 10. PMPA is in compliance with its covenants under the Bond Resolution.

The following is a summary of total debt service deposit requirements for bonds outstanding on December 31, 2022:

Year	P	Principal		nterest	Total		
2023	\$	51,290	\$	36,857	\$	88,147	
2024		52,086		33,334		85,420	
2025		66,565		18,855		85,420	
2026		27,065		56,245		83,310	
2027		37,397		46,276		83,673	
2028-2032		200,345		217,938		418,283	
2033-2034		155,538		11,722		167,260	
	\$	590,286	\$	421,227	\$	1,011,513	

All principal payments are due on January 1 of the year after the deposit requirement.
Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

### (10) Refunding and Defeasance of Debt

In June 2021, PMPA issued the 2021A Series Electric Revenue Bonds totaling \$55,370 plus other sources of funds, including premiums, totaling \$3,899 and an equity contribution of \$28,000, to refund all remaining outstanding bonds of the 2010A-2, 2010A-3, 2010A-4 and 2010A-5 series in the amount of \$35,815, \$18,435, \$23,385, and \$13,665, respectively. The issuance resulted in an economic gain of \$6,037 and cash flow savings of \$10,858.

In October 2021, PMPA issued the 2021BC Series Electric Revenue Bonds totaling \$187,940 plus other sources of funds, including premiums, totaling \$39,741 and an equity contribution of \$191, to refund all remaining outstanding bonds of the 2008C, 2008D, 2011B, and 2011C series in the amount of \$90,000, \$30,000, \$53,950, and \$53,950, respectively. The issuance resulted in an economic gain of \$44,578 and cash flow savings of \$46,732.

In October 2021, PMPA issued the 2021DE Series Electric Revenue Bonds totaling \$122,575 plus other sources of funds, including premiums, totaling \$18,784 and an equity contribution of \$4,443, to refund all remaining outstanding bonds of the 2012A, 2012B and 2008E series in the amount of \$13,050, \$19,970, and \$60,000 respectively; and terminate the floating-to-fixed rate, step-coupon swap in the amount of \$50,000. The issuance resulted in an economic gain of \$18,133 and cash flow savings of \$20,878.

In prior years, PMPA defeased in-substance certain Electric Revenue Bonds by placing the proceeds of new bonds in an irrevocable trust fund to provide for future debt service payments on the old debt. Accordingly, the trust account asset and the liability for the defeased bonds are not included in the accompanying financial statements. On December 31, 2022 and 2021, \$25,030 and \$25,345 of the bonds are considered defeased in-substance, respectively.

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

### (11) Reserve for Decommissioning

The owners of Catawba, including PMPA, have an obligation to decommission the station after its operating licenses expire. Management believes PMPA complies with the Nuclear Regulatory Commission requirements for funding future decommissioning costs. Since 1985, PMPA has been making regular deposits to segregated decommissioning accounts. Deposits pertaining to contaminated portions of the Project are held by a trustee. As of December 31, 2022 and 2021, the fair value of PMPA's assets that are legally restricted for settling the decommissioning obligation is \$111,832 and \$108,868, respectively.

Planned deposits into the decommissioning fund, together with interest earnings, are expected to be sufficient to pay PMPA's share of the projected cost of decommissioning the entire Catawba Station.

During 2003, Duke received a 19-year extension of the operating license for Catawba Unit 1 and a 17-year extension of the operating license for Catawba Unit 2 through 2043. In connection with the license extensions, PMPA received an updated decommissioning study in 2003 and has subsequently received updated decommissioning studies in December 2008, 2013 and 2018. The latest study, as of December 2018, estimates total decommissioning costs of \$1,802,550 in 2018 dollars and presumes the Catawba Nuclear Station will be decommissioned as soon as possible following the expiration of its operating licenses in 2043. PMPA used the estimates from this study to determine its decommissioning liability in accordance with U.S. GAAP accounting for asset retirement obligations.

Notes to Financial Statements

December 31, 2022 and 2021

(Dollars in thousands)

### (11) Reserve for Decommissioning – Continued

PMPA used the following assumptions in determining its reserve for decommissioning:

		 2021		
Period in which decommissioning liability was incurred		1985	1985	
Agency's share of decommissioning costs per study				
(in 2018 dollars)	\$	225,319	\$ 225,319	
Estimation of inflation		2.4%	2.4%	
Credit adjusted risk-free interest rate		5.0%	5.0%	
Estimated life of corresponding asset		25 years	25 years	

The following is a roll forward of the reserve for decommissioning for the years ended December 31, 2022 and 2021:

	 2022			
Reserve for decommissioning at January 1 Accretion expense (decommissioning)	\$ 137,032	\$	130,409	
Accretion expense (decommissioning)	6,960		6,623	
Increase in decommissioning liability	-		-	
Reserve for decommissioning at December 31	\$ 143,992	\$	137,032	

### (12) Employee Benefit Plans

PMPA maintains a defined contribution money purchase plan in compliance with Section 401(a) of the Internal Revenue Code ("IRC"). On behalf of all full-time employees, PMPA contributes 10% of the base salary to the money purchase plan. PMPA contributions totaled \$165 and \$182 in 2022 and 2021, respectively. Employee contributions may also be made to the Plan, providing combined employer and employee annual contributions do not exceed 25% of eligible employee compensation, or \$30, whichever is less.

PMPA also maintains a deferred compensation plan under Section 457 of the IRC. In the past, on behalf of selected employees, PMPA has contributed to the deferred compensation plan; however, no such contribution was made in 2022 or 2021. Employee contributions may also be made to the deferred compensation plan providing combined employer and employee annual contributions do not exceed certain limitations.

Assets of the money purchase and deferred compensation plans are held by Empower Retirement, administrator and trustee for PMPA, for the exclusive benefit of the employees.

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

### (13) Other Postemployment Benefits ("OPEB")

PMPA's Postemployment Benefit Plan (the "Plan") provides other retiree medical benefits to qualified retirees. To qualify, a retiree must be 59 ½ years of age, have ten years of service and be an active employee of PMPA at the time of retirement. Medical benefits to qualified retirees are as follows: PMPA will maintain and pay up to 100% of premiums for group medical and dental insurance for each eligible retiree and up to 60% of premiums for the retiree's dependent spouse and children for the retiree's lifetime. After qualifying for Medicare, the covered individual will be covered under a supplemental insurance plan secondary to Medicare.

Membership in the healthcare benefit plan consisted of the following on December 31:

	2022	2021
Retirees	4	4
Active Employees	14	13
Total	18	17

Funding Policy

The required contribution is based on pay-as-you-go financing requirements.

Actuarial Assumptions and Other Inputs

The following actuarial assumptions and other inputs were used in calculating the OPEB liability for the years ended December 31, 2022 and 2021:

Valuation Date	December 31, 2021
Merthods and Assumptions	
Actuarial cost method	Entry age normal
Discout rate	2.25% per annum
Salary increases	2.5% per annum
Mortality rates	1994 Group Annuity Mortality Static Table
Health care trend rates	Medical: 6% grading to 5.5% over 2 years and following the Getzen model thereafter
	to an ultimate rate of 4.04% by 2075
	Vision: 5.0% per annum
Participaton rates	100% of active participants are assumed to elect coverage into retirement
	50% of active participants are assumed to cover a spouse into retirement

Notes to Financial Statements

December 31, 2022 and 2021

(Dollars in thousands)

### (13) Other Postemployment Benefits ("OPEB") – Continued

The following is a schedule of changes in the OPEB liability for the years ended December 31, 2022 and 2021:

	2	2021		
OPEB liability at January 1	\$	1,983	\$	1,607
Service cost		115		110
Interest		46		38
Experience losses (gains)		-		(154)
Changes of assumptions		-		402
Benefit paids		(21)		(20)
OPEB liability at December 31	\$	2,123	\$	1,983

The following table presents PMPA's total OPEB liability calculated using the medical trend rate of 6% to 5.5% over 2 years and following the Getzen model thereafter, as well as the total OPEB liability if it was calculated using a medical trend rate that is one percent lower or one percent higher. The table also presents PMPA's total OPEB liability calculated using the discount rate of 2.25%, as well as the total OPEB liability if it was calculated using a discount rate that is one percent lower or one percent higher.

	Medical Trend Rate										
	1% 1 (5% over 2 foll Getze the	Decrease to 4.5%) years and lowing en model creafer	C (6% over 2 fol Getz th	urrent to 5.5%) years and llowing ten model ereafer	1% Increase (7% to 6.5%) over 2 years and following Getzen model thereafer						
Changes to Net OPEB Liability											
December 31, 2022	\$	1,695	\$	2,123	\$	2,690					
	1% I (1.	Decrease 25% )	Disc C (2	ount Rate urrent .25% )	1% (3	Increase .25%)					
Changes to Net OPEB Liability											
December 31, 2022	\$	2,615	\$	2,123	\$	1,740					

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

#### (13) Other Postemployment Benefits ("OPEB") – Continued

OPEB Expense and Deferred Outflows of Resources Related to OPEB

Experience gains or losses as well as changes in actuarial assumptions are recognized over the average working lifetime of all participants, which is 8.1 years for both the years ended December 31, 2022 and 2021. The following table summarizes OPEB expense for the years ended December 31, 2022 and 2021:

	20	)22	2	021
Service cost	\$	115		110
Interest		47		38
Experience losses (gains)		-		(19)
Changes of assumptions		-		49
Amortization of deferrals		112		82
Total OPEB expense	\$	274	\$	260

On December 31, 2022 and 2021, the deferred outflows of resources related to OPEB were \$463 and \$576, respectively. The deferred outflows of resources related to OPEB will be recognized in pension expense as follows:

Year ending December 31,	
2023	\$ 112
2024	112
2025	112
2026	61
2027	31
Therefeafter	35
	\$ 463

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

### (14) Disclosures Regarding Fair Value of Financial Instruments

U.S. GAAP requires disclosure of fair value information about financial instruments, whether or not recognized in the balance sheet, for which it is practicable to estimate fair value. Fair value estimates are made as of a specific point in time based on the characteristics of the financial instruments and the relevant market information. Where available, quoted market prices are used. In other cases, fair values are based on estimates using present value or other valuation techniques. These techniques involve uncertainties and are significantly affected by the assumptions used and the judgments made regarding risk characteristics of various financial instruments, discount rates, prepayments, estimates of future cash flows, future expected loss experience and other factors. Changes in assumptions could significantly affect these estimates. Derived fair value estimates cannot be substantiated by comparison to independent markets and, in many cases, may or may not be realized in an immediate sale of the instrument.

Under U.S. GAAP, fair value estimates are based on existing financial instruments without attempting to estimate the value of anticipated future business and the value of the assets and liabilities that are not financial instruments. Accordingly, the aggregate fair value amounts presented do not represent the underlying value of PMPA.

The following describes the methods and assumptions used by PMPA in determining carrying value and estimated fair value of financial instruments:

### (a) Cash

Carrying value equals estimated fair value.

### (b) Marketable Debt Securities

Marketable debt securities are reported at fair value and categorized within the fair value hierarchy established under U.S. GAAP. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. Gains or losses that result from market fluctuation are reported in the current period. As of December 31, 2022 and 2021, the Agency's investments included money market investments of \$163,184 and \$137,342, respectively, which were valued at amortized cost which approximates fair value and marketable debt securities of \$154,692 and \$153,646, respectively, which were valued using significant other observable inputs.

### (c) Participant Accounts Receivable and Other Accounts Receivable

Carrying amount approximates fair value due to the short-term nature of these instruments.

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

#### (14) Disclosures Regarding Fair Value of Financial Instruments – Continued

### (d) Long-Term Debt

Carrying value of long-term debt coupon securities includes par, less unaccreted discounts, plus unamortized premiums, plus accrued interest payable. Carrying value also includes capital appreciation term bonds valued at the original price plus accrued interest payable.

The estimated fair value of long-term debt securities is derived from quoted market prices and includes accrued interest.

The estimated fair values of PMPA's long-term debt with carrying amount on December 31, 2022 and 2021 are as follows:

		2022					2021			
	С	Carrying I Amount		<b>Estimated Fair</b>		Carrying		mated Fair		
	A			Value	Amount		Value			
1993 Electric Revenue Refunding Bonds	\$	32,955	\$	34,549	\$	33,323	\$	38,041		
2004A-2 Electric Revenue Refunding Bonds		267,932		297,027		272,327		339,648		
2009B Build America Bonds		27,422		31,159		27,422		38,080		
2012C Electric Revenue Refunding Bonds		4,580		4,580		4,580		4,667		
2015A Electric Revenue Refunding Bonds		53,687		53,307		55,882		58,342		
2017A Electric Revenue Refunding Bonds		10,073		10,030		10,302		10,690		
2017B Electric Revenue Refunding Bonds		23,946		23,709		24,607		25,200		
2021A Electric Revenue Refunding Bonds		41,219		40,059		59,338		59,212		
2021B Electric Revenue Refunding Bonds		119,163		107,241		120,328		120,677		
2021C Electric Revenue Refunding Bonds		107,640		99,771		108,141		108,262		
2021D Electric Revenue Refunding Bonds		107,552		97,074		108,081		109,250		
2021E Electric Revenue Refunding Bonds		32,686	32,686		33,641		33,62			
	\$	828,855	\$	830,780	\$	857,972	\$	945,690		

The carrying amount of the bond is net of all discounts, premiums, and accrued interest on capital appreciation bonds.

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

### (15) Nuclear Insurance and Other Risk Management

*Nuclear Insurance*. Duke owns and operates McGuire with two nuclear reactors. In addition, Duke operates and has a partial ownership interest in Catawba with two nuclear reactors. Nuclear insurance coverage is maintained in three program areas: nuclear liability coverage; property, decontamination and premature decommissioning coverage; and business interruption and/or extra expense coverage. The other joint owners of Catawba reimburse Duke for certain expenses associated with nuclear insurance premiums per the Catawba joint owner agreements. The Price-Anderson Act requires Duke to provide for public nuclear liability claims resulting from nuclear incidents to the maximum total financial protection liability. The maximum total financial protection liability, which currently is \$13,500,000, is subject to change every five years for inflation and for the number of licensed reactors.

*Primary Liability Insurance*. Duke has purchased the maximum reasonably available private primary nuclear liability insurance as required by law, which currently is \$450,000.

*Excess Liability.* This policy currently provides \$13,100,000 of coverage through the Price-Anderson Act's mandatory industry-wide excess secondary financial protection program of risk pooling. The \$13,100,000 of coverage is the sum of the current potential cumulative retrospective premium assessments of \$138,000 per licensed commercial nuclear reactor. This \$13,100,000 would be increased by \$138,000 as each additional commercial nuclear reactor is licensed or reduced by \$138,000 for nuclear reactors that are no longer operational and may be exempted from the risk pooling insurance program. Under this program, licensees could be assessed retrospective premiums to compensate for public nuclear liability damages in the event of a nuclear incident at any licensed facility in the U.S. If such an incident should occur and public nuclear liability damages exceed primary liability insurance; licensees may be assessed up to \$138,000 for each of their licensed reactors, payable at a rate not to exceed \$20,500 a year per licensed reactor for each incident. The \$138,000 amount is subject to indexing for inflation and may be subject to state premium taxes.

Duke is a member of Nuclear Electric Insurance Limited ("NEIL"), which provides property and accidental outage insurance coverage for Duke's nuclear facilities under the following two policy programs:

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

### (15) Nuclear Insurance and Other Risk Management – Continued

Accidental Property Insurance. This policy provides excess property, decontamination, and decommissioning liability insurance in the following amounts: \$1,500,000 for Catawba and McGuire. Catawba has a dedicated \$1,250,000 insurance limit above this excess. McGuire also shares an additional \$1,250,000 insurance limit with another nuclear station above this excess. This shared limit is not subject to reinstatement in the event of a loss. NEIL sub-limits property damage losses to \$750,000 for non-nuclear accidental property damage.

Accidental Outage Insurance. This policy provides business interruption and/or extra expense coverage resulting from an accidental property damage outage of a nuclear unit. Coverage is provided on a weekly limit basis after a significant waiting period deductible. Coverage amounts per unit decline if more than one unit is involved in an accidental outage. Initial coverage begins after a 12-week deductible period for Catawba and a 26-week deductible period for McGuire and continues at 100% for 52 weeks and 80% for the next 110 weeks. The McGuire and Catawba policy limit is \$490,000. Effective April 1, 2013, NEIL sub-limits the accidental outage recovery to approximately \$328,000 for non-nuclear accidental property damage.

Losses resulting from non-certified acts of terrorism are covered as a common occurrence, such that if non-certified terrorist acts occur against one or more commercial nuclear power plants insured by NEIL within a 12-month period, they would be treated as one event and the owners of the plants, where the acts occurred, would share one full limit of liability (currently \$3,200,000). Effective April 1, 2013, NEIL sub-limits the total aggregate for all of their policies for non-nuclear terrorist events to approximately \$1,800,000.

In the event of large industry losses, NEIL's board of directors may assess Duke's retroactive premiums of amounts up to ten times its annual premiums for up to six years after a loss. NEIL has never exercised this assessment. The maximum aggregate annual retrospective premium obligations for Duke are \$140,000.

Pursuant to regulations of the Nuclear Regulatory Commission, each company's property damage insurance policies provide that all proceeds from such insurance be applied, first, to place the plant in a safe and stable condition after a qualifying accident and second, to decontaminate before any proceeds can be used for decommissioning, plant repair or restoration.

In the event of a loss, the amount of insurance available might not be adequate to cover property damage and other expenses incurred. Uninsured losses and other expenses, to the extent not recovered by other sources, could have a material adverse effect on Duke's results of operations, cash flows or financial position.

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

#### (15) Nuclear Insurance and Other Risk Management – Continued

The maximum assessment amounts include 100% of Duke's potential obligation to NEIL for Catawba. However, the other joint owners of Catawba are obligated to assume their pro rata share of liability for retrospective premiums and other premium assessments resulting from the Price-Anderson Act's excess secondary financial protection program of risk pooling or the NEIL policies.

PMPA also carries building and personal property insurance for the administrative offices, health insurance for all active employees, and workers' compensation insurance in accordance with statutory requirements. The policy limit for the building and personal property insurance is \$6,581.

#### (16) Derivative Financial Instrument

As part of the October 2021 debt restructuring, PMPA terminated the floating-to-fixed rate stepcoupon swap ("swap") originally entered into as part of the 2004 debt restructuring. In order to terminate the swap, PMPA paid a swap termination fee of \$50,000 in October 2021.

The swap was originally designed to produce level debt service by deferring payments until later years. PMPA realized the following net benefits (expenses) from the swap prior to the October 2021 settlement:

Not Bonofit (Exponse)

Period Ended	Vari Pavme	able Rate	I Pay	Fixed Rate ments Made	]	From Interest Rate Swan
December 31, 2004	<u> </u>	361	\$	695	\$	(334)
December 31, 2005		1,468		1,800		(332)
December 31, 2006		2,067		1,800		267
December 31, 2007		2,175		1,800		375
December 31, 2008		1,348		1,800		(452)
December 31, 2009		248		1,800		(1,552)
December 31, 2010		158		1,800		(1,642)
December 31, 2011		119		1,800		(1,681)
December 31, 2012		98		1,800		(1,702)
December 31, 2013		55		1,800		(1,745)
December 31, 2014		31		1,800		(1,769)
December 31, 2015		20		1,800		(1,780)
December 31, 2016		246		1,800		(1,554)
December 31, 2017		503		1,800		(1,297)
December 31, 2018		848		1,800		(952)
December 31, 2019		876		1,800		(924)
December 31, 2020		338		1,800		(1,462)
December 31, 2021		19		1,409		(1,390)
Total realized	\$	10,978	\$	30,904	\$	(19,926)

Notes to Financial Statements December 31, 2022 and 2021 (Dollars in thousands)

### (17) Commitments and Contingencies

The Agency is subject to lawsuits, claims, investigations and proceedings, which arise in the ordinary course of business. If management believes that a loss arising from these matters is probable and can be reasonably estimated, a loss is recorded. As additional information becomes available, these matters are assessed and the estimates are revised, if necessary. Based on the currently available information, management believes the ultimate outcome of these matters, individually and in the aggregate, will not have a material, adverse effect on the Agency's business, financial condition, or results of operation.

PMPA has been named as a defendant in a lawsuit by certain PMPA Participants with respect to billing practices and the allocation of charges to the PMPA Participants. The lawsuit seeks, among other things, a declaratory judgment to affirm past and future billing and rate calculation practices. The impact of this lawsuit, if any, on the PMPA financial statements is currently unknown and no provision for this litigation has been made in the accompanying financial statements.

#### (18) Subsequent Events

The Agency has evaluated subsequent events through February 28, 2023 and has determined there are no events that have occurred that would require adjustments to our disclosures.

SUPPLEMENTARY INFORMATION

Schedule of Revenues and Expenses Actual and Budget

### Per the Bond Resolution and Other Agreements

Year Ended December 31, 2022

(Dollars in thousands)

	Ac Rew a Exp	tual enues nd enses	Bi Ro Ev	udgeted evenues and xpenses	(	Actual Over Under) Budget
Revenue:						
Sales of electricity to Participants	\$	215,668	\$	230,048	\$	(14,380)
Sales of electricity to Duke		10,975		11,498		(523)
Sales of electricity to Others		10,654		2,792		7,862
Interest income		2,890		1,561		1,329
Other		1,532		1,412		120
Total Revenue	\$	241,719	\$	247,311	\$	(5,592)
Expenses:						
Catawba operating expenses:						
Operation and maintenance	\$	24,987	\$	23,782	\$	1,205
Nuclear fuel amortization		13,335		13,717		(382)
Purchased power-Duke		11,763		12,027		(264)
Payments in lieu of taxes		8,005		8,247		(242)
Purchased power:						
Supplemental Suppliers		30,566		24,133		6,433
Participants		11,948		12,727		(779)
Other		2,521		2,134		387
Transmission Services		8,295		9,428		(1,133)
Distribution services		590		593		(3)
Administrative and general:						
Agency		5,694		6,491		(797)
Duke		10,302		11,076		(774)
Other		6,641		6,186		455
Special fund deposits (withdrawals):						
Bond fund:						
Deposits from revenues		87,962		88,762		(800)
Decommissioning fund:						
Deposits from revenue		8,652		9,505		(853)
Interest income(1)		793		78		715
Revenue fund:						
Working capital		(4,563)		613		(5,176)
Fuel		(12,804)		(13,626)		822
Plant additions:						
Generation Plant		14,822		15,778		(956)
General plant		30		51		(21)
Transmission plant		35		1,750		(1,715)
LDMSS/SCADA		(659)		233		(892)
Fuel acquisitions		12,804		13,626		(822)
Total Expenses	\$	241,719	\$	247,311	\$	(5,592)

(1) Included in "Revenue: Interest Income."

Schedule of Revenues and Expenses

Per the Bond Resolution and Other Agreements

Year Ended December 31, 2022

(Dollars in thousands)

									FUNDS						
										R	eserve			Supp	lemental
		Revenue		0	perating		Bo	nd		Con	tingency	Dec	ommission	P	ower
		W	/orking Capital	А	Fuel .ccount	F I Re	rincipal nterest etirement	R	eserve						
Balances at beginning of year:															
Assets		\$	111,219	\$	7,354	\$	45,377	\$	47,671	\$	4,767	\$	109,285	\$	1,600
Liabilities			(9,277)		-		-		-		-		-		-
Net			101,942		7,354		45,377		47,671		4,767		109,285		1,600
Project revenues:															
Participants-Electric	(1)		215,668												
-Facilities rent	(1)		339												
-Other	(1)		1,193												
Duke Power-Electric	(1)		10,975												
Other-Surplus Electric	(1)		10,654												
Interest income	(1)		2,097										793		
Project costs (see note):															
Operations and maintenance	(2)		(24,987)												
Fuel	(3)		(13,335)		13,335										
Purchased power-Duke	(2)		(11,763)												
Decommissioning	(3)		(8,652)										8,652		
Administrative and general	(2)		(14,562)												
Payments in lieu of taxes	(2)		(7,893)												
Other	(2)		(6,641)												
Debt service	(3)		(87,962)				88,576								
Supplemental power costs: Purchased power:															
-Supplemental Suppliers	(2)		(30,566)												
-Participant	(2)		(11,948)												
-Other	(2)		(2,521)												
Transmission services	(2)		(8,295)												
Distribution services	(2)		(590)												
Administrative and general	(2)		(1,434)												
Payments in lieu of taxes	(2)		(112)												
Other fund changes:															
Net change in fair market value Payments:			(8)						(2,947)				(6,898)		
Capital additions	(2)		(14,228)		(12,804)		(56,753)								
Balances at December 31, 2022		\$	97,371	\$	7,885	\$	77,200	\$	44,724	\$	4,767	\$	111,832	\$	1,600
Assets			109,248												
Liabilities			(11,877)												
		¢	07.271												
		\$	97,371												

(1) Deposited in appropriate fund

(2) Paid to third parties

(3) Transfers between funds