

Indiana Municipal Power Agency

Consolidated Financial Statements as of and for
the years ended December 31, 2019 and 2018,
Management's Discussion and Analysis, and
Report of Independent Auditors

Indiana Municipal Power Agency

Consolidated Financial Statements as of and for
the years ended December 31, 2019 and 2018

Management's Discussion and Analysis and Report of Independent Auditors

Table of Contents

REPORT OF INDEPENDENT AUDITORS	1 - 2
MANAGEMENT'S DISCUSSION AND ANALYSIS	3 - 5
FINANCIAL STATEMENTS:	
CONSOLIDATED STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION	6
CONSOLIDATED STATEMENTS OF NET POSITION	7
CONSOLIDATED STATEMENTS OF CASH FLOWS	8 - 9
CONSOLIDATED FINANCIAL STATEMENTS' NOTES	10 - 30



REPORT OF INDEPENDENT AUDITORS

To the Board of Commissioners of Indiana Municipal Power Agency

We have audited the accompanying consolidated financial statements of Indiana Municipal Power Agency and its subsidiary, which comprise the consolidated statements of net position as of December 31, 2019 and 2018, and the related consolidated statements of revenues, expenses, and changes in net position and of cash flows for the years then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Consolidated Financial Statements

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

Auditors' Responsibility

Our responsibility is to express an opinion on the consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the Agency's preparation and fair presentation of the consolidated financial statements 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 the Agency's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Indiana Municipal Power Agency and its subsidiary as of December 31, 2019 and 2018, and the results of their operations and their cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matter

The accompanying management's discussion and analysis on pages 3 through 5 are required by accounting principles generally accepted in the United States of America 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 and comparing 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.



PricewaterhouseCoopers LLP
Columbus, Ohio
April 3, 2020

INDIANA MUNICIPAL POWER AGENCY MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis of the Indiana Municipal Power Agency's (IMPA or the Agency) consolidated financial performance provides an overview of the Agency's activities for the fiscal year ended December 31, 2019 and 2018. It should be read in conjunction with the basic consolidated financial statements and the accompanying notes.

CONSOLIDATED FINANCIAL STATEMENTS

The consolidated financial statements presented herein include all of the activities of IMPA and its affiliate IMPA Service Corp. The Agency substantially follows the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission. These statements are prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America. IMPA has implemented all Financial Accounting Standards Board (FASB) pronouncements that do not conflict with or contradict Governmental Accounting Standards Board (GASB) pronouncements. IMPA Service Corp is a not-for-profit service corporation formed by IMPA to provide non-power supply services to IMPA members and other municipal entities. IMPA Service Corp's revenues and expenses are reported in IMPA's consolidated statements of revenues, expenses and changes in net position in other revenues and other non-operating expenses, respectively.

The consolidated statements of revenues, expenses and changes in net position and cash flows present information about IMPA's business activities. The consolidated statements of net position report year-end assets, liabilities and net position based on the original cost adjusted for any depreciation, amortization or unrealized gains/losses, as appropriate. Over time, increases in the Agency's net position are one indicator of its financial strength. Other factors to consider are the Agency's wholesale electric rates and its ability to maintain or exceed the debt service coverage levels required by its bond resolution.

CONDENSED CONSOLIDATED STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION (\$ millions)

	2019	2018	2017
Sales to municipalities	\$ 451.9	\$ 453.9	\$ 418.5
Other revenues	7.8	7.2	4.9
Total Operating Revenues	459.7	461.1	423.4
Purchased power, fuel, and production expense	235.6	236.2	230.0
Transmission and local facilities	44.9	45.6	42.9
Other operating expenses	101.7	96.3	79.6
Total Operating Expenses	382.2	378.1	352.5
Total Operating Income	77.5	83.0	70.9
Interest expense	59.1	59.8	56.4
Interest income	(6.9)	(4.9)	(1.9)
Other non-operating income	(8.6)	(9.5)	(6.7)
Total Non-Operating Expenses (Income)	43.6	45.4	47.8
Change in Net Position	33.9	37.6	23.1
Net Position at Beginning of Year	360.6	323.0	299.9
Net Position at End of Year	\$ 394.5	\$ 360.6	\$ 323.0

2019 Discussion

Operating revenues, which are composed of sales to municipalities and other revenues, were relatively flat compared to 2018. Total operating revenues decreased approximately \$1.4 million (less than 1%). Energy sales in kilowatt hours (kWh) to members decreased approximately 2.0% as a result of milder temperatures in 2019 compared to 2018. The average accrued cost per kWh for 2019 was 7.24 cents, an approximate 1.6% increase compared to 2018.

Similar to operating revenues, operating expenses were relatively flat compared to 2018. Total operating expenses increased \$4.1 million (1.1%). Total non-operating expenses decreased approximately \$1.8 million (4.0%) compared to 2018.

2018 Discussion

Operating revenues, which are composed of sales to municipalities and other revenues, increased approximately \$37.7 million (8.9%) compared to 2017. Energy sales in kilowatt hours (kWh) to members increased approximately 4.5% in 2018 compared to 2017 as a result of cooler winter temperatures and warmer summer temperatures. The average accrued cost per kWh for 2018 was 7.12 cents, an approximate 3.8% increase compared to 2017.

As a result of higher energy (kWh) sales, total operating expenses increased approximately \$25.6 million (7.3%) in 2018 compared to 2017. Total 2018 non-operating expenses decreased approximately \$2.4 million (5.0%) in 2018 compared to 2017.

CONDENSED CONSOLIDATED STATEMENTS OF NET POSITION (\$ millions)

	2019	2018	2017
Utility plant, net	\$ 1,258.2	\$ 1,233.6	\$ 1,224.2
Cash and investments	472.9	358.5	350.2
Other current assets	124.9	112.0	120.6
Deferred outflows	195.6	181.5	188.0
Total Assets	\$ 2,051.6	\$ 1,885.6	\$ 1,883.0
Net investment in capital assets	(199.0)	(118.7)	(162.0)
Restricted	244.7	143.1	167.8
Unrestricted	348.8	336.2	317.2
Total Net Position	394.5	360.6	323.0
Non-current liabilities	1,499.6	1,376.0	1,410.7
Current liabilities	157.5	149.0	149.3
Total Liabilities	1,657.1	1,525.0	1,560.0
Total Net Position and Liabilities	\$ 2,051.6	\$ 1,885.6	\$ 1,883.0

Utility plant increased approximately \$24.6 million and \$9.4 million in 2019 and 2018, respectively. Capital additions were approximately \$105.4 million in 2019. Net retirements in 2019 were approximately \$37.6 million. Net capital additions in 2018 were approximately \$52.0 million. Depreciation expense was approximately \$43.2 and \$42.6 million in 2019 and 2018, respectively.

During 2019, the Agency closed on the 2019 Series A Bonds (2019 A Bonds) with a par value of approximately \$123.1 million and the variable rate 2019 Series B Bonds (2019 B Bonds) with a par value of \$60.38 million. The proceeds from the 2019 A Bonds will be used for ongoing capital improvements. The proceeds from the 2019 B Bonds were used to refund the variable rate 2015 Series A Bonds and the 2016 Series B Bonds, both of which combined had a par of \$60.38 million.

During 2019 and 2018, total net position increased approximately \$33.9 million and \$37.6 million, reflecting IMPA's 2019 and 2018 net income, respectively.

Debt service coverage for 2019 and 2018 was 1.37 times and 1.41 times, respectively. The Agency's bond resolution requires debt service coverage to be at least 1.10 times.

**INDIANA MUNICIPAL POWER AGENCY
CONSOLIDATED STATEMENTS OF REVENUES, EXPENSES AND CHANGES
IN NET POSITION**

(in thousands)

For the Years Ended December 31,	2019	2018
Operating Revenues		
Sales to municipalities	\$ 451,858	\$ 453,899
Other revenues	7,848	7,217
Total Operating Revenues	459,706	461,116
Operating Expenses		
Purchased power	149,517	141,000
Fuel	58,663	67,489
Production	27,387	27,713
Transmission and local facilities	44,929	45,637
Other operating	19,196	18,059
Maintenance	24,823	24,407
Depreciation	43,890	43,676
Future recoverable costs	13,767	10,152
Total Operating Expenses	382,172	378,133
Operating Income	77,534	82,983
Non-Operating Expenses (Income)		
Interest expense	59,070	59,765
Accretion of premiums received on debt	(7,849)	(7,751)
Interest income	(6,939)	(4,891)
Other non-operating income	(636)	(1,717)
Total Non-Operating Expenses (Income)	43,646	45,406
Change in Net Position	33,888	37,577
Net Position at Beginning of Year	360,593	323,016
Net Position at End of Year	\$ 394,481	\$ 360,593

The accompanying notes are an integral part of the above statements.

INDIANA MUNICIPAL POWER AGENCY

CONSOLIDATED STATEMENTS OF NET POSITION

(in thousands)

December 31,	2019	2018
Assets		
Utility Plant		
Utility plant in service	\$ 1,690,503	\$ 1,659,493
Less: accumulated depreciation	(560,234)	(518,242)
	1,130,269	1,141,251
Construction work in progress	127,941	92,306
Total Utility Plant, Net	1,258,210	1,233,557
Long-Term Investments	55,277	82,474
Restricted Cash and Cash Equivalents	227,646	93,957
Current Assets		
Unrestricted cash and cash equivalents	172,027	166,128
Short-term investments	17,997	15,918
Municipality accounts receivable	65,432	65,273
Fuel stock and material inventory	22,152	21,188
Other current assets	37,229	25,444
Total Current Assets	314,837	293,951
Deferred Outflows		
Regulatory assets	79,146	93,301
Other	116,465	88,282
Total Deferred Outflows	195,611	181,583
Total Assets	\$ 2,051,581	\$ 1,885,522
Net Position and Liabilities		
Net Position		
Net investment in capital assets	\$ (199,080)	\$ (118,759)
Restricted	244,737	143,133
Unrestricted	348,824	336,219
Total Net Position	394,481	360,593
Non-Current Liabilities		
Long-term revenue bonds, net	1,435,371	1,329,922
Other non-current liabilities	37,430	26,298
Total Non-Current Liabilities	1,472,801	1,356,220
Current Liabilities		
Current maturities of revenue bonds	27,750	26,645
Accounts payable	35,983	25,970
Accrued interest on revenue bonds	29,375	29,466
Accrued liabilities	64,384	66,878
Total Current Liabilities	157,492	148,959
Deferred Inflows of Resources	26,807	19,750
Total Net Position and Liabilities	\$ 2,051,581	\$ 1,885,522

The accompanying notes are an integral part of the above statements.

INDIANA MUNICIPAL POWER AGENCY
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

For the Years Ended December 31,	2019	2018
Cash Flows From Operating Activities:		
Receipts from municipalities	\$ 445,159	\$ 458,069
Other operating receipts	7,848	7,217
Payments for purchased power	(145,581)	(142,707)
Payments for fuel	(61,108)	(68,437)
Payments for production	(28,834)	(27,162)
Payments for transmission and local facilities	(36,859)	(38,955)
Cash deposits as collateral	(7,028)	7,593
Payments for other operating expenses	(17,471)	(17,117)
Payments for maintenance	(23,805)	(26,463)
Net cash provided by operating activities	132,321	152,038
Cash Flows From Capital And Related Financing Activities:		
Net additions to utility plant	(96,482)	(77,710)
Proceeds from sale of capital assets	10,985	8,329
Net issuance of long-term debt	205,305	-
Refunding of long-term debt	(60,380)	-
Principal payments on long-term debt	(27,665)	(26,060)
Interest payments	(59,162)	(55,232)
Net cash used in capital and related financing activities	(27,399)	(150,673)
Cash Flows From Investing Activities:		
Investment purchases	(21,378)	(97,017)
Maturities and called investments	48,540	87,049
Interest income and other	7,504	6,664
Net cash used by investing activities	34,666	(3,304)
Net (Decrease) Increase in Cash and Cash Equivalents	139,588	(1,939)
Restricted and Unrestricted Cash and Cash Equivalents:		
Balances at Beginning of Year	260,085	262,024
Balances at End of Year	\$ 399,673	\$ 260,085

The accompanying notes are an integral part of the above statements.

INDIANA MUNICIPAL POWER AGENCY
CONSOLIDATED STATEMENTS OF CASH FLOWS (continued)
(in thousands)

For the Years Ended December 31,	2019	2018
Reconciliation of Operating Income to Net Cash Provided by Operating Activities:		
Operating Income	\$ 77,534	\$ 82,983
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation	43,890	43,676
Future recoverable costs	13,767	10,152
Changes in current assets and liabilities:		
Municipality accounts receivable	(159)	3,360
Fuel stock and material inventory	(964)	(1,856)
Accounts payable	949	(2,795)
Other	(2,696)	16,518
Net cash provided by operating activities	\$ 132,321	\$ 152,038

The accompanying notes are an integral part of the above statements.

INDIANA MUNICIPAL POWER AGENCY CONSOLIDATED FINANCIAL STATEMENTS' NOTES

1. Organization and Significant Accounting Policies

Organization and Operations

Indiana Municipal Power Agency (IMPA or the Agency) is a body corporate and politic and a political subdivision of the State of Indiana. IMPA was created in June of 1980 by a group of municipalities for the purpose of jointly financing, developing, owning and operating electric generation and transmission facilities appropriate to the present and projected energy needs of its participating members. IMPA serves 60 Indiana cities and towns and one Ohio village. IMPA sells power to its members under long-term power sales contracts (the Power Sales Contracts). The members resell the power to retail customers within their respective municipal service territories. IMPA's owned nameplate generating capacity is 959 megawatts (MW) or 80% of IMPA's 2019 peak demand (IMPA's maximum annual hourly load). The remainder of IMPA's power is purchased from other utilities under long-term contracts with varying terms and expiration dates. Power is delivered to members through an integrated transmission system known as the Joint Transmission System (JTS), jointly-owned by IMPA, Duke Energy Indiana, Inc. (DEI), Duke Energy Ohio, Inc. (DEO), and Wabash Valley Power Association (WVPA); and, transmission service arrangements with other utilities and regional transmission organizations.

IMPA Service Corp was created by the Agency as a not-for-profit corporation to provide cost-effective services beyond power supply and transmission to members and other municipal utilities.

Principles of Consolidation

The consolidated financial statements include the accounts of the Agency and its affiliate, IMPA Service Corp. All significant intercompany account balances and transactions have been eliminated in consolidation.

Basis of Presentation

The accompanying consolidated financial statements are prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America (US GAAP). IMPA has chosen the option to implement all Financial Accounting Standards Board (FASB) pronouncements that do not conflict with or contradict Governmental Accounting Standards Board (GASB) pronouncements.

Utility Plant

IMPA provides power to the communities it serves through ownership of utility plant, which includes: (1) an undivided 24.95% ownership in the 625 MW Gibson Unit 5 generating facility (Gibson Unit 5) placed in service in 1982; (2) an undivided 12.88% ownership in the 514 MW Trimble County Unit 1 generating facility (Trimble County Unit 1) placed in service in 1990; (3) an undivided 12.88% ownership in the 750 MW Trimble County Unit 2 generating facility (Trimble County Unit 2) constructed at the same site as Trimble County Unit 1 and placed in service in 2011; (4) an undivided

12.64% ownership in the 1600 MW Prairie State Generating Company, LLC (PSGC or Prairie State) placed in service in 2012; (5) seven wholly-owned combustion turbines and associated facilities aggregating 419 MW (two 41 MW units placed in service in 1992 and one 85 MW unit placed in service in 2004 located in Anderson, Indiana, two 41 MW units placed in service in 1992 located near Richmond, Indiana, and two 85 MW units located in Indianapolis, Indiana, placed in service in 2000; and (6) twelve wholly-owned solar generating facilities with a total generating capacity of approximately 19.25 MW in member communities.

Based on future economics, IMPA, DEI and WVPA, the joint owners of Gibson Unit 5, are considering closure of Gibson Unit 5 as early as 2026.

The Agency capitalizes fixed assets with an original cost greater than \$25,000, except for jointly-owned utility plant, which are capitalized based on the policies defined by DEI for Gibson Unit 5, by LG&E for Trimble County Unit 1 and Unit 2 and by PSGC for Prairie State Units 1 and 2, the coal mine and other Prairie State facilities. Utility plant is recorded at cost including capitalized interest during construction and a proportionate share of overhead costs. Construction overhead costs include salaries, payroll taxes, fringe benefits and other expenses. The original cost of property replaced or retired, less salvage, is charged to accumulated depreciation. Depreciation is recorded over the estimated useful lives of the utility plant by using the straight-line method. The effective composite depreciation rate on utility plant is approximately 2.6% in 2019 and 2018.

IMPA's ownership interest in Prairie State includes an interest in coal reserves with an original cost net of depletion of \$8.6 and \$8.9 million at December 31, 2019 and 2018, respectively.

At December 31, 2019 and 2018, construction work in progress (CWIP) included construction costs for ongoing utility plant capital improvements.

Sale of Solar Generation Facilities (Solar Parks)

IMPA has entered into purchase power agreements whereby IMPA has agreed to purchase all of the output from certain solar generation facilities (Solar Parks) located in IMPA member communities with a total capacity of approximately 54 MW. The Solar Parks were all engineered, procured and constructed by IMPA. All purchase power contracts are for 25 years from when the respective Solar Park went into commercial operation.

The purchase power contract for one solar park with a capacity of approximately 5 MW is a prepaid purchase power agreement and provides IMPA an option to buy the Solar Park at 5 ½ years after commercial operation.

The remaining Solar Park purchase power agreements, with a total capacity of approximately 49 MW, provide IMPA an option to buy the Solar Parks after six years. As part of these agreements, IMPA loaned the respective purchaser a portion of the engineering, procurement and construction price.

The prepaid purchase power and the notes receivable are included in Other Deferred Outflows on the Consolidated Statements of Net Position.

Funds

IMPA's Master Power Supply System Revenue Bond Resolution (the Bond Resolution) requires the creation and maintenance of certain funds and accounts. The Restricted Funds under the Bond Resolution are the Debt Service Fund and the Debt Service Reserve Fund. The Bond Resolution allows for the creation and maintenance of the Rate Stabilization Account, the Reserve and Contingency Fund, and the Asset Retirement Obligation Fund, the use of which is restricted by Board resolution. The Construction Fund includes restricted proceeds from bonds issued for specified capital projects. The Revenue Fund, the General Reserve Fund and the Operation and Maintenance Fund are all unrestricted and are to be used for the operating needs of the Agency.

Restricted and Unrestricted Cash and Cash Equivalents

IMPA considers all highly liquid investments with an original maturity of three months or less to be cash equivalents.

Restricted and Unrestricted Investments

IMPA classifies investments in U.S. government agencies and treasury securities as available for sale.

Fair Value Measurements

IMPA uses fair value to measure certain financial instruments, with related unrealized gains or losses generally affecting regulatory assets and deferred inflows of resources (see Regulatory Assets and Deferred Inflows of Resources). The fair value of a financial instrument is the amount at which an instrument could be exchanged in a current transaction between willing parties.

Hedging Derivative Instruments

IMPA accounts for derivatives in accordance with GASB Statement No. 53, *"Accounting and Financial Reporting for Derivative Instruments"* (GASB 53). GASB 53 requires that hedging derivative instruments ("Hedging Transactions") be recorded at fair value and establishes certain requirements for revenue recognition, measurement and disclosure related to Hedging Transactions. IMPA's Hedging Transactions have been tested for effectiveness under the guidelines prescribed by GASB 53. IMPA utilized one of the three quantitative methods required by GASB 53, the regression analysis method. This method evaluates the effectiveness of a hedge transaction by comparing the statistical relationship between the cash flows of the potential hedging item and the hedgeable item. The effectiveness testing of IMPA's Hedging Transactions demonstrated that the hedges are effective as defined by GASB 53. See Note 5 for specific disclosures related to derivatives.

Fuel Stock and Material Inventory

Fuel stock and materials and supplies are valued at average cost. The cost of fuel and materials used in production are expensed as recovered through revenues.

Regulatory Assets and Deferred Inflows of Resources

In accordance with GASB Statement No. 62, "Codification of Accounting and Financial Reporting Guidance" (GASB 62), IMPA's consolidated financial statements reflect the rate making actions of the Board of Commissioners that result in the recognition of revenues and expenses in different time periods than entities that are not rate regulated. Regulatory assets are expenditures incurred by the Agency that will be recovered in rates in future periods. Deferred inflows of resources are revenues collected in rates for expenses not yet incurred by the Agency.

Regulatory assets and deferred inflows of resources consist of the following (in thousands):

Regulatory Assets	2019	2018
Debt service net of related depreciation and amortization	\$ 71,383	\$ 85,039
Capital assets associated with asset retirement obligations	5,830	4,251
Net valuation of financial instruments	1,933	4,011
	\$ 79,146	\$ 93,301

Deferred Inflows of Resources	2019	2018
Reserve for contingencies	\$ 24,024	\$ 17,049
Valuation of inventories	2,783	2,701
	\$ 26,807	\$ 19,750

Employee Benefit Plan

IMPA maintains a 401(k) and 457(b) plan on behalf of all employees meeting certain eligibility requirements regarding length of employment, age and employee contributions. Employer contributions to the plan were approximately \$1.2 million and \$1.1 million for 2019 and 2018, respectively.

Committed Line of Credit

IMPA has entered into a \$75 million committed line of credit agreement (the Credit Agreement) with PNC Bank. Under the Credit Agreement, IMPA may draw funds and/or post standby letters of credit. The Credit Agreement expires on March 1, 2021. At December 31, 2019 and 2018, IMPA had posted letters of credit totaling \$6.0 million. The Credit Agreement is subordinated to IMPA's long-term revenue bonds, see Note 6, Long-Term Revenue Bonds. The Credit Agreement provides that PNC Bank may only require repayment prior to expiration if certain terms of default occur.

Revenue Recognition and Rates

IMPA sets rates in accordance with the Bond Resolution. The Bond Resolution requires the establishment of rates that, together with other revenues, are reasonably expected to pay IMPA's operating costs (excluding depreciation and amortization), and at least 110% of the Agency's aggregate debt service. IMPA's debt service requirements are designed to be relatively equal over the life of the bonds to help provide stable rates to the communities IMPA serves. Rates are not subject to state or federal regulation. The debt service included in rates provides for full cost recovery of the utility plant assets over a period not exceeding the utility plant useful lives.

Revenues are recognized on an accrual basis when energy is delivered, while the communities are billed using budget rates. Differences between the accrued rate and the billed rate are collected from or returned to the members via a tracker in subsequent periods. The amount to be paid to members (a regulatory liability) at December 31, 2019 and 2018 was \$51.6 million and \$58.2 million, respectively. The regulatory liability is included in accrued liabilities in the consolidated statements of net position at December 31, 2019 and 2018.

Operating Revenues

Operating revenues include sales to municipalities and other revenues. These descriptions of operating revenues reflect how economic factors affect the nature, amount, timing and uncertainty of revenues and cash flows. The Power Sales Contracts are the underlying agreements for IMPA's revenues from sales to members. Under the Power Sales Contracts, IMPA's performance obligation is to deliver electricity to member communities. Member communities consume electricity upon delivery and payment for electricity consumed is due within 30 days of receipt of invoice. There are no significant judgments in determining or allocating the transaction price. IMPA does not have any material contract assets or liabilities. IMPA does not incur any material costs to obtain or fulfill contracts with customers.

Operating Expenses

IMPA's operating expenses are defined as purchased power and expenses directly related to, or incurred in support of, the production and transmission of electricity to the participating communities IMPA serves.

Non-Operating Expenses

Non-operating expenses include interest income and expenses, costs related to the issuance of bonds, amortization of bond premiums, Build America Bond (BAB) subsidies and other non-operating revenues and expenses.

IMPA Service Corp

IMPA Service Corp's revenues and expenses are reported as other revenues and other operating expenses, respectively.

Regional Transmission Organizations (RTOs)

IMPA is a transmission owning member of the Midcontinent Independent System Operator (MISO) and a transmission dependent utility of the MISO and PJM Interconnection, LLC (PJM). The MISO schedules, manages and oversees operational control of the JTS.

The MISO and PJM are independent organizations whose purposes are to ensure the reliability of their respective integrated, regional electrical transmission systems, to facilitate a regional wholesale marketplace, to provide non-discriminatory access to the transmission system and to maintain and improve electric system reliability.

IMPA records all net sales through MISO and PJM to purchase power on the Consolidated Statements of Revenues, Expenses and Changes in Net Position.

Income Taxes

IMPA, as a political subdivision of the State of Indiana, is exempt from federal and state income taxes. IMPA qualifies for federal income tax exclusion under Internal Revenue Code section 115. IMPA Service Corp is exempt from federal income tax under Internal Revenue Code section 501 (a) as a 501 (c) (3) organization.

Use of Estimates

The preparation of the consolidated financial statements in conformity with US GAAP requires management to make estimates and assumptions that affect the reported assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. The reported results of operations are not indicative of results of operations for any future period.

Accounting Pronouncements Issued

During 2016 and 2017, the FASB updated Accounting Standards Codification (ASC) Topic 606, Revenue from Contracts with Customers (Topic 606), Topic 606 establishes financial reporting principles regarding the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers.

IMPA adopted ASU2016-18 and Topic 606 for the period ending December 31, 2018. ASU 2016-18 and Topic 606 do not have a material impact on IMPA's consolidated financial statements.

During 2016, the Government Accounting Standards Board (GASB) issued Statement No. 83, "*Certain Asset Retirement Obligations*" (GASB 83). GASB 83 establishes uniform criteria for governments to recognize and measure certain asset retirement obligations.

During 2018, the GASB issued Statement No. 88, "*Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*" (GASB 88). GASB 88 defines debt and requires additional debt related disclosures in the notes of the financial statements.

During 2018, the GASB issued Statement No. 90, "Majority Equity Interest" (GASB 90). GASB 90 establishes certain reporting requirements for a majority equity interest in a legally separate organization and for certain component units.

IMPA adopted GASB 83, 88 and 90 for the period beginning January 1, 2019. GASB 83, 88 and 90 do not have a material impact on IMPA's consolidated financial statements.

During 2018, the GASB issued Statement No. 89, "Accounting for Interest Cost Incurred before the End of a Construction Period" (GASB 89). GASB 89 establishes certain accounting requirements for interest cost incurred before the end of a construction period. GASB 89 is effective for reporting periods beginning after December 15, 2019. IMPA does not believe that GASB 91 will have a material impact on IMPA's consolidated financial statements.

Reclassification

Certain amounts in the prior period financial statements have been reclassified to conform to the presentation of the current period financial statements. The reclassification had no effect on the previously reported change in net position.

2. Capital Assets

Capital asset activity for the years ended December 31, 2019 and 2018, was as follows (in thousands):

2019	Beginning Balance	Additions	Transfers	Retirements	Other	Ending Balance
Utility plant in service	\$ 1,659,493	\$ 1,983	\$ 32,503	\$ (3,476)	\$ -	\$ 1,690,503
Construction work in progress	92,306	103,479	(32,503)	(35,341)	-	127,941
Total Utility Plant (Gross)	1,751,799	105,462	-	(38,817)	-	1,818,444
Less accumulated depreciation for utility plant in service	(518,242)	(43,227)	-	1,235	-	(560,234)
	\$ 1,233,557	\$ 62,235	\$ -	\$ (37,582)	\$ -	\$ 1,258,210

2018	Beginning Balance	Additions	Transfers	Retirements	Other	Ending Balance
Utility plant in service	\$ 1,640,509	\$ 1,523	\$ 21,536	\$ (5,200)	\$ 1,125	\$ 1,659,493
Construction work in progress	62,136	70,717	(21,536)	(19,011)	-	92,306
Total Utility Plant (Gross)	1,702,645	72,240	-	(24,211)	1,125	1,751,799
Less accumulated depreciation for utility plant in service	(478,396)	(42,590)	-	2,744	-	(518,242)
	\$ 1,224,249	\$ 29,650	\$ -	\$ (21,467)	\$ 1,125	\$ 1,233,557

Accumulated depreciation additions for the years ended December 31, 2019 and 2018 do not include depreciation of asset retirement obligation assets of \$0.6 million and \$1.1 million, respectively.

3. Cash, Cash Equivalents and Investments

A Board policy governs IMPA's investments and deposits. IMPA's authorized investments include money market funds, federal agencies, investment contracts, US treasuries, commercial paper and repurchase agreements if the instruments meet certain minimum rating requirements.

During the years ended December 31, 2019 and 2018, IMPA recorded net increases in the fair value of investments of \$2.0 million and \$0.2 million, respectively. To the extent any unrealized gains or losses are realized in the future, those realized gains or losses are refundable or recoverable through IMPA's rate-making methodology. Accordingly, any unrealized gains or losses at December 31, 2019 and 2018 have been included in regulatory assets on IMPA's consolidated statements of net position (see Note 1).

The carrying amount of cash and cash equivalents approximates fair value due to the short maturity of the instruments.

At December 31, 2019 and 2018, the original cost and the estimated fair values of the Agency's cash, cash equivalents and investments were as follows (in thousands):

INVESTMENT TYPE	2019		2018	
	Cost	Estimated Fair Value	Cost	Estimated Fair Value
Long-Term Investments:				
Restricted:				
U.S. Government Agencies	\$ 31,977	\$ 32,134	\$ 59,004	\$ 58,012
U.S. Treasuries	22,207	23,143	24,168	24,462
Total Long-Term Investments	54,184	55,277	83,172	82,474
Restricted and Unrestricted Cash and Cash Equivalents:				
Restricted	227,646	227,646	93,957	93,957
Unrestricted	172,027	172,027	166,128	166,128
Total Restricted and Unrestricted Cash and Cash Equivalents	399,673	399,673	260,085	260,085
Short-Term Investments:				
Restricted:				
U.S. Government Agencies	16,054	15,995	16,113	15,918
U.S. Treasuries	1,960	2,002	-	-
Total Short-Term Investments	18,014	17,997	16,113	15,918
Total	\$ 471,871	\$ 472,947	\$ 359,370	\$ 358,477

The debt service account is comprised of current principal payments and interest due on long-term debt payable on the first business day of the subsequent year. The Bond Resolution restricts the debt service account, the debt service reserve fund and the construction fund. Additionally, certain accounts are restricted by Board resolution, including the rate stabilization account. For further discussion of accounts restricted by Board resolution, see Note 1.

U.S. Government agencies consist solely of mortgage-backed securities which are backed by the full faith and credit guaranty of the United States' government. All long-term investments mature in less than five years.

At December 31, 2019 and 2018, the Agency's cash, cash equivalents and investments were restricted as follows (in thousands):

FUND	2019		2018	
	Cost	Estimated Fair Value	Cost	Estimated Fair Value
Unrestricted:	\$ 172,027	\$ 172,027	\$ 166,128	\$ 166,128
Restricted by Board:				
Rate Stabilization Fund	28,383	28,654	26,383	26,171
Other Board Restricted Accounts	36,961	37,159	27,977	27,953
Restricted by Bond Resolution:				
Debt Service Reserve Fund	93,930	94,537	82,671	82,014
Debt Service Account	57,241	57,241	56,211	56,211
Construction Fund	83,329	83,329	-	-
Total	\$ 471,871	\$ 472,947	\$ 359,370	\$ 358,477

4. Net Position

At December 31, 2019 and 2018, the Agency's net position included the following components (in thousands):

	2019	2018
Net investment in capital assets	\$ (199,080)	\$ (118,759)
Restricted for debt service	27,866	26,745
Restricted for debt service reserve	94,537	82,014
Restricted for bond financed construction projects	83,329	-
Restricted by Board resolution	39,005	34,374
Unrestricted	348,824	336,219
	\$ 394,481	\$ 360,593

5. Hedging Transactions

IMPA purchases forward power contracts to minimize the cost volatility of purchased power in the energy markets. IMPA does not purchase derivatives for speculative purposes. The acquisition of forward power contracts allows IMPA to effectively plan and set stable rates from period to period for IMPA's Members. Certain of IMPA's forward power contracts are settled by a cash payment that is equal to the differential between the contract price and the settlement price (financially settled). Financially settled forward power contracts are hedging derivative instruments as defined by GASB 53. IMPA has entered into hedging transactions in the MISO and PJM energy markets.

IMPA is required to test its hedging transactions for effectiveness as of the reporting date as defined by GASB 53. IMPA's outstanding hedging transactions at December 31, 2019 and 2018 have been determined by management to be effective. Accordingly, IMPA's outstanding hedging transactions are reported in the Agency's December 31, 2019 and 2018 consolidated statements of net position at fair value. The fair market value for each of IMPA's hedging transactions have been determined by computing the difference between the contractual forward price and the published forward price at the respective energy market's settlement point(s) at market closing as of December 31, 2019 and 2018. All of IMPA's hedging transactions settle and are valued at either the Indiana Hub or the AEP Dayton Hub, which are settlement hubs in the MISO and PJM energy markets, respectively.

As of December 31, 2019, the Agency has recorded unrealized gains and losses in other current assets of approximately \$3.4 million, deferred outflows of approximately \$14.3 million, and other non-current liabilities of approximately \$0.2 million. As of December 31, 2018, the Agency has recorded unrealized gains and losses in other current assets of approximately \$1.8 million, deferred outflows of approximately \$11.3 million, other non-current liabilities of approximately \$1.3 million and accrued liabilities of approximately \$26 thousand.

The following tables provide information related to IMPA's outstanding derivative instruments as of December 31, 2019 and 2018 (in thousands).

December 31, 2019

Trade Date Range	Duration	Notional Amount (MWhs)	Ending Fair Value	
			Classification	Amount
Dec 2014 thru Apr 2019	Jan 2020 thru Dec 2020	725	Accrued liabilities	\$ (3,376)
Dec 2014 thru Mar 2017	Jan 2021 thru Dec 2026	6,300	Other non-current liabilities	(14,330)
Mar 2017	Jan 2022 thru Jan 2026	300	Deferred outflows	216
		7,325		\$ (17,490)

December 31, 2018

Trade Date Range	Duration	Notional Amount (MWhs)	Ending Fair Value	
			Classification	Amount
Dec 2014 thru Aug 2018	Jan 2019 thru Dec 2019	675	Accrued liabilities	\$ (1,766)
Oct 2016 thru Aug 2018	Jul 2019	50	Other current assets	26
Dec 2014 thru Mar 2017	Jan 2020 thru Dec 2026	6,000	Other non-current liabilities	(11,255)
Mar 2017	Jul 2021 thru Jul 2026	1,200	Deferred outflows	1,255
		7,925		\$ (11,740)

Credit Risk

All of IMPA's hedging transactions were transacted on exchanges. Exchanges are designed to avoid contract defaults and credit risk. Exchanges utilize clearing houses to guarantee the performance of each market participant for each transaction. The clearing house requires every market participant to deposit funds into a margin account. There is a required deposit for a percent of the nominal value of outstanding contracts and a deposit to reflect each market participant's daily gain or loss in the market. These funds are held by the clearing house and available to settle any defaults by market participants, thus mitigating credit risk related to IMPA's outstanding financially settled forward power contracts.

Basis Risk

IMPA is exposed to basis risk on its hedging transactions because the pricing point of the hedged commodity may settle at a different pricing point than the hedge transaction (Indiana Hub or AEP-Dayton Hub). At December 31, 2019 and 2018, the Indiana Hub price was \$23.56 and \$34.46 per MWh and the AEP-Dayton Hub price was \$23.38 and \$32.54 per MWh, respectively.

Termination Risk

IMPA is exposed to termination risk on its hedging transactions because a counterparty may fail to perform under the terms of one or more contracts resulting in the termination of the contract with that counterparty. IMPA's termination risk is mitigated for those forward power contracts transacted on the Exchanges.

Commitments

IMPA had \$24.0 and \$16.6 million posted as collateral at December 31, 2019 and 2018, respectively. This is recorded in other current assets on the consolidated statement of net position.

6. Long-Term Revenue Bonds

IMPA issues Power Supply System Revenue Bonds to finance its acquisition and construction of utility plant. Long-term revenue bonds issued and outstanding at December 31, 2019 and 2018, consist of the following (in thousands):

Bond Series	Interest Rates	Due Date January 1,	Optional Redemption Year	2019	2018
2007 Series B	5.800%	2020 to 2022		\$ 15,510	\$ 20,125
2009 Series C	7.350%	2020 to 2024		14,410	16,035
2010 Series A	5.594%	2031 to 2042		123,640	123,640
2010 Series B	5.000%	2020 to 2023	2021	20,235	20,235
2011 Series A	5.000%	2020 to 2021		13,915	19,835
2012 Series A	4.000% - 5.000%	2020 to 2028	2022	23,960	29,015
2013 Series A	3.000% - 5.250%	2020 to 2042	2023	27,015	28,505
2014 Series A	5.000%	2020 to 2032	2025	162,925	167,730
2015 Series A	Variable	2018 to 2042		-	38,155
2016 Series A	4.000% - 5.000%	2033 to 2042	2026	366,350	366,350
2016 Series B	Variable	2029 to 2031		-	24,225
2016 Series C	3.000% - 5.000%	2020 to 2039	2027	145,585	146,970
2017 Series A	5.000%	2020 to 2042	2028	221,835	222,605
2019 Series A	4.000% - 5.000%	2021 to 2042	2029	123,100	-
2019 Series B	Variable	2021 to 2042		60,380	-
				1,318,860	1,223,425
Less current maturities				(27,750)	(26,645)
Long-term revenue bonds				1,291,110	1,196,780
Unamortized premium, net				144,261	133,142
				\$ 1,435,371	\$ 1,329,922

In December 2019 the 2015 Series A and the 2016 Series B Bonds were refunded by the 2019 Series B Bonds.

The 2007 Series B, 2009 Series C, and the 2011 Series A Bonds are non-callable. The 2010 Series A Bonds are designated as direct payment Build America Bonds and have make-whole optional redemption and extraordinary optional redemption provisions. The 2019 Series B Bonds are currently callable at a redemption prices of 100%.

All other bonds are callable on or after January 1 of the optional redemption year at a redemption price of 100%, with the exception of the 2012 Series A Bonds. The 2012 Series A Bonds maturing on or after January 1, 2024 are callable on or after July 1, 2022 at a redemption price of 100%.

Debt service requirements based on contractual maturities at December 31, 2019 were as follows (in thousands):

	Principal	Interest
2020	\$ 27,750	\$ 57,438
2021	32,875	62,383
2022	35,230	60,024
2023	37,075	58,183
2024	39,090	56,169
2025 - 2029	226,775	249,507
2030 - 2034	288,280	188,526
2035 - 2039	366,045	113,052
2040 - 2042	265,740	24,190
	\$ 1,318,860	\$ 869,472

Long-term revenue bond activity for the periods ended December 31, 2019 and 2018, was as follows (in thousands):

December 31, 2019	Beginning Balance	Additions	Reductions	Ending Balance
Long-term revenue bonds	\$ 1,223,425	\$ 183,480	\$ (88,045)	\$ 1,318,860
Less:				
Current maturities	(26,645)	26,645	(27,750)	(27,750)
Unamortized premium, net	133,142	21,825	(10,706)	144,261
	\$ 1,329,922	\$ 231,950	\$ (126,501)	\$ 1,435,371

December 31, 2018	Beginning Balance	Additions	Reductions	Ending Balance
Long-term revenue bonds	\$ 1,249,485	\$ -	\$ (26,060)	\$ 1,223,425
Less:				
Current maturities	(26,060)	26,060	(26,645)	(26,645)
Unamortized premium, net	143,771	-	(10,629)	133,142
	\$ 1,367,196	\$ 26,060	\$ (63,334)	\$ 1,329,922

Certain Debt Covenants

IMPA's long-term revenue bonds are payable from and secured by a pledge of and security interest in all revenues, income, rents and receipts attributable to the Agency's ownership and operation of IMPA's power supply system and certain funds established by the Bond Resolution including IMPA's Unrestricted and Restricted By Bond Resolution funds, see Note 3, Cash, Cash Equivalents and Investments. IMPA's Members, the State of Indiana nor any political subdivision of Indiana are obligated to pay the debt service on IMPA's long-term revenue bonds.

The Bond Resolution has no subjective acceleration provisions or events of default that change the timing of repayment.

Debt Service Coverage

The IMPA Power Supply System Revenue Bond Resolution (Resolution) contains covenants that require IMPA to collect through rates 1.1 times the current year’s accrued aggregate debt service. Debt service coverage was 1.37 times and 1.41 times for 2019 and 2018, respectively. Debt service coverage for 2019 was calculated based on approximately \$27.75 million of principal and approximately \$59.1 million of 2019 interest expense payable during 2019 and in January 2020, net of approximately \$2.0 million transferred during 2019 to the Rate Stabilization Fund. Management believes that IMPA is in compliance with all financial debt covenants and restrictions as of December 31, 2019.

2010 Series A Build America Bonds (BAB)

BAB subsidies are included in other non-operating income on the consolidated statements of revenues, expense and changes in net position. BABs subsidies received (in \$ thousands):

	2019	2018
BAB subsidies received	\$ 2,278	\$ 2,266

2019 Series A Bonds

During 2019, the Agency closed on the 2019 Series A Bonds (2019 A Bonds) with a par value of approximately \$123.1 million. The proceeds from the 2019 A Bonds will be used for ongoing capital improvements.

2019 Series B Variable Rate Bonds

During 2019, the Agency closed on the 2019 Series B Variable Rate Bonds (2019 B Bonds) with a par value of \$60.38 million. The proceeds from the 2019 B Bonds were used to refund the 2015 Series A (2015 A Bonds) and 2016 Series B (2016 B Bonds) Bonds which combined also had a par value outstanding of \$60.38 million. The 2015 A Bonds had a put date of March 10, 2020. The letter of credit supporting the 2016 B Bonds had a maturity date of December 1, 2020. There is no expected reduction of debt service or present value savings as a result of the refundings.

The 2019 B Bonds are secured by an irrevocable transferable direct pay letter of credit (Letter of Credit) issued for the benefit of the owners of the 2019 Series B Bonds. The interest rates on the 2019 Series B Bonds is adjusted daily, and bondholders may require repurchase of the 2019 Series B bonds at the time of such interest rate adjustments. Through the Letter of Credit, the Agency has the right of direct offset with its lender for any repurchases. These bonds have a contractual maturity of January 1, 2042. The Letter of Credit has a contractual maturity of December 19, 2024. The interest rate at December 31, 2019 on the 2019 Series B Bonds was 1.62%.

7. Fair Value of Financial Instruments

As defined in the fair value measurements standard, fair value is the price that would be received for an asset or paid to transfer a liability (exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between willing market participants on the measurement date. This standard establishes a fair value hierarchy that prioritizes the inputs used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted market prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3).

The three levels of the fair value hierarchy defined by the fair value measurement standard are as follows:

Level 1

Quoted prices are available in active markets for identical assets or liabilities as of the reporting date. Active markets are those where transactions for the asset or liability occur in sufficient frequency and volume to provide pricing information on an ongoing basis. IMPA's Level 1 assets primarily consist of money market funds that are listed on active exchanges which are included in unrestricted cash and cash equivalents and restricted cash and cash equivalents on the consolidated statements of net position. IMPA does not have any liabilities that meet the definition of Level 1.

Level 2

Pricing inputs are either directly or indirectly observable in the market as of the reporting date, other than quoted prices in active markets included in Level 1. Level 2 includes those financial instruments that are valued using models or other valuation methodologies based on assumptions that are observable in the marketplace throughout the full term of the instrument, can be derived from observable data or are supported by observable levels at which transactions are executed in the marketplace. These models are primarily industry-standard models that consider various assumptions, including time value, volatility factors, and current market and contractual prices for the underlying instruments, as well as other relevant economic measures. IMPA's Level 2 assets and liabilities consist primarily of debt securities and financially settled forward power contracts, which are included in long-term investments, short-term investments, other current assets, other deferred outflows, accrued liabilities, and other non-current liabilities.

Level 3

Pricing inputs that are generally less observable from objective sources. These inputs may be used with internally developed methodologies that result in management's best estimate of fair value. IMPA does not have any assets or liabilities that meet the definition of Level 3.

IMPA utilizes market data and assumptions that market participants would use in pricing the asset or liability, including assumptions about risk and the risks inherent in the inputs to the valuation technique. These inputs can be readily observable, market corroborated, or generally unobservable.

IMPA primarily applies the market approach for recurring fair value measurements using the best information available. Accordingly, IMPA maximizes the use of observable inputs and minimizes the use of unobservable inputs.

The carrying amounts of cash, accounts receivable and accounts payable approximate their fair value due to their short-term nature.

The following tables set forth IMPA's financial assets and financial liabilities that are accounted for on a recurring basis at fair value by level within the fair value hierarchy as of December 31, 2019 and 2018. As required by the fair value measurement standard, assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. IMPA's assessment of the significance of a particular input to the fair value measurement requires judgment and may affect the valuation of fair value assets and liabilities and their placement within the fair value hierarchy levels.

Recurring fair value measures at December 31, 2019 and 2018 were as follows (in thousands):

December 31, 2019	Level 1	Level 2	Total
Assets:			
Money market funds	\$ 358,736	\$ -	\$ 358,736
Debt securities	-	73,274	73,274
Purchase power futures	-	216	216
	\$ 358,736	\$ 73,490	\$ 432,226
Liabilities:			
Purchase power futures	\$ -	\$ 17,707	\$ 17,707

December 31, 2018	Level 1	Level 2	Total
Assets:			
Money market funds	\$ 197,731	\$ -	\$ 197,731
Debt securities	-	98,392	98,392
Purchase power futures	-	1,282	1,282
	\$ 197,731	\$ 99,674	\$ 297,405
Liabilities:			
Purchase power futures	\$ -	\$ 13,021	\$ 13,021

8. Asset Retirement Obligations

Asset retirement obligations represent legal obligations associated with the retirement of tangible long-lived assets that are incurred upon the acquisition, construction, development or normal operation of the assets. IMPA's asset retirement obligations consist primarily of costs associated with the future cost of mine reclamation and closure at Prairie State and with the future closure of waste disposal facilities at IMPA's jointly-owned plants.

Asset retirement obligations are estimated annually during the fourth quarter of the year and recognized in the period in which they are incurred, if a reasonable estimate of fair value can be made. The asset retirement obligations are accreted to their present value at the end of each reporting period. The associated estimated asset retirement costs are capitalized as part of the carrying amount of the long-lived asset and depreciated over their useful lives. The Agency uses an expected cash flow approach to measure the obligations. IMPA's asset retirement obligations have no impact on change in net position due to the Agency applying the provisions of GASB 62.

The following table presents the details of the Agency's asset retirement obligations for the periods ended December 31, 2019 and 2018 (in thousands):

	Beginning Balance	Liabilities Settled	Accretion	Cash Flow Revisions	Ending Balance
2019	\$ 11,655	(351)	498	755	\$ 12,557
2018	\$ 15,359	(1,463)	646	(2,887)	\$ 11,655

IMPA's share of the asset retirement obligations for the Agency's jointly-owned generation at December 31, 2019 and 2018 was as follows (in thousands):

	2019	2018
Gibson Unit 5	\$ 4,304	\$ 2,126
Prairie State Units 1 & 2	2,477	2,474
Trimble County Units 1 & 2	5,776	7,055
	\$ 12,557	\$ 11,655

IMPA's percentage share of the total asset retirement obligations approximates the Agency's percentage ownership share of each of the respective jointly owned production facilities, see Note 11, Jointly-Owned Plant.

The Agency had restricted assets for the payment of IMPA's share of the asset retirement obligations totaling approximately \$13.0 and \$10.8 million at December 31, 2019 and 2018, respectively.

9. Arbitrage

A rebate payable to the Internal Revenue Service (IRS) generally results from the investment of bond proceeds at a higher rate of interest than the cost of borrowing. The excess of interest income over cost of borrowing is payable to the IRS within five years of the date of the bond offering and every five years thereafter. At December 31, 2019 and 2018, the Agency did not have a rebate payable. The estimated arbitrage expense is recorded as a reduction of interest income.

10. Concentration of Risk

Credit risk represents the risk of loss that would occur if suppliers or customers did not meet their contractual obligations to IMPA. Concentration of credit risk occurs when significant suppliers or customers possess similar characteristics that would cause their ability to meet contractual obligations to be affected by the same events.

Approximately 28% of the Agency's sales to municipalities were provided to two communities for the periods ended December 31, 2019 and 2018. Accounts receivable balances for the two communities account for 30% and 29% of the total municipality accounts receivable balances as of December 31, 2019 and 2018, respectively. IMPA has long-term energy purchase contracts with two suppliers that account for approximately 32% of IMPA's total energy for the years ended December 31, 2019 and 2018.

11. Jointly-Owned Plant

IMPA is a joint owner of Gibson Unit 5, Trimble County Units 1 and 2, Prairie State Units 1 and 2 and co-owns certain transmission property and local facilities. IMPA's portion of all operating costs associated with the commonly-owned facilities is reflected in the consolidated financial statements. For further discussion of Jointly-Owned Plant, see Note 1, Utility Plant.

IMPA's investments in jointly-owned plant at December 31, 2019 were as follows (in thousands):

	Share	Utility Plant In Service	Accumulated Depreciation
Production			
Gibson Unit 5	24.95%	\$ 199,381	\$ 98,405
Prairie State Units 1 & 2	12.64%	756,967	147,849
Trimble County Units 1 & 2	12.88%	320,884	117,727
Transmission and local facilities	5.35%	181,902	58,456

12. Commitments and Contingencies

Contracts and Capital Expenditures

IMPA has purchased power contracts with several power producers. IMPA has firm commitments under take-or-pay contracts which expire on or before April 1, 2042. The total amount of these future purchase obligations at December 31, 2019 was approximately \$132.3 million for 2020 and \$2.0 billion through April 1, 2042. These future purchase obligations include the Ratts Solar PPA discussed in Note 13, Subsequent Events.

IMPA anticipates its share of future capital expenditures for Gibson Unit 5, Prairie State Units 1 and 2, Trimble County Units 1 and 2, the combustion turbines, the JTS and other ongoing system projects to total approximately \$368 million for the years 2020 through 2024. The projected capital expenditures include both environmental improvements and expenditures of a normal and recurring nature. IMPA anticipates funding the foregoing projected capital improvements with a combination of internally generated funds and proceeds from future debt offerings.

Environmental Protection Agency Matters

The Cross State Air Pollution Rule and the Cross State Air Pollution Update Rule

The Cross State Air Pollution Rule (CSAPR) aims to reduce emissions of SO₂ and NO_x from electric generating units greater than 25 MW in the eastern half of the United States by controlling 28 upwind states from preventing downwind states from reaching their emission reduction goals for particulate matter (PM_{2.5}) and ozone standards. The proposed Cross State Air Pollution Update Rule (CSAPR Update Rule) would further reduce emissions of NO_x from generating units in 23 states, including Indiana, Illinois and Kentucky. IMPA expects that the Agency will have to acquire SO₂ and NO_x emission allowances in order to comply with CSAPR, but there will be no material impact on IMPA's generating facilities. The full impacts of the proposed CSAPR Update Rule on IMPA's generating units are not yet known.

The Clean Power Plan and The Affordable Clean Energy Rule

The EPA has issued a final rule repealing the Clean Power Plan (CPP) and publishing the Affordable Clean Energy Rule (ACE Rule). The ACE Rule replaces the CPP and seeks to reduce emissions through efficiency increases for coal-fired units using an inside-the-fence framework and specific standards, subject to EPA approval, to be set by each state. State governments will have 3 years to provide their plans to the EPA, which will have 1 year to approve such plans. The Indiana Department of Environmental Management (IDEM) is collecting data for the purpose of preparing its State Implementation Plan. IMPA's combustion turbines and renewable portfolio are exempt from the terms of the ACE Rule, and its coal-fired units will not be affected until the relevant state plans are approved by the EPA; however, IMPA does not anticipate a material impact on its facilities arising from the ACE Rule's implementation.

Contract Disputes

In the normal course of business, IMPA may be involved in various disputes with other parties. While management cannot predict the ultimate outcome of these disputes, total exposure as of the report issuance date is not material to IMPA's financial position or results of operations.

13. Subsequent Events

In January 2020, IMPA entered into a purchase power agreement (the Ratts Solar PPA) to purchase 100% of the output from the planned 100 MW Ratts solar generation project (the Ratts Solar Project). The Ratts Solar Project will be located in Pike County, Indiana and is currently planned to commence commercial operations during the first quarter of 2022. The Ratts Solar PPA is a 20 year agreement beginning when the Ratts Solar Project commences commercial operations.