

Grand River Dam Authority

(A Component Unit of the State of Oklahoma)

Basic Financial Statements as of and for the
Years Ended December 31, 2018 and 2017
Required Supplementary Information (Unaudited)
and Independent Auditors' Report

GRAND RIVER DAM AUTHORITY
(A Component Unit of the State of Oklahoma)

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INDEPENDENT AUDITORS' REPORT

To the Board of Directors
Grand River Dam Authority
Vinita, Oklahoma

Report on the Financial Statements

We have audited the accompanying financial statements of Grand River Dam Authority, as of and for the year ended December 31, 2018, and the related notes to the financial statements, which collectively comprise the Grand River Dam Authority's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these 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 financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Grand River Dam Authority's preparation and fair presentation of the 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 Grand River Dam Authority'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 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 financial statements referred to above present fairly, in all material respects, the financial position of Grand River Dam Authority as of December 31, 2018, and the respective changes in financial position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matters

As discussed in Note 1, the Grand River Dam Authority adopted the provisions of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, effective January 1, 2018. Our opinion is not modified with respect to this matter.

The financial statements of the Grand River Dam Authority, as of and for the year ended December 31, 2017, were audited by other auditors whose report dated March 31, 2018, expressed an unmodified opinion on those statements.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the required supplementary information as listed in the table of contents 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 and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit 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.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have issued our report dated March 28, 2019 on our consideration of the Grand River Dam Authority's internal control over financial reporting and on tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal controls over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Grand River Dam Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Grand River Dam Authority's control over financial reporting and compliance.

Baker Tilly Virchow Krause, LLP

Madison, Wisconsin
March 28, 2019

Management's Discussion and Analysis – Unaudited

The following discussion and analysis of the Grand River Dam Authority's (GRDA or the Authority) financial performance provides an overview of the Authority's financial activities for the year ended December 31, 2018, and provides a comparison with the prior years' financial results. Please read it in conjunction with the financial statements, which follow this section.

USING THIS FINANCIAL REPORT

This annual financial report consists of a series of financial statements and reflects the self-supporting, proprietary activities of the Authority funded primarily by the sale of electrical power and energy.

The State of Oklahoma reports the business-type activities of the Authority as a discretely presented major component unit.

The basic financial statements presented in this report consist of the Statements of Net Position; the Statements of Revenues, Expenses, and Changes in Net Position; the Statements of Cash Flows; and the Notes to Financial Statements.

STATEMENTS OF NET POSITION; STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION; STATEMENTS OF CASH FLOWS; AND NOTES TO FINANCIAL STATEMENTS

The Authority's Statements of Net Position and Statements of Revenues, Expenses, and Changes in Net Position provide an indication of the Authority's financial health.

The Statements of Net Position include all of the Authority's assets and liabilities, using the accrual basis of accounting, as well as an indication of which assets can be used for general purposes and which are restricted as a result of bond covenants or for other purposes.

The Statements of Revenues, Expenses, and Changes in Net Position report all of the Authority's revenues and expenses during the time periods indicated.

The Statements of Cash Flows report the cash provided and used by operating activities, as well as other cash sources, such as investment income or bond proceeds, and other cash uses, such as cash payments for repayment of bonds and capital additions.

The Notes to Financial Statements provide additional explanation and details about the financial information.

FINANCIAL HIGHLIGHTS

The Authority's financial focus for 2018 was on "The Year of Efficiency". As the first full fiscal year operating Grand River Energy Center (GREC) Unit 3 (GREC 3) as well as operating GREC Unit 2 (GREC 2) after its refurbishment following the 2016 fire, discussed more below, GRDA's management concentrated on streamlining business practices to reduce operating costs.

The rating increases received in 2016 serve as testimony of the Authority's continually improving financial position and were reaffirmed by the rating agencies preceding the advanced refunding of a portion of the Series 2010A Revenue Bonds in August 2017.

On the evening of July 1, 2016, a lightning strike precipitated a fire at the GREC, which resulted in a short outage of GREC Unit 1 (GREC 1) and the impairment of GREC 2. GREC 1 was successfully returned to operation July 19, 2016, and GREC 2 was returned to service in September 2017. As of the end of 2018, restoration of the turbine-generator and auxiliary systems were completely finalized. The Authority incurred approximately \$146.6 million in damages; however, the Authority is fully insured and has been made mostly whole by its insurer. Costs to the Authority were materially limited to \$4.7 million, which includes the \$1.3 million insurance policy deductible.

GREC 3 first produced energy to the grid in March 2017. GREC 3 construction reached the milestone of sellable power on June 1, 2017, and then achieved substantial completion December 23, 2017.

The Authority has contracts for firm wind purchases of 387 MW from Oklahoma wind farms, with 140 MW of that being placed into service January 1, 2018. In combination with existing hydroelectric generation, these diverse resources allow the Authority to produce low-cost, reliable electricity for customers while also striving to excel in environmental stewardship.

FINANCIAL HIGHLIGHTS - DECEMBER 31, 2018, 2017, AND 2016

	2018	2017	2016
CONDENSED SCHEDULE OF NET POSITION			
Assets:			
Current assets	260,455,415	204,502,845	266,859,465
Net utility plant	1,218,249,936	1,246,041,479	1,244,661,834
Noncurrent investments	308,789,981	323,806,627	309,973,763
Other noncurrent assets	1,772,872	97,059	146,150
Total assets	1,789,268,204	1,774,448,010	1,821,641,212
Deferred outflows related to pension plans	7,326,606	10,358,992	17,765,376
Deferred outflows related to other postemployment benefits	1,068,541	-	-
Deferred outflows related to loss on reacquired debt	34,523,355	37,967,108	29,563,900
Deferred outflows related to derivative hedges	-	539,198	-
Total deferred outflows	42,918,502	48,865,298	47,329,276
Liabilities:			
Current liabilities	80,407,089	63,263,166	111,699,020
Noncurrent liabilities	1,078,066,715	1,108,505,456	1,130,293,579
Total liabilities	1,158,473,804	1,171,768,622	1,241,992,599
Deferred inflows related to pension plans	3,574,189	3,582,289	588,385
Deferred inflows related to regulated operations	46,947,793	42,959,617	28,501,794
Deferred inflows related to derivative hedges	700,390	-	-
Total deferred inflows	51,222,372	46,541,906	29,090,179
Net Position:			
Net investment in capital assets	239,876,589	269,911,995	271,706,418
Restricted for:			
Debt service	15,286,250	8,610,000	1,445,001
Rate stabilization	-	-	21,000,000
Other special purposes	2,201,996	2,230,264	2,377,982
Unrestricted	365,125,695	324,250,521	288,348,309
Total net position	622,490,530	605,002,780	597,887,710

FINANCIAL HIGHLIGHTS - DECEMBER 31, 2018, 2017, AND 2016 (continued)

	2018	2017	2016
CONDENSED SCHEDULE OF CHANGES IN NET POSITION			
Operating Revenues:			
Sales of power	399,488,356	422,294,469	428,066,100
Other operating revenues	37,037,056	13,710,781	14,157,387
Regulatory asset revenues	1,098,338	535,403	-
Transfer (provision) for rate stabilization	-	-	(21,000,000)
Total operating revenues	437,623,750	436,540,653	421,223,487
Non-Operating Revenues:			
Investment income	4,620,856	7,582,222	20,394,413
Net increase (decrease) in fair value of investments	(1,222,703)	606,602	(2,491,488)
Award revenue - operating	253,218	487,466	458,782
Income (loss) - nonoperating	(97,966)	10,565,313	(14,251,649)
Income from nonutility operations	(877,453)	(883,924)	2,076,492
Costs (recovered) to be recovered	(5,070,883)	(15,259,799)	-
Total non-operating revenues	(2,394,931)	3,097,880	6,186,550
Total revenues	435,228,819	439,638,533	427,410,037
Operating Expenses:			
Fuel	(94,802,749)	(70,435,652)	(119,783,385)
Purchased power – net	(88,779,253)	(138,401,740)	(78,339,797)
Depreciation	(80,383,786)	(71,935,555)	(69,673,894)
Operations	(61,009,966)	(61,887,909)	(55,939,972)
Maintenance	(28,162,855)	(29,456,552)	(30,436,172)
Administrative and general	(18,132,047)	(22,355,136)	(16,048,057)
Total operating expenses	(371,270,656)	(394,472,544)	(370,221,277)
Non-Operating Expenses:			
Interest expense	(50,110,812)	(50,821,244)	(50,991,904)
Amortization of debt discount and expense	(92,894)	(878,282)	(8,276,662)
Amortization of bond premium	11,206,324	10,450,953	3,993,414
Total non-operating expenses	(38,997,382)	(41,248,573)	(55,275,152)
Total expenses	(410,268,038)	(435,721,117)	(425,496,429)
Award revenue - capital	5,170,213	3,197,654	1,470,730
Net increase in net position	30,130,994	7,115,070	3,384,338
Net Position – Beginning of year	605,002,780	597,887,710	594,503,372
Adoption of new accounting standard	(12,643,244)	-	-
Net Position – Beginning of year, as restated	592,359,536	597,887,710	594,503,372
Net Position – End of year	622,490,530	605,002,780	597,887,710

Events that drove the results for the Authority in 2018 centered on the focus of efficiency. For 2017, the previously mentioned fire at the GREC accounted for many shifts in Operating Results. Events of 2017 also included the advanced refunding of debt transactions. In August 2017, the Authority issued \$90.5 million in revenue bonds, refunding existing debt and capitalizing on the opportunity for lower interest rates.

GRDA is a member of the Southwest Power Pool (SPP) Regional Transmission Organization (RTO). The SPP Integrated Marketplace was the source for a supply of low cost energy to meet the requirements of GRDA customers. A combination of low natural gas prices and an abundant supply of wind generation resulted in lower costs for GRDA customers during both 2017 and 2018. Sales of power have declined slightly over the last two years, with 2018 being 5% less than 2017, and 2017 seeing a 1% decrease from sales in 2016. This is discussed further in Operating Revenues.

The Authority implemented Governmental Accounting Standards Board (GASB) Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits other than Pensions* (GASB 75) that required the restatement of opening net position for 2018. See Note 7 to Financial Statements, Retirement Plans, Postretirement, and Other Employee Benefits for the impact to the Authority.

The financial results are further discussed in the following paragraphs and reflect the financial impact of the highlights mentioned.

Net Position

The Net Position increased by \$17.5 million or 3%, following a \$7.1 million or 1% increase in 2017. Both increases in Net Position were the result of net income.

Total Assets increased by \$14.8 million or 1% in 2018 after decreasing \$47.2 million or 3% in 2017. The 2018 increase is mostly attributable to the \$58.3 million increase in current cash and investments offset by a \$27.8 million reduction in Net Utility Plant and a decrease of \$12.9 million in Under Recovered Fuel Costs. The decrease in 2017 Total Assets is comprised of a \$62.4 million decrease in Current Assets offset by an \$11.8 million increase in Noncurrent Investments.

Current Assets increased by \$56.0 million or 27% in 2018 after decreasing by \$62.4 million or 23% in 2017. The 2018 increase is materially due to an increase in current general operating account investments of \$71.1 million offset by a decrease of \$20.9 million in general operating cash and cash equivalents. Money market funds decreased \$21.5 million in 2017 due to a December 2016 transfer of \$25.0 million from Construction Funds to the Revenue Fund. Since these reimbursements were processed late in the year, they were held as current investments at year-end 2016 but were converted to long-term investments shortly thereafter, accounting for the 2017 decrease. Accounts receivable decreased by \$14.8 million or 27% in 2017 as compared to 2016, of which \$12.8 million was attributable to significant completion of the GREC 2 fire restoration work.

Materials and Supplies inventory included in Current Assets increased \$14.6 million or 36% in 2018 after only increasing by \$158 thousand in 2017. This is due to significant shifts in the inventories on hand. The addition of GREC 3 triggered the requirement to stock spare parts not previously kept on hand, which initialized in 2017 and continued throughout 2018. The Authority also disposed of \$4.6 million of obsolete inventory in 2017 that resulted from the discontinuation of GREC 1 as a coal-fired generating unit and the upgrade of several systems due to the July 2016 GREC 2 fire.

Receivables for under recovered fuel costs were reduced to zero in 2018 as they were recovered through the Power Cost Adjustment (PCA) throughout the year. This followed a \$2.4 million increase for 2017.

Net Utility Plant had a net decrease for the first time in many years in 2018 as major construction projects were completed in prior years. This decrease of \$27.8 million or 2% consists of additions to assets in the amount of \$53.3 million offset by \$7.8 million of retirements and annual depreciation expense of \$73.3 million. Net Utility Plant remained nearly the same throughout 2017, only increasing \$1.4 million, which represents 0.1% increase over 2016. Total 2017 additions were \$76.7

million, offset by \$70.5 million of depreciation and \$4.9 million in net retirements. More detailed information about changes in Net Utility Plant is presented in Note 4 to Financial Statements, Utility Plant.

Noncurrent Investments, which includes noncurrent prepaid assets, decreased \$15.0 million or 5% after it increased \$13.8 million or 4% in 2017. The 2018 decrease resulted from the spending of the remaining Construction Funds on hand to complete the final milestone payments for the construction of GREC 3. The 2017 increase was a result of a \$55.7 million increase in General Reserve Fund, offset by a \$44.5 million decrease in Construction Funds, which were also paid toward construction of GREC 3.

Portions of Series 2010A Bonds were refunded with the issuance of \$90.5 million Series 2017 Bonds, resulting in an estimated net present value savings of \$11.1 million.

Additional information about the Restricted Investments is presented in Note 2 to Financial Statements, Deposits and Investments. Restricted Assets are discussed later in more detail in the Significant Assets and Debt Administration section.

Noncurrent Prepaid Assets decreased by \$6.5 million related to long term service agreement work for the Redbud generating facility after increasing in 2017 by \$2.0 million due to payments made toward the Redbud advanced hot gas path upgrades that will be installed in 2019.

Current Liabilities increased in 2018 by \$17.1 million or 27%, after decreasing \$48.4 million or 43% in 2017. Accounts Payable and Accrued Liabilities balances have leveled out, decreasing in 2018 by \$2.3 million or 5%, following a decrease of \$20.4 million or 31% in 2017. The 2017 decreases in Accounts Payable and Accrued Liabilities were due to the substantial completion of GREC 3 and fire restoration work at GREC 2. The 2018 increase in Current Liabilities is mostly attributable to an increase of \$11.4 million in Bonds Payable. Unearned Revenue Related to Insurance Proceeds had decreased to only \$21 thousand by the end of 2017; however, this increased by \$1.5 million in 2018. To facilitate timely and efficient reimbursement of expenditures related to the fire, the insurance carrier advanced funds which were deposited in a restricted account by GRDA. This account has been the source to replenish cash following approval by the insurance company. The balance of the amount unearned by the Authority at the end of each year is presented as part of Current Liabilities.

Noncurrent Liabilities, which include the long-term obligations for revenue bonds outstanding, decreased by \$30.4 million or 3% after decreasing \$21.8 million or 2%. Both the 2018 and 2017 decreases are attributable to payments of principal on outstanding debt and reductions in Bonds Payable related to the advanced bond refunding transactions. In 2018, Noncurrent Liabilities other than Bonds Payable increased by \$6.9 million or 32% after decreasing by \$7.6 million or 26%. Changes in the net pension liability and other postemployment benefit liabilities account for the vast majority of the remaining changes in each year. Additional details about bonds outstanding are presented in Note 6 to Financial Statements, Bonds Payable, and details about pension and other postemployment benefit liabilities are presented in Note 7 to Financial Statements, Retirement Plans, Postretirement, and Other Employee Benefits.

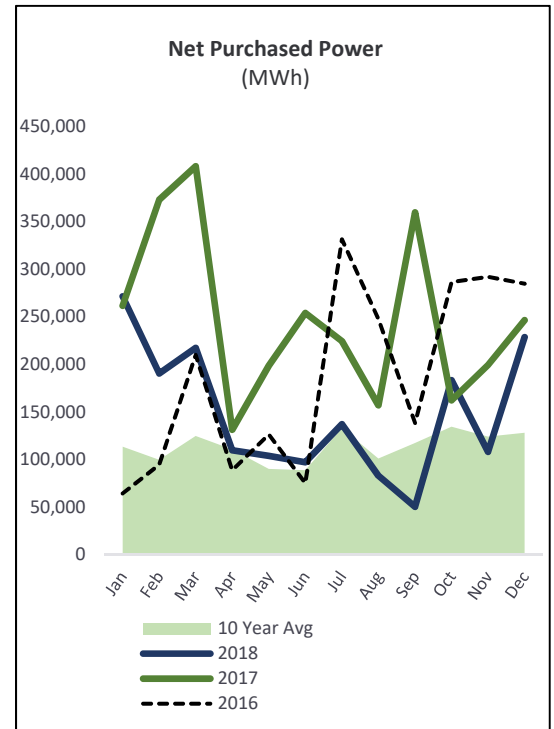
Deferred Outflows of Resources decreased by \$5.9 million or 12% in 2018 after remaining relatively consistent, only increasing \$1.5 million or 3% from 2016 to 2017. Conversely, Deferred Inflows of Resources increased \$4.7 million or 10% in 2018 after a similar \$17.5 million increase in 2017. These are discussed in further detail in Deferred Inflows of Resources and Deferred Outflows of Resources.

Unrestricted Net Position, which represents the part of net position used to finance day-to-day operations without constraints established by debt covenants, enabling legislation, or other legal agreements, increased by \$40.9 million or 13% in 2018, following an increase of \$36.1 million or 13% in 2017.

OPERATING RESULTS

The Authority was embracing new beginnings as it came into 2018, with the completion of the restoration of GREC 2 and construction of GREC 3. It remains a testament to the resiliency and flexibility of the Authority that operating and financial results remained positive in 2017 and continued to improve in 2018. The Authority has now operated nearly five years in SPP's Integrated Marketplace, which has provided more financial certainty through the availability of economical Purchased Power.

The graph titled "Net Purchased Power (MWh)" depicts the Authority's hourly net purchases of energy from the Integrated Marketplace. As is evidenced by the comparisons of 2016, 2017, and 2018 versus the ten-year average in the light green shaded area, purchases of power in 2018 returned to a more seasonal pattern as power was purchased to supplement owned generation, whereas in 2017, power was purchased to fill the need for absence of owned generation. The SPP Integrated Marketplace is designed such that the lowest variable cost generation is dispatched ahead of the higher variable cost resources. The continuation of low natural gas prices and the growth of wind resources in SPP have both contributed to the availability of low-priced market energy. The Authority's need to replace generation from GREC 2 due to the fire-related outage and the discontinuation of GREC 1 as a coal-fired unit influenced the purchases of power for 2017. GREC 3, which was constructed to replace the base capacity of GREC 1, first produced energy to the grid in March of 2017, which accounts for the sharp drop of Purchased Power in early 2017 and the lower overall annual purchased power for 2018.

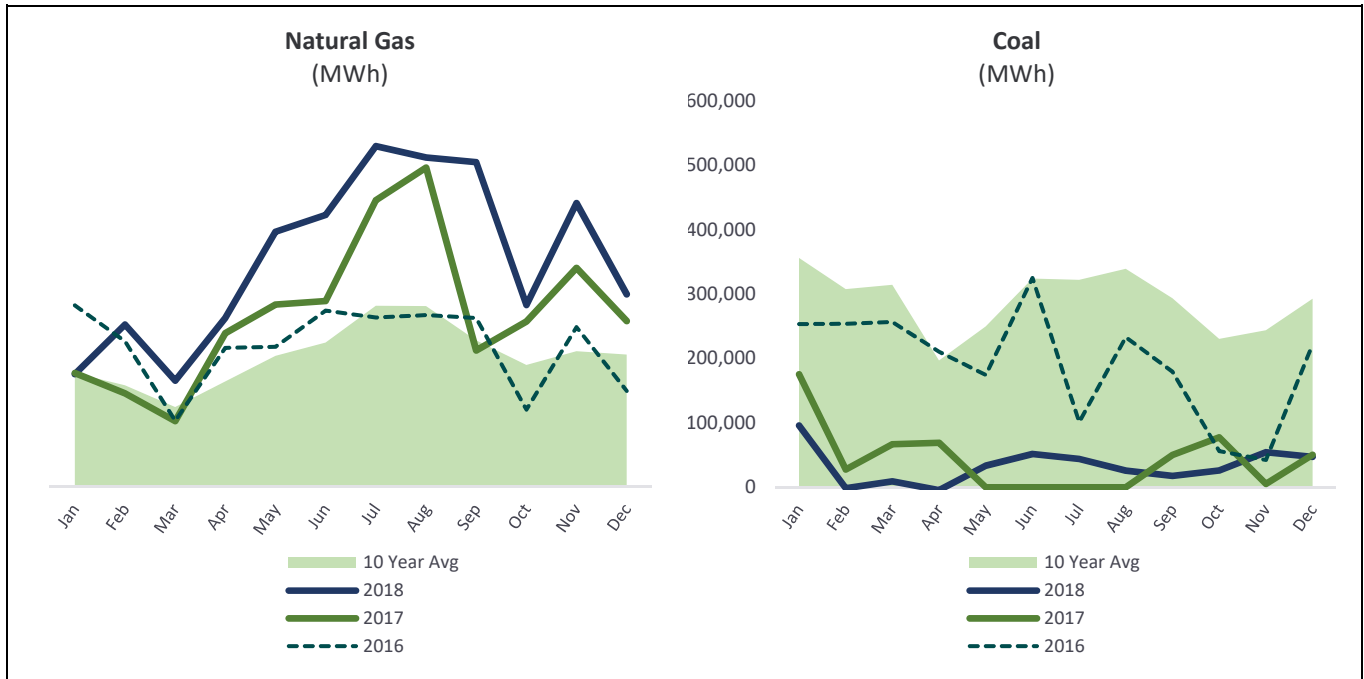


The Authority's resources have included wind through purchased power agreements since 2013. The most recent addition, Red Dirt Wind, became commercially operational January 1, 2018. The energy produced from these projects is recorded as Purchased Power. The wind purchase agreements provide a hedge against possible increases in fuel costs in future years and help to expand the Authority's diversified energy portfolio.

Sales into the spot market represented slightly less than 2% of Total Operating Revenues in 2018 and slightly less than 1% in 2017. The Authority does not rely on significant spot sales revenue to meet its payment obligations or debt coverage requirements.

As demonstrated by the graph titled "Coal (MWh)", the generation for coal has been substantially lower than the historical ten-year average beginning the second half of 2016 due to the outage caused by the catastrophic fire in that year. While GREC 2 was available for operation beginning in September 2017, coal prices have remained uneconomical as compared to both natural gas and the overall available market energy through the end of 2018. This is in combination with the April 2017 discontinuation of GREC 1 as a coal-fired generating unit.

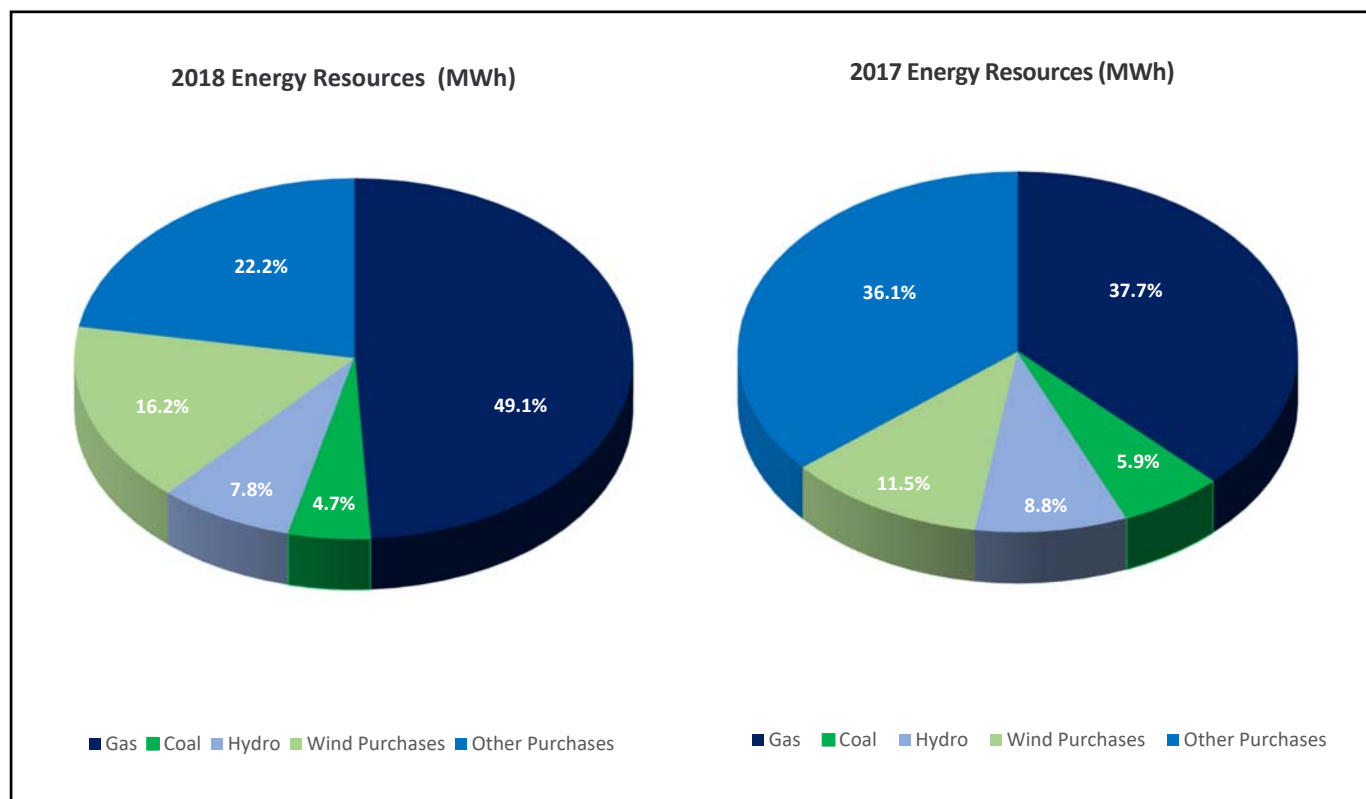
The graphs titled "Natural Gas (MWh)" and "Coal (MWh)" reflect the use of the Authority's thermal generation resources. The graph titled "Natural Gas (MWh)" indicates the heavy reliance on GREC 3 and Redbud during the summer months of 2018 and 2017.



Though its impact has remained immaterial to the financial results, the Authority expanded an Energy Hedging Program in 2017 that manages market, counterparty, volume, budget, regulatory, model, and operations risks through Risk Management Policies. The Board of Directors of the Authority is responsible for an overall understanding of risks and the internal Risk Oversight Committee is responsible for primary operational risk oversight and the implementation of the Risk Management Policies. The Energy Hedging Program has three essential objectives: (1) to achieve a customer power cost to serve native load and off-system firm load at a cost that is materially close to the budgeted amount; (2) to reduce the Authority’s exposure to volatile swings in energy and hedging costs and to limit the uncertainty related to market timing when purchasing fuel-related hedges by purchasing a portion of required hedges on a programmatic basis; and (3) to maintain a degree of flexibility allowing the Authority to benefit from a favorable energy market. As these transactions relate to natural gas, realized gains and losses as a result of these hedges are recognized as fuel expense. See Deferred Inflows of Resources and Deferred Outflows of Resources for further discussion.

The graphs titled “2017 Energy Resources (MWh)” and “2018 Energy Resources (MWh)” indicate the energy resources mix upon which GRDA relies to meet the customers’ load needs. The availability of adequate generation capacity, along with a reliable transmission system and firm customer contracts, ultimately drive the operating and financial results. The common trend between 2017 and 2018 graphs is the continuing decrease in the Authority’s coal generation and the increase in gas generation as GREC 3 was online for its first full year. Wind generating resources have also increased from 2017 to 2018. While the hydro units continue to play a vital role in both reliability and available capacity, their part in the energy resources mix has lessened in 2018 and 2017.

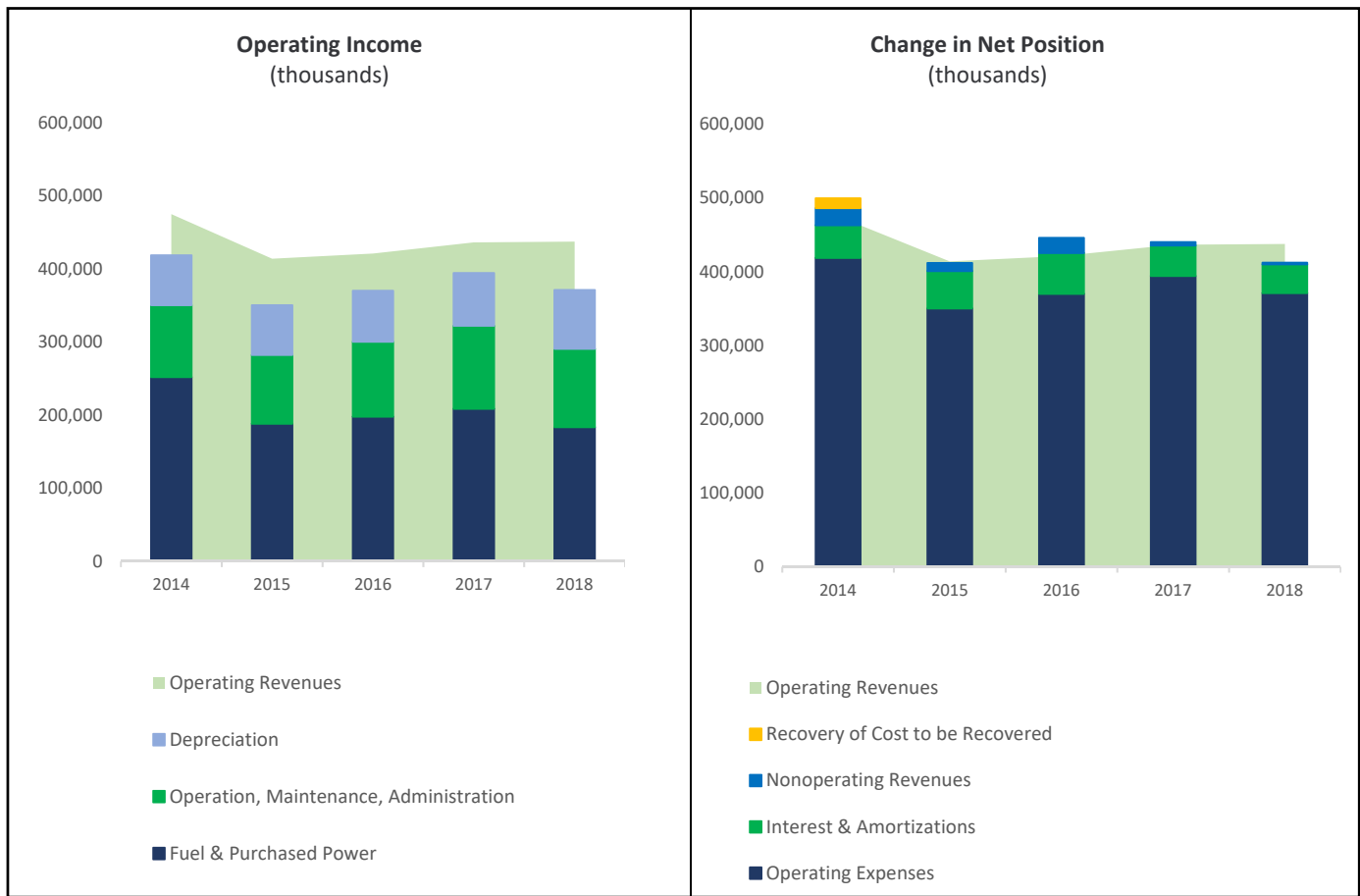
The Authority has a generation portfolio that provides diversity and employs an experienced team in power marketing that uses those resources in conjunction with the hedging program to minimize risks and volatility for the Authority.



OPERATING INCOME

Operating Income		
	<u>2018</u>	<u>2017</u>
Total operating revenues	437,623,750	436,540,653
Total operating expenses	(371,270,656)	(394,472,544)
Operating Income	66,353,094	42,068,109

Operating Income increased \$24.3 million or 58% after decreasing by \$8.9 million or 18% in 2017. Operating



Revenues continue to experience slight increases year over year as 2018 increased \$1.1 million or less than 1% after also increasing \$15.3 million or 4% in 2017.

Other Operating Revenues include recovery of revenue requirements for transmission plant recovered through the SPP’s administration of the transmission tariffs, as well as revenues associated with an Integrated Transmission Agreement. Other Operating Revenues increased by \$23.3 million in 2018 following a \$447 thousand decrease in 2017. Additionally, Non-operating Revenues decreased \$3.2 million in 2018 after increasing \$10.9 million in 2017. Non-operating Revenues primarily includes Investment Income.

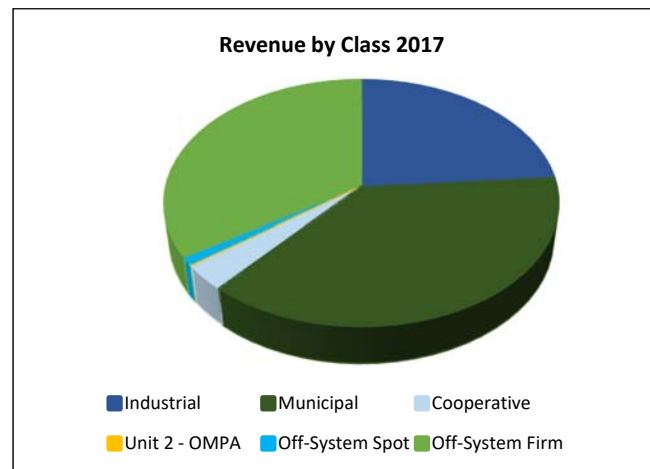
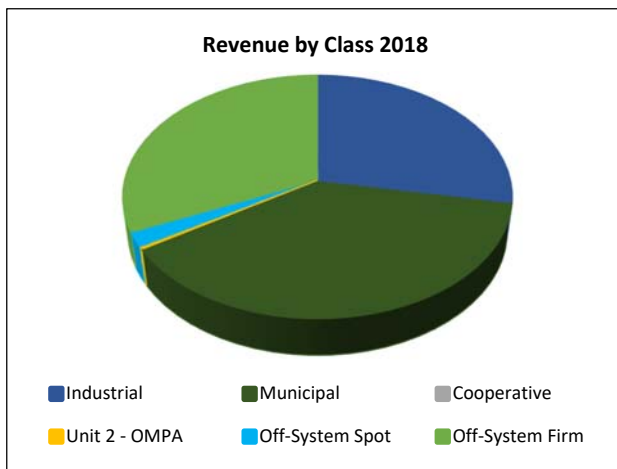
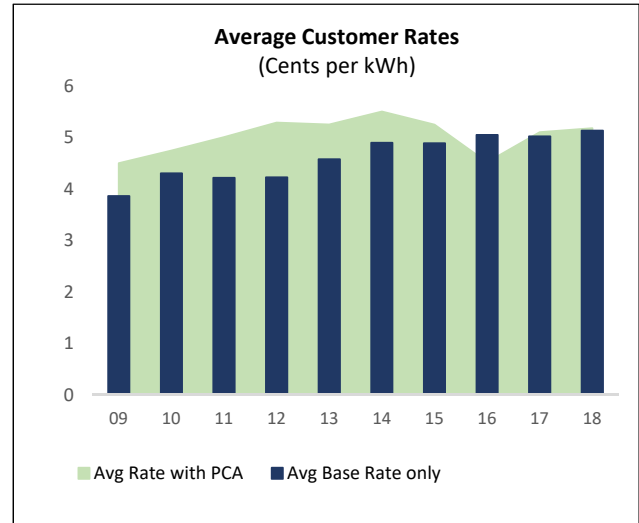
Award revenue - capital includes revenues from third parties for capital asset additions, which were deferred by the Authority by following accounting for regulated operations in accordance with GASB Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements* (GASB 62), which is discussed in further detail in Deferred Inflows of Resources and Deferred Outflows of Resources.

Operating Expenses decreased by \$23.2 million or 6% in 2018 after they increased in 2017 by \$24.3 million or 7%. As previously discussed, Purchased Power, which includes purchased energy and purchased capacity, has been a significant resource for the Authority over the last two years. This resulted in an increase in Purchased Power expense of \$60.1 million or 77% in 2017. However, in 2018, costs shifted back to fuel to operate owned generation, which led to a \$49.6 million decrease. Fuel costs increased \$24.4 million in 2018 following a 2017 decrease of \$49.3 million.

The graph labeled “Operating Income (thousands)” reflects both operating revenues and operating expenses, and the difference in the column height and the shaded area represents operating income. Operating Revenues are combined with Other Non-operating Revenues, primarily interest and investment income, to pay the Authority’s expenses. As can be seen in the “Change in Net Position (thousands)” graph to the right of the “Operating Income (thousands)” graph, revenues have consistently exceeded expenses.

OPERATING REVENUES

Operating Revenues increased slightly for 2018, by \$1.1 million after a 2017 increase of \$15.3 million. The largest contributor to Operating Revenues is Sales of Power, which has decreased the last two consecutive years. In 2018, Sales of Power decreased \$22.8 million or 5% following a \$5.8 million or 1% decrease in 2017. While overall sales declined over the last two years, GRDA's industrial load has experienced steady increases year over year due to growth in the MidAmerica Industrial Park, increasing 20% in MWh sales in 2018 and 10% in 2017. Off System Firm sales decreased by 14%, accounting for the overall decrease in sales of power. The discontinuation of service to a cooperative load as of June 1, 2017, accounted for the majority of the 6% decrease of MWh sales in 2017. This is illustrated in the graphs titled "Revenue by Class 2018" and "Revenue by Class 2017".



Other Operating Revenues increased by \$23.3 million in 2018 after decreasing by \$447 thousand in 2017. The 2018 increase is largely contributable to a settlement of a multi-year contract renewal for an integrated transmission agreement of \$16.8 million and a credit received from SPP related to a settlement of Annual Revenue Rights of \$5.2 million.

The Authority is empowered to set rates as necessary to provide for operating expenses and debt service payments. When deemed necessary by the Board of Directors, rates can be raised after Board approval by providing at least 60 days' notice to the Authority's customers. By statute, the Authority is a self-regulated entity, and its rates do not come under the jurisdiction of the Oklahoma Corporation Commission. The rates charged by the Authority for the sale of electric power and energy are not currently regulated by FERC or any other state or federal authority; however, GRDA's transmission tariff is filed and approved by FERC as part of the SPP open access tariff.

Oklahoma law requires the Authority to maintain rates which are sufficient to produce adequate revenues to fulfill the obligations of the Authority. These obligations include payment of all maintenance and operation expenses, interest and principal of all bonds, sinking fund and/or reserve fund payments agreed to be made in respect of any such bonds, and any other obligations or agreements made with the holder of such bonds and/or with any person on behalf of such holder. The Authority agreed with its customers to not adopt or charge excess rates and to ensure rates will be applied to all customers served under the same rate schedules at the same service level in a reasonable and not unduly discriminatory manner.

The Authority's rates have three main components: capacity, energy, and PCA. The amount of the rate is dependent upon the level of service for which the customer has contracted: generation bus, transmission, primary distribution, or distribution.

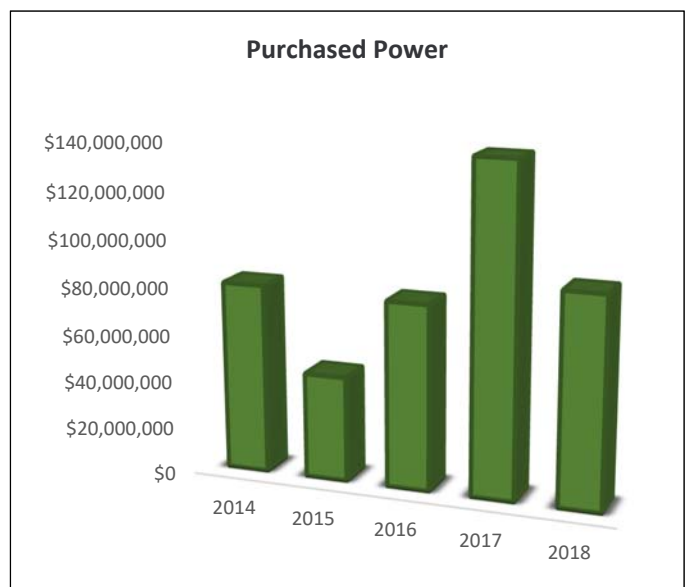
The PCA is an adjustment mechanism that allows the Authority to recover variations between estimated and actual fuel and purchased power costs for contract sales to Wholesale and Retail customers. The Authority's 2018 energy rates

included a base rate of 23 mills per kWh as the estimated power cost (fuel and purchased power). The difference of projections of power cost over a 12-month rolling period less the base rate are reflected in the customer rates as the PCA rate. All contract sales are subject to the PCA except for the GREC 2 output contract with Oklahoma Municipal Power Authority (OMPA), which is cost based, and any spot-market, short-term sales. The revenues also reflect an accrual of any over or under-collected fuel cost. Approximately \$6.6 million in fuel and purchased power costs were over-recovered on December 31, 2018, while \$12.9 million were under-recovered at the end of 2017.

OPERATING EXPENSES

Operating Expenses for 2018 decreased by \$23.2 million or 6 % after a 2017 increase of \$24.3 million or 7%. As previously mentioned, Purchased Power expense dropped in 2018 by \$49.2 million or 36% after it increased \$60.1 million or 77% in 2017. For the first time in the history of the Authority's operation, the 2017 Purchased Power represented the largest Operating Expense in any given year. Historically, the Operating Expenses have typically been headlined by Fuel, followed by Depreciation. While Depreciation remained the Authority's second largest operating expense, Fuel dropped to third. This was significant in that it is representative of the depth of value that participating in the SPP Integrated Marketplace provides to the Authority's customers, as well as the lower cost of natural gas as our main generating unit as compared to coal. See the graph titled "Purchased Power" for the trend in Purchased Power expenses over the last five years. In 2018, the Operating Expense mix returned more closely to historical norms. Fuel increased \$24.4 million or 35% in 2018 as the Authority generated more power from owned resources and drew from the Integrated Marketplace less. Operations and Maintenance expenses decreased by \$2.2 million or 2% after increasing by \$5.0 million in 2017 or 6%. The 2018 decrease is due to the implementation of multiple operational efficiencies at the GREC and throughout the hydro generation operations. Administrative and General Expenses have decreased by \$4.2 million or 19%, following an increase of \$6.3 million or 39% in 2017.

Depreciation expense increased by \$8.5 million or 12% in 2018 after increasing by \$2.3 million or 3% in 2017. The 2018 and 2017 increases are partly attributable to the Authority's gross assets continued increase. The remainder of the 2018 increase relates to the early retirement of assets at the Redbud generating facility.



As previously stated, Administrative and General Expenses decreased in 2018 by \$4.2 million or 19% after an increase of \$6.3 million or 39% in 2017. These fluctuations are materially due to the GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*, impact to recording pension expense, which is discussed further in Deferred Inflows of Resources and Deferred Outflows of Resources. Historically, Administrative and General Expenses included the settlement of claims, insurance deductibles, employee insurance premiums, and post-retirement benefits. With the implementation of GASB Statement No. 68, GRDA has experienced some variability of expenses in this area. The Statement requires current year contributions to be recorded as a reduction in the long-term pension liability rather than a current year expense and introduced other variables to recognition of current year expense. For 2018, the Authority also implemented GASB 75. Similar to the Statement related to pensions, this Statement establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expense for defined benefit other post-employment benefits. This required the Authority to restate opening Net Position, reducing it by \$12.6 million.

SIGNIFICANT ASSETS AND DEBT ADMINISTRATION

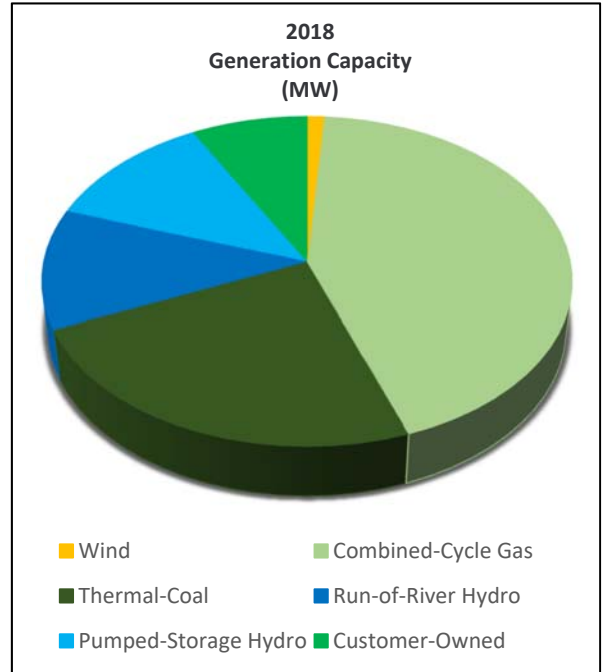
On August 30, 2017, the Authority issued Series 2017 Revenue Bonds to refund certain portions of the Authority's Series 2010A Revenue Bonds. The Authority refunded approximately \$95.6 million in par value of bonds and issued \$90.5 million in bonds for a debt reduction of approximately \$5.1 million. The new bonds were sold with an all in cost of 3.61%. The present value savings to the Authority's customers from this transaction was estimated to be \$11.1 million.

Capital Assets

While significant asset additions for 2017 included the continuing progress toward the commissioning of GREC 3 and the refurbishment of GREC 2, which included the installation of a high-pressure turbine and generator-circuit breaker, 2018 capital additions were mostly related to construction of infrastructure to serve new and expanding customers and investment related to the relicensing of the Pensacola hydro project.

The Authority continues to reinvest in the transmission and distribution systems, as well as the communication system, upgrading and replacing components of lines, substations, and repeaters to ensure reliability in meeting our customers' needs.

As shown in the Note 4 to Financial Statements, Utility Plant, the majority of Net Utility Plant consists of a diverse mixture of hydroelectric, coal, and natural gas generation resources supported by a transmission system for the delivery of power and energy. The pie chart labeled "2018 Generation Capacity (MW)" reflects GRDA's generation capacity by fuel source.



Restricted Assets

The Authority's General Bond Resolution No. 5107 requires Debt Service Reserve Funds (DSRF) to be set aside and that the Debt Service Reserve account be equal to the "Maximum Aggregate Debt Service". Upon issuance of the Series 2017 Bonds, the Debt Service Reserve requirement was calculated to be \$86.0 million.

The Authority normally keeps an excess in restricted accounts to compensate for any unforeseen market value fluctuations of investments in the account. As of December 31, 2018, the requirement in the Debt Service Reserve account was \$89.0 million and included an excess deposit of \$3.0 million. As discussed further in Note 2 to Financial Statements, Deposits and Investments, any excess balance in the Debt Service Reserve account is reflected as a restricted asset because bond proceeds were used to initially fund the account and carry associated restrictions on how the funds can be used. Excess debt service reserve deposits have been used to make bond principal payments. In 2017, \$1.1 million was used as part of the Series 2017 Bond Refunding.

The final restricted accounts for special purposes relate to wildlife mitigation pursuant to hydro licensing requirements. Each of the restrictions is discussed in further detail in Note 2 to Financial Statements, Deposits and Investments.

The Authority has conservative investment requirements which protect against investment losses, although the yields earned on eligible investments reflect the reduced risk. The priority of the investment policies is to protect the deposits rather than earn speculative income.

Deferred Inflows of Resources and Deferred Outflows of Resources

The Authority followed accounting for regulated operations in accordance with GASB 62, which requires approval from the Board of Directors, as they represent the regulatory body for the Authority. Board Resolution 5307 was unanimously approved to defer revenues related to capital cost insurance recoveries received and to recognize those revenues in the same periods as the assets funded by those insurance recoveries are depreciated. This resolution is intended to clarify and support the appropriate accounting treatment of the capital cost insurance recoveries and depreciation of assets for the GREC fire. The Authority's Board of Directors further expanded the use of regulated operations in 2017 by adopting Board Resolution 5325, which transferred the discretion to the CFO to allow the Authority to defer revenues related to third-party reimbursements for capital assets procured or constructed. These revenues, like the aforementioned insurance recoveries deferred, will be recognized in proportion to the depreciation of the assets for which the revenue was earned. The total revenue deferred and recognized as part of Deferred Inflow of Resources Related to Regulated Operations was \$4.0 million and \$14.5 million for 2018 and 2017, respectively. See Note 5 to Financial Statements, Cost to be Recovered from Future Revenues.

The Deferred Outflows Related to Loss on Reacquired Debt decreased by \$3.4 million or 9% due entirely to amortization. This follows an increase of \$8.4 million in 2017 due to recognition of an \$11.3 million deferred loss from the Series 2017 Bond netted against the amortization of the Series 2016A and 2016B Bond loss. These balances will be amortized over the life of the associated debt.

The Deferred Outflows of Resources related to pension plans totaled \$7.3 million and \$10.4 million for 2018 and 2017, respectively, while Deferred Inflow of Resources related to pension plans remained virtually unchanged, totaling \$3.6 million in both 2018 and 2017. These amounts represent the Differences in Experience, Differences in Assumption, Investment Gain/Deficit, and Changes in Proportion from the actuarial studies performed on defined benefit plans. See Note 7 to Financial Statements, Retirement Plans, Postretirement, and Other Employee Benefits.

As noted previously, the Authority implemented GASB 75. Similar to the Statement related to pensions, this Statement establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expense for defined benefit other post-employment benefits. This implementation created Deferred Outflows of Resources in the amount of \$1.1 million but did not create Deferred Inflows of Resources. These Deferred Outflows of Resources relate to changes of actuarial assumptions and Authority contributions subsequent to the actuarial measurement date.

As stated previously, the Authority expanded its Energy Hedging Program through which the Authority has entered into derivative transactions related to the purchase of natural gas. At the end of 2017, the Authority reported a Deferred Outflow of Resources of \$539 thousand, which represented an anticipated loss of the same amount to be recognized in future years; however, the Authority's position improved throughout 2018, ending with a Deferred Inflow of Resources of \$700 thousand. This \$700 thousand is an anticipated gain, which will reduce fuel costs in future periods.

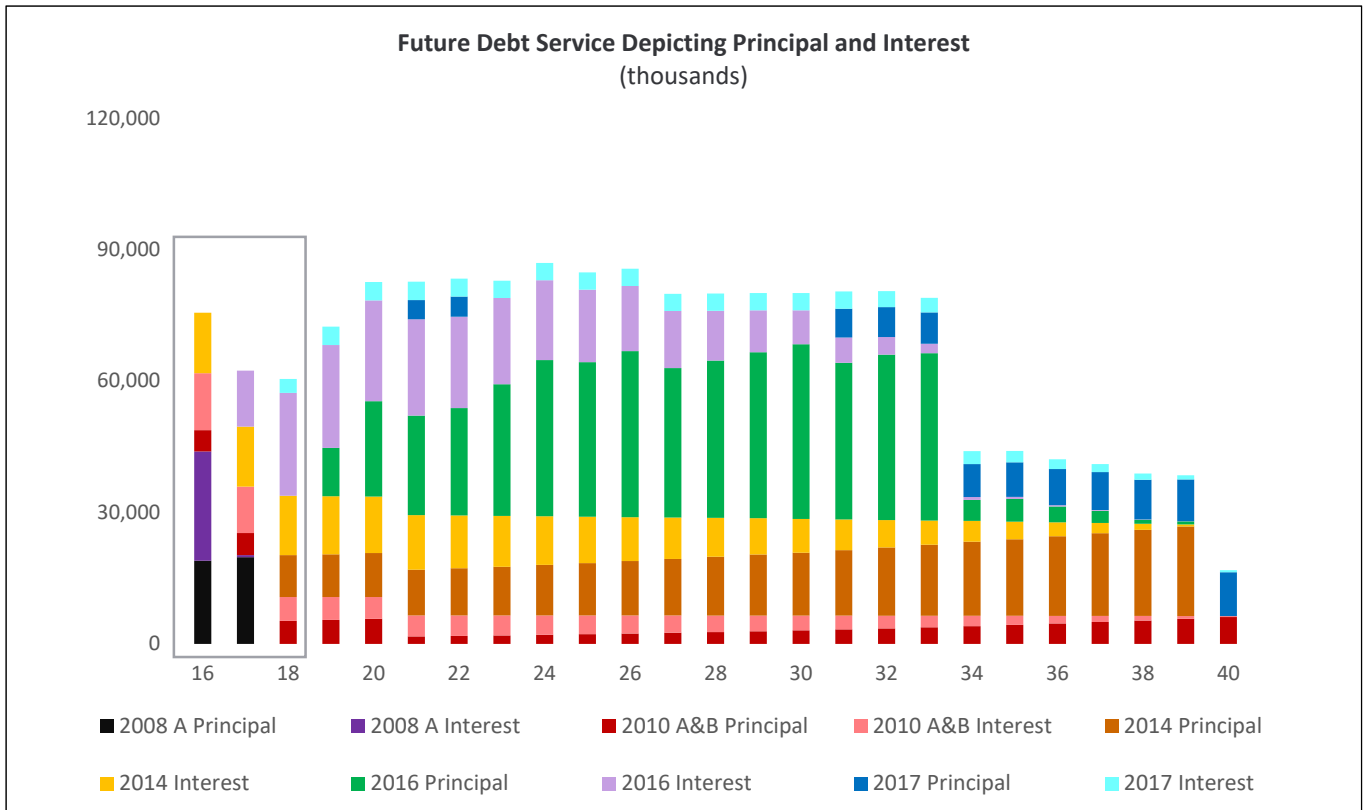
Long-Term Debt

The Authority is not authorized to mortgage or pledge any assets for the repayment of debt. Instead, the bonds issued are revenue bonds, which pledge the future revenues of GRDA's entire electric system to repay bondholders.

The Authority held two 2014 bond proceed construction accounts in 2018. One is from taxable debt while the other is from tax-exempt proceeds. Disbursements for the construction projects are initially paid from revenue funds. Requests for reimbursements are then submitted to the trustee, and monies are transferred from the construction project accounts to revenue fund accounts. At the end of 2017, \$16.4 million remained in the construction accounts. All construction funds were expended in 2018, and these accounts no longer have balances. The graph "Future Debt Service Depicting Principal and Interest (thousands)" provides an indication of how much principal and interest are due each year until all currently outstanding bonds mature in 2040. The graph distinguishes between the matured bonds and the currently outstanding issues.

As indicated in Note 6 to Financial Statements, Bonds Payable, GRDA makes monthly sinking fund payments to the bond trustee, which are reflected as Current Investments "Restricted for Bond Service." The bondholders are then paid annual principal payments on June 1 and semi-annual interest payments on December 1 and June 1 of each year.

In 2017, all three credit agencies evaluated the ratings of GRDA's bonds prior to the issuance of the 2017 revenue bonds. Fitch assigned an "A+" rating to the 2017 bond series as well as affirmed the Authority's "A+" rating on outstanding bonds and affirmed the Authority's rating outlook as stable. Standard & Poor's assigned an "AA-" rating to the 2017 bond series as well as affirmed the Authority's "AA-" rating on outstanding bonds and affirmed the Authority's rating outlook as stable. Moody's assigned an "A1" rating to the 2017 bond series as well as affirmed the Authority's "A1" rating on outstanding bonds and affirmed the Authority's rating outlook as stable.



Public Financial Management (PFM) represents the Authority as financial advisor to meet current and long-term operations and capital financing needs and render assistance with respect to debt transactions. PFM is acting as the Authority’s Independent Municipal Advisor, as defined by the U.S. Securities and Exchange Commission in connection with all general capital markets activity.

CHANGE IN FINANCIAL POSITION

The Authority’s financial position continues to improve year over year. The Authority’s cash reserve levels, in conjunction with a formalized Cash Reserve Policy that was approved by the Board of Directors in 2018, has positioned the Authority to continue with its capital improvement plan while holding base rates steady. Debt service coverage has remained excellent, far exceeding the one-time’s coverage required by debt covenants. In 2018, the Authority’s Chief Executive Officer, with support of executive staff, instituted the “Year of Efficiency,” which drove the operational results and helped to shape the business culture to one that strives for improvement. The Authority’s Board of Directors ensures that GRDA’s success continues and plans are implemented efficiently and effectively and continue to challenge management to strive for excellence.

Wholesale customers provide financial security with long-term contracts, enabling better future load projections. The Authority has been humbled by and is motivated by the active support of its customers and is actively working with this customer group to prepare for the onslaught of changes in the utility industry. Long-term revenue projections are also more reliable as many of the all-requirements contracts with the municipal customers run two years longer than any outstanding debt.

The Authority continues to be very proud of Google’s continued expansion of its facilities in Mayes County. The Authority is Google’s local utility provider. Google has already built a four-story data center in the MidAmerica Industrial Park (MAIP). In a press release in September of 2016, Google stated that its investment in Oklahoma will reach \$2 billion by 2018. Then, in February 2018, Google announced an additional \$600 million investment in the MAIP. The Authority is positioned to support Google’s growth in the community. In response to the growth of industry, MAIP has broken ground on a new development called “The District,” which is a project with 100 new residential homes, a 100 unit apartment complex, and a shopping area to attract the qualified laborers to staff the growing businesses.

The 2018 “Year of Efficiency” was marked by the reduction in operating expenses and the ability of the Authority to hold rates steady for 2019. Excellent debt service coverage also lends testimony to the financial strength of GRDA.

ECONOMIC OUTLOOK

GRDA has a positive economic outlook due to sound financial and operational fundamentals and solid, mutually-beneficial, long-term customer relationships. GRDA’s rates are competitive. Ten-year financial projections indicate they will remain that way, with adequate cash reserves to fund capital reinvestment. The retail customers served by GRDA are diverse and service-oriented, with forecasted growth over the upcoming years.

Net Income for 2018 was stronger after appearing to be minimal for 2017. In 2017, the Authority was able to undertake not only the refurbishment of GREC 2, but also made repairs to GRDA assets in response to two Federal Emergency Management Agency (FEMA) events, one from December 2015 and one from April 2017. 2018 was the first full year of operation for both the refurbished GREC 2 and recently completed GREC 3. That, combined with normal inflation, with no rate increase seen by a single GRDA customer shows GRDA’s financial metrics remain strong.

The Authority and its customers continue to work together to educate end users regarding the connection between efficiency, demand, and affordability. This will aid in managing end users’ expectations of their electricity providers as the impact of the Integrated Marketplace and technology, such as distributed generation, introduce new and varying aspects to the utility industry.

The Authority protects the waters of the Grand River and the environments associated with it and uses Oklahoma’s natural gas, water, and wind resources to generate electricity. The Authority meets customers’ needs and environmental mandates with new generation like the combined-cycle natural gas unit. The diversity in GRDA’s generation portfolio provides a hedge to risks such as fuel supply, Integrated Marketplace competition, and environmental legislation. The generation assets are backed by a robust transmission grid. The Authority has a favorable economic outlook because its electric system profile has low-debt costs, strong customer support, and coordinated resource planning.

MANAGEMENT’S DISCUSSION AND ANALYSIS

This report is intended to provide our customers, bondholders, citizens of the state of Oklahoma, and other interested parties with a general overview of GRDA’s financial position, results of operations, and to demonstrate accountability for the revenues GRDA receives.

Questions about this report or requests for additional financial information should be directed to the Authority at: Grand River Dam Authority, PO Box 409, 226 West Dwain Willis Avenue, Vinita, OK 74301-0409.

GRAND RIVER DAM AUTHORITY
(A Component Unit of the State of Oklahoma)

STATEMENTS OF NET POSITION
AS OF DECEMBER 31, 2018 AND 2017

ASSETS:	2018	2017
Current assets:		
Cash and cash equivalents:		
General operating accounts	\$ 20,797,884	\$ 41,706,481
Restricted accounts	4,156,051	2,368,254
Investments:		
General operating accounts	93,057,233	22,005,534
Restricted accounts	18,816,955	12,406,427
Accounts receivable—net	41,929,970	39,917,452
Accrued interest receivable	1,559,789	5,013,591
Fuel stock	19,177,131	22,288,191
Materials and supplies	55,469,884	40,860,841
Under recovered fuel costs	-	12,926,158
Prepaid assets	5,490,518	5,009,916
Total current assets	<u>260,455,415</u>	<u>204,502,845</u>
Noncurrent assets:		
Investments:		
General operating accounts	198,797,378	193,128,661
Restricted accounts	109,992,603	124,207,988
Prepaid assets	-	6,469,978
Net utility plant:		
Nondepreciable—at original cost	63,888,622	55,011,449
Depreciable—at original cost, less depreciation	1,154,361,314	1,191,030,030
Other noncurrent assets	1,772,872	97,059
Total noncurrent assets	<u>1,528,812,789</u>	<u>1,569,945,165</u>
Total assets	<u>1,789,268,204</u>	<u>1,774,448,010</u>
DEFERRED OUTFLOWS OF RESOURCES:		
Deferred outflows related to pension plans	7,326,606	10,358,992
Deferred outflows related to post employment benefits	1,068,541	-
Deferred outflows related to loss on reacquired debt	34,523,355	37,967,108
Deferred outflows related to derivative hedges	-	539,198
Total deferred outflows of resources	<u>42,918,502</u>	<u>48,865,298</u>
LIABILITIES:		
Current liabilities:		
Accounts payable and accrued liabilities	42,236,659	44,568,748
Accrued interest payable	3,872,327	3,913,713
Bonds payable—current portion	26,205,000	14,760,000
Unearned revenue related to insurance proceeds	1,505,309	20,705
Over recovered fuel costs	6,587,794	-
Total current liabilities	<u>80,407,089</u>	<u>63,263,166</u>
Noncurrent liabilities:		
Bonds payable—net	1,049,736,511	1,087,054,941
Liabilities related to pension plans	6,712,892	17,657,529
Liabilities related to post employment benefits	17,668,568	-
Other noncurrent liabilities	3,948,744	3,792,986
Total noncurrent liabilities	<u>1,078,066,715</u>	<u>1,108,505,456</u>
Total liabilities	<u>1,158,473,804</u>	<u>1,171,768,622</u>
DEFERRED INFLOWS OF RESOURCES:		
Deferred inflows related to pension plans	3,574,189	3,582,289
Deferred inflows related to regulated operations	46,947,793	42,959,617
Deferred inflows related to derivative hedges	700,390	-
Total deferred inflows of resources	<u>51,222,372</u>	<u>46,541,906</u>
NET POSITION:		
Net investment in capital assets	239,876,589	269,911,995
Restricted for:		
Debt service	15,286,250	8,610,000
Other special purposes	2,201,996	2,230,264
Unrestricted	365,125,695	324,250,521
TOTAL NET POSITION	<u>\$ 622,490,530</u>	<u>\$ 605,002,780</u>

See notes to financial statements.

GRAND RIVER DAM AUTHORITY

(A Component Unit of the State of Oklahoma)

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

	2018	2017
OPERATING REVENUES:		
Sales of power	\$ 399,488,356	\$ 422,294,469
Other operating revenues	37,037,056	13,710,781
Regulatory asset revenues	<u>1,098,338</u>	<u>535,403</u>
Total operating revenues	<u>437,623,750</u>	<u>436,540,653</u>
OPERATING EXPENSES:		
Fuel	(94,802,749)	(70,435,652)
Purchased power—net	(88,779,253)	(138,401,740)
Depreciation	(80,383,786)	(71,935,555)
Operations	(61,009,966)	(61,887,909)
Maintenance	(28,162,855)	(29,456,552)
Administrative and general	<u>(18,132,047)</u>	<u>(22,355,136)</u>
Total operating expenses	<u>(371,270,656)</u>	<u>(394,472,544)</u>
OPERATING INCOME	<u>66,353,094</u>	<u>42,068,109</u>
NONOPERATING REVENUES (EXPENSES):		
Investment income	4,620,856	7,582,222
Net increase (decrease) in the fair value of investments	(1,222,703)	606,602
Award revenue—operating	253,218	487,466
Income (loss) - non-operating	(97,966)	10,565,313
Loss - non-utility operations	(877,453)	(883,924)
Interest expense	(50,110,812)	(50,821,244)
Costs to be recovered	(5,070,883)	(15,259,799)
Amortization of debt discount and financing costs	(92,894)	(878,282)
Amortization of bond premium	<u>11,206,324</u>	<u>10,450,953</u>
Total nonoperating expenses	<u>(41,392,313)</u>	<u>(38,150,693)</u>
CAPITAL CONTRIBUTIONS:		
Award revenue—capital	<u>5,170,213</u>	<u>3,197,654</u>
Total capital contributions	<u>5,170,213</u>	<u>3,197,654</u>
NET INCREASE IN NET POSITION	<u>30,130,994</u>	<u>7,115,070</u>
NET POSITION—Beginning of year, as previously reported	605,002,780	597,887,710
IMPLEMENTATION OF NEW ACCOUNTING STANDARD (see Note 1)	(12,643,244)	-
NET POSITION—Beginning of year, as restated	<u>592,359,536</u>	<u>597,887,710</u>
NET POSITION—End of year	<u>\$ 622,490,530</u>	<u>\$ 605,002,780</u>

See notes to financial statements.

GRAND RIVER DAM AUTHORITY

(A Component Unit of the State of Oklahoma)

**STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017**

	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES:		
Received from user charges	\$ 438,587,099	\$ 435,109,011
Received from refined coal partner	-	10,323,108
Received from award revenues—operating	600,662	6,428
Payments to employees for services	(42,388,908)	(39,577,110)
Payments to suppliers for goods and services	(239,667,107)	(264,664,299)
Payments to refined coal partner	-	(14,215,108)
	<u>157,131,746</u>	<u>126,982,030</u>
Net cash provided by operating activities		
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:		
Additions to utility plant	(53,270,297)	(76,671,466)
Payments for retirements of utility plant	(660,350)	(625,683)
Received from sales of retirements of utility plant	261,530	10,129,066
Received from award revenues—capital	618,183	-
Proceeds from bond issues	-	90,455,000
Bond premium	-	13,975,419
Payments to refund bonds	-	(103,759,834)
Bond issuance costs	-	(695,592)
Insurance proceeds received	-	90,613,186
Insurance proceeds spent	-	(108,459,969)
Repayment of principal	(14,760,000)	(24,780,000)
Interest paid	(46,708,446)	(48,068,595)
	<u>(114,519,380)</u>	<u>(157,888,468)</u>
Net cash used in capital and related financing activities		
CASH FLOWS FROM INVESTING ACTIVITIES:		
Interest received	8,480,927	8,213,076
Purchases of securities	(466,312,595)	(1,098,824,728)
Proceeds from sales and maturities of securities	394,310,705	1,099,047,199
	<u>(63,520,963)</u>	<u>8,435,547</u>
Net cash provided by investing activities		
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(20,908,597)	(22,470,891)
CASH AND CASH EQUIVALENTS—Beginning of year	41,706,481	64,177,371
CASH AND CASH EQUIVALENTS—End of year	<u>\$ 20,797,884</u>	<u>\$ 41,706,480</u>
NONCASH ITEMS FROM CAPITAL AND RELATED ACTIVITIES:		
Noncash award revenues—capital	<u>\$ 4,869,448</u>	<u>\$ 3,197,654</u>
NONCASH ITEMS FROM INVESTING ACTIVITIES:		
Change in unrealized gain (loss) on investments	<u>\$ (1,222,703)</u>	<u>\$ 606,602</u>
Amortization of premiums and discounts	<u>\$ 304,858</u>	<u>\$ 404,834</u>
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES:		
Operating income	\$ 66,353,094	\$ 42,068,109
Noncash items included in net operating income:		
Income from nonutility operations	(1,837,553)	(8,028,728)
Depreciation	80,383,786	71,935,555
Changes in assets and liabilities:		
Receivables:		
Customers	(2,319,446)	2,702,913
Other	278,821	12,095,673
Fuel stock	3,111,060	16,050,927
Materials and supplies	(13,429,205)	(157,757)
Other	5,983,062	(3,567,747)
Deferred outflows related to pension plans	3,032,386	7,406,383
Deferred outflows related to derivative hedges	(1,068,541)	(539,198)
Accounts payable and accrued liabilities	539,198	(20,438,447)
Over (under) recovered fuel costs	(2,332,089)	(2,370,052)
Other noncurrent liabilities	19,513,952	(7,627,329)
Deferred inflows related to pension plans	(5,757,244)	2,993,905
Deferred inflows related to rate stabilization	(8,101)	-
Deferred inflows related to deferred revenues	3,988,176	14,457,823
Deferred inflows related to derivative hedges	700,390	-
NET CASH PROVIDED BY OPERATING ACTIVITIES	<u>\$ 157,131,746</u>	<u>\$ 126,982,030</u>

See notes to financial statements.

GRAND RIVER DAM AUTHORITY
(A Component Unit of the State of Oklahoma)

NOTES TO FINANCIAL STATEMENTS
AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Business—The Grand River Dam Authority (the “Authority” or “GRDA”), a non-appropriated state agency was created by the State of Oklahoma in 1935 as a conservation and reclamation district. The Authority has the power to control, store, preserve, and distribute the waters of the Grand River and its tributaries for any useful purpose and to develop and generate water power, electric power, and electric energy within the boundaries of the Authority and to buy, sell, resell, interchange, and distribute electric power and energy. The Grand River lies entirely within Oklahoma, but its drainage basin also extends over the states of Arkansas, Kansas, and Missouri. As part of the Authority’s licensing agreements, the Authority also has lake area responsibilities. The costs of those activities are funded primarily through electricity sales to the Southwest Power Pool (SPP) Integrated Marketplace that serves Oklahoma, Kansas, Missouri, and Arkansas. The Authority’s financial statements are included in the state of Oklahoma Comprehensive Annual Financial Report as a discretely presented component unit.

Basis of Accounting—The Authority is licensed to operate under the Federal Power Act, which requires the use of the uniform system of accounts, prescribed for public utilities and licensees. The Authority is a cost of service organization and establishes its rates to provide revenues sufficient to pay all expenses necessary for the operation and maintenance of the system, all payments, transfers, and deposits related to outstanding debt, and all other charges or obligations imposed by law or contract.

Basis of Presentation—The Authority’s basic financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Under the accrual basis of accounting, revenues are recognized when earned and expenses are recorded when the liability is incurred or economic asset used. Revenues, expenses, gains, losses, assets, deferred outflows of resources, liabilities, and deferred inflows of resources resulting from exchange and exchange-like transactions are recognized when the exchange takes place.

The Authority’s basic financial statements conform to the provisions of standards issued by the Governmental Accounting Standards Board (GASB). GASB establishes standards for external financial reporting for all state and local governmental entities, which include Statements of Net Position, Statements of Revenues, Expenses, and Changes in Net Position, and Statements of Cash Flows. It requires the classification of net position into three components—net investment in capital assets, restricted, and unrestricted. These classifications are defined as follows:

Net Investment in Capital Assets—This component of net position consists of capital assets, net of accumulated depreciation and costs to be recovered from future revenues reduced by the outstanding balances of any bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets. If there are significant unspent related debt proceeds at year-end, the portion of the debt attributable to the unspent proceeds is not included in the calculation of net investment in capital assets. Rather, that portion of the debt is included in the same net position component as the unspent proceeds.

Restricted—This component of net position consists of funds subject to constraints placed on net position use through external constraints imposed by creditors (such as through debt covenants), contributors, or laws or regulations of other governments or constraints imposed by law through constitutional provisions or enabling legislation. When both restricted and unrestricted resources are available for use for the same purpose, it is the Authority’s policy to use unrestricted resources first, then restricted resources as they are needed.

Unrestricted Net Position—This component of net position consists of any remaining net position that does not meet the definition of “restricted” or “net investment in capital assets.”

The financial statements of the Authority are prepared under the accrual basis of accounting. Revenues are recognized when earned and expenses are recognized when incurred.

Estimates—The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America 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.

Cash and Cash Equivalents—Cash and cash equivalents include unrestricted cash in banks, unrestricted money market funds, and unrestricted certificates of deposit with original maturities of three months or less. Balances are presented on a net basis to the extent such balances are subject to the right of offset. Unrestricted cash and cash equivalents are shown as General Operating Accounts and restricted cash and cash equivalent are shown as Restricted Accounts on the Statements of Net Position.

Investments—Investments principally comprise U.S. government securities, U.S. government agencies, U.S. government sponsored enterprises, money market funds, certificates of deposit and Certificates of Deposit Account Registry Service. The Authority reports investments at fair value, which is the price that would be received to sell an asset in an orderly transaction between market participants at the measurement date. Unrestricted investments are shown as General Operating Accounts and restricted investments are shown as Restricted Accounts on the Statements of Net Position.

Fuel Stock—Fuel stock is valued using the average cost method, which includes the delivered commodity and other undistributed costs of coal handling, railcar and railroad track maintenance. The delivered commodity is expensed monthly based on fuel burned, and undistributed costs are expensed monthly independent of fuel burned.

Materials and Supplies—Materials and supplies are valued using the average cost and specific identification methods.

Under/Over Recovered Fuel Costs—The Authority's rate structure as approved by the Board of Directors provides for the Authority to make adjustments in revenue collections from municipal, industrial, cooperative and off-system firm customers to recover actual fuel costs incurred by the Authority. This adjustment, referred to as the Power Cost Adjustment (PCA), is calculated monthly based on a 12-month average of fuel costs. The cumulative difference between the actual fuel costs less the base rate of 23 mills and the revenue collected by the PCA is reflected as either an asset ("under recovery") or liability ("over recovery") in the Authority's accompanying Statements of Net Position, as amounts will either be collected from or refunded to customers of the Authority in subsequent periods.

Joint Ownership—On October 1, 2008, the Authority purchased certain assets and assumed certain liabilities in the Redbud combined-cycle gas plant near Luther, Oklahoma. The Authority's undivided interest in the assets and liabilities of the facility is 36%, while Oklahoma Gas & Electric's (OG&E) interest is 51% and Oklahoma Municipal Power Authority's (OMPA) interest is 13%.

OG&E operates the Redbud facility under an operating agreement with the Authority and OMPA and allocates certain costs and expenses attributable to Redbud to the Authority and to OMPA in accordance with their undivided ownership interests (36% and 13%, respectively). The Redbud facility has long-term service agreements with a large industrial manufacturer for the maintenance of the gas and steam turbines. These amounts have been included in the contractual commitments in Note 9.

Utility Plant and Depreciation—The cost of utility plant includes direct material, direct labor and indirect costs, such as engineering, supervision, and interest expense (net of applicable interest income) capitalized during construction. The Authority follows the Federal Energy Regulatory Commission (FERC) electric plant instruction guidelines in defining capital assets. Generally, assets which have a cost of \$500 or more at the date of acquisition and have an expected useful life of more than one year, and are not consumable, are capitalized. The cost of maintenance and repairs to property is expensed. Consistent with the Redbud plant operator’s treatment, certain costs of the long-term service agreement payments for the Redbud plant are capitalized. Gain or loss is recognized on retirements and dispositions that management believes to be unusual in nature.

Depreciation is computed on the cost of utility plant by the composite method over the following estimated useful lives:

GREC coal-fired plants	1.5–35 years
GREC combined-cycle plant	5–35 years
Redbud combined-cycle plant	3–32 years
Hydraulic production plants	5–87 years
Transmission system	5–40 years
Other properties and production plant	3–30 years

Costs to be Recovered—Certain items included in operating costs are recovered by the Authority through rates set by the Board of Directors. The Authority, as a self-regulated utility, is subject to the requirements of GASB Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*. GASB Statement No. 62 provides that certain costs that would otherwise be charged to revenue and expense can be deferred as regulatory liabilities and assets, based on the expected recovery from customers in future rates. Recognition of these costs is deferred to the extent that such costs are later included in rates charged by the Authority in future years.

Management continuously monitors the future recoverability of regulatory assets, and when, in management’s judgment, any future recovery becomes impaired, the amount of the regulatory asset is reduced or written off, as appropriate. For additional information about the costs to be recovered, see Note 5 in the Notes to the Financial Statements.

Bonds Payable—The Authority is operating under its Board’s General Bond Resolution No. 5107 (“Resolution No. 5107”), which provides for the issuance of revenue bonds and defines eligible investment securities.

Unamortized Debt Discount or Premium—Debt discount or premium are amortized using the bonds outstanding method over the periods of the applicable issues.

Unamortized Gains and Losses on Advance Refunding of Long-Term Debt—Gains and losses realized on advance refunding of long-term debt are deferred and amortized over the shorter of the life of the new bonds or the related refunding issues using the bonds outstanding method.

Deferred Outflows—In addition to assets, the Statements of Net Position reports a separate section for the deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to a future period and so will not be recognized as an outflow of resources (expense/expenditure) until then. The Authority has three items that qualify for reporting in this category. The deferred outflows of resources relate to pension related deferrals under GASB 68, OPEB related deferrals under GASB 75 and deferred losses on reacquired debt. For additional information about the pension plans and OPEB, see Note 7 in the Notes to the Financial Statements. For additional information about the loss on reacquired debt, see Note 6 in the Notes to the Financial Statements.

Deferred Inflows—In addition to liabilities, the Statements of Net Position reports a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period and so will not be recognized as an inflow of resources

(revenue) until that time. The Authority has three items that qualify for reporting in this category. The deferred inflows of resources relate to pension related deferral under GASB 68, regulated operations and derivative hedges. For additional information about the pension plans, see Note 7 in the Notes to the Financial Statements. For additional information about the derivative hedges, see Note 11 in the Notes to the Financial Statements. For additional information about regulated operations, see Note 5 in the Notes to the Financial Statements.

Operating and Nonoperating Revenues and Expenses—Operating revenues include the sales of power and other operating revenues consisting primarily of transmission revenues, but also include sales of water and renewable energy certificates. Operating expenses include costs to operate and maintain the Authority’s generation and transmission assets, including fuel, purchased power, depreciation, and related administrative and general expenses. Nonoperating revenues include investment income, net increase in the fair value of investments, recognition of deferred revenues, and income from nonutility operations, which includes lake permitting fees and scenic river operations fees. Nonoperating expenses include interest expense, amortization of costs to be recovered from future revenues, amortization of bond-related expenses, and expenses from nonutility operations, which include lake and scenic river operating expenses.

Purchased Power—Purchased power includes the cost of energy purchased for resale to contract customers. Included are the settlements for the hourly net exchange of electricity in the SPP Integrated Marketplace and bilateral purchases from counterparties, including energy purchased under wind purchase agreements and customer capacity purchase agreements.

Energy Hedging—In 2014, GRDA formalized its Risk Management Policies and Energy Hedging Programs. Accordingly, GRDA evaluates transactions under GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments*. For additional information about the hedging program, see Note 11 in the Notes to the Financial Statements.

Capital Contributions—Cash and capital assets are contributed to the Authority from customers, the municipality, or external parties. The value of property contributed to the Authority are reported as award revenues on the accompanying Statements of Revenues, Expenses, and Changes in Net Position.

Income Taxes—The Authority is a governmental agency organized under the laws of the State of Oklahoma and is not subject to federal or state income taxes.

Comparative Data—Certain amounts presented in the prior year data may have been reclassified in order to be consistent with the current year’s presentation.

Adoption of New Accounting Standards—During the year, the Authority adopted the following accounting standards:

GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*: The primary objective of this Statement is to improve accounting and financial reporting by state and local governments for postemployment benefits other than pensions (other postemployment benefits or OPEB). It also improves information provided by state and local governmental employers about financial support for OPEB that is provided by other entities. This Statement results from a comprehensive review of the effectiveness of existing standards of accounting and financial reporting for all postemployment benefits (pensions and OPEB) with regard to providing decision-useful information, supporting assessments of accountability and interperiod equity, and creating additional transparency. This statement was effective for the Authority for fiscal year 2018. The implementation of this statement resulted in the restatement of the 2018 opening net position as follows:

Reconciliation to the Change in Net Position:

Beginning OPEB Liability, December 31, 2017	\$ 16,760,009
Less: GASB 45 prior year Liability	3,267,430
Less: PY Deferred Outflow for Contributions	<u>849,335</u>
2018 Opening Net Position restatement amount	<u>\$ 12,643,244</u>

Recently Issued Accounting Standards—The following accounting standards will be adopted as applicable in future periods: GASB Statement No. 83, *Certain Asset Retirement Obligations*, GASB Statement No. 84, *Fiduciary Activities*, GASB Statement No. 87, *Leases*, GASB Statement No. 88, *Certain Disclosures Related to Debt*, GASB Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*, and GASB Statement No. 90, *Majority Equity Interests (amendment of GASB Statements No. 14 and No. 61)*. When they become effective, application of these standards may restate portions of these financial statements.

2. DEPOSITS AND INVESTMENTS

The Authority's Resolution No. 5107 provides for the issuance of revenue bonds and defines eligible investment securities as investments allowed pursuant to the Authority's investment policy. The Authority's Board Policy 5-2 defines the following categories of investments (1) bonds or other obligations, which are direct obligations of the United States of America, (2) bonds or other specifically named obligations, which are indirectly guaranteed by the United States of America, (3) direct and general obligations of any state which are rated in the two highest major categories of Moody's, Standard & Poor's (S&P), or Fitch, (4) certificates of deposit issued by a savings and loan association or a bank and trust company which are collateralized by the securities described in (1) and (2) or which are fully insured by the Federal Deposit Insurance Corporation (FDIC), (5) repurchase agreements with banks or government bond dealers which are secured by securities described in (1) and (2), (6) investment agreements with companies or banks whose senior debt obligations are rated no lower than the second highest category of Moody's, S&P, or Fitch, (7) short-term obligations of any state or political subdivision which are rated in the highest short-term category by Moody's or S&P, and (8) any cash swap or similar arrangement of the Bond Fund Trustee, the investments of which are limited to securities described in (1) and (2).

The Authority carries its investments at fair value. Fair value of a financial instrument is the price that would be received to sell an asset in an orderly transaction between market participants at the measurement date. The Authority and trustees monitor collateral pledged to secure deposits in financial institutions for compliance with rules and regulations promulgated by the Oklahoma State Treasurer.

Interest-Rate Risk—Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. The Authority has no formal policy to address exposure to fair value losses resulting from changes in interest rates. However, Resolution No. 5107 requires that investments not mature later than such times as the funds shall be necessary to provide monies when needed for payments to be made from the Debt Service Account, and in the case of the Debt Service Reserve Account, unless otherwise provided in a Supplemental Resolution, not later than ten (10) years from the date of investment. The Authority's Board Policy 5-2 provides that general fund investments shall also not mature later than ten (10) years from the date of investment. The Authority attempts to hold the investments to maturity, which minimizes the exposure to rising interest rates.

As of December 31, 2018 and 2017, the Authority had the following investments (classified as either General Operating investments or Restricted investments on the Statements of Net Position) and corresponding maturities:

Investment Type	2018			
	Fair Value	Investment Maturities (in Years)		
		Less than 1	1-5	6-10
U.S. government securities				
U.S. Treasury Bills	\$ 19,082,335	\$ 19,082,335	\$ -	\$ -
U.S. Treasury Notes	181,646,803	69,390,316	77,996,418	34,260,069
U.S. government sponsored enterprises				
FFCB	4,658,224	-	-	4,658,224
FHLB	18,704,839	9,215,732	2,486,250	7,002,857
FHLMC	106,601,211	27,555,204	73,826,208	5,219,799
FNMA	64,853,923	11,236,841	42,417,573	11,199,509
GNMA	11,586,777	-	11,150,615	436,162
Total	\$ 407,134,112	\$ 136,480,428	\$ 207,877,064	\$ 62,776,620

Investment Type	2017			
	Fair Value	Investment Maturities (in Years)		
		Less than 1	1-5	6-10
U.S. government securities				
U.S. Treasury Bills	\$ 9,307,844	\$ 9,307,844	\$ -	\$ -
U.S. Treasury Notes	178,785,463	4,247,528	145,839,521	28,698,414
U.S. government sponsored enterprises				
FFCB	6,539,542	4,770,336	-	1,769,206
FHLB	14,297,254	1,798,776	7,402,735	5,095,743
FHLMC	75,281,174	14,584,855	60,228,723	467,596
FNMA	58,887,485	1,226,223	55,249,183	2,412,079
GNMA	1,928,408	-	1,471,297	457,111
Total	\$ 345,027,170	\$ 35,935,562	\$ 270,191,459	\$ 38,900,149

Credit Risk—Credit risk is the risk that the insurer or other counterparty to an investment will not fulfill his obligation. Mortgage backed securities (MBS) are not rated because the agencies that issue such securities did not apply to any of the nationally recognized statistical rating organizations (NRSRO) such as Moody’s Investors Service and S&P for ratings on their MBS. However, the agencies and the Government Sponsored Enterprises (GSE) carry “Aaa/AA+” ratings from Moody’s and S&P for their debentures, and the MBS which carry their label (e.g., Federal National Mortgage Association—“FNR”; Federal Home Loan Bank—“FHR”) are direct obligations of the agencies. With the exception of Federal National Mortgage Association (“Fannie Mae”) and the Federal Home Loan Mortgage Corporation (“Freddie Mac”), which are government-sponsored quasi-governmental agencies (which also received U.S. government backing during 2008), the agencies have the backing of the U.S. Government; therefore, the “Aaa/AA+/AAA” rating by Moody’s, Standard & Poor’s, and Fitch is implied. MBS issued by the Government National Mortgage Association, with the label GNR, carry the explicit full faith and credit of the U.S. Government. Securities issued by the Federal Farm Credit Bank (FFCB) are rated “Aaa/AA+/AAA” by Moody’s, S&P, and Fitch credit rating agencies. Fannie Mae and Freddie Mac are rated “Aaa/AA+/AAA” by Moody’s, S&P, and Fitch credit rating agencies. The MBS are senior in the credit structure to the debentures for the FNMA and FHLMC. The certificates of deposit are held by various banks and are subject to the FDIC guarantees up to \$250,000. The Authority addresses credit risk of investments through the Authority’s Board Policy 5-2 which states that investments must be backed by the U.S. government, collateralized, fully insured by the FDIC, or be rated no lower than the second highest category of Moody’s “Aa”, S&P “AA”, or Fitch “AA”.

As of December 31, 2018 and 2017, the Authority’s investments had the following ratings:

Investment Ratings	Moody's/S&P/Fitch "Aaa/AA+/AAA"	
	2018	2017
U.S. government securities	\$ 200,729,138	\$ 188,093,307
U.S. government sponsored enterprises	206,404,974	156,933,863

As of December 31, 2018 and 2017, the Authority had the following portfolio of investments with credit exposure by investment type as a percentage of total investments:

	2018	2017
U.S. government securities		
U.S. Treasury Bills	4.7 %	2.7 %
U.S. Treasury Notes	44.6	51.8
U.S. government sponsored enterprises		
FFCB	1.1	1.9
FHLB	4.6	4.1
FHLMC	26.2	21.8
FNMA	16.0	17.1
GNMA	2.8	0.6

Custodial Credit Risk—Custodial credit risk is the risk that, in the event of the failure of the counterparty, the Authority will not be able to recover the value of its investment for collateral securities that are in the possession of an outside party. All money to be held by the Authority under Resolution No. 5107 is required to be deposited in one or more depositories in the name of the Authority. All money deposited under the provisions of Resolution No. 5107 with the Bond Fund Trustee and the Construction Fund Trustee is required to be held in trust and applied only in accordance with the provisions of Resolution No. 5107; money held by the Authority and deposited in any depository is required to be held and secured in the manner provided by Oklahoma law.

Restricted noncurrent investment funds in the bond service reserve account, and certain funds in the construction account are included in Investments in Noncurrent assets on the Statements of Net Position. Restricted current investment funds in the bond service account and certain deposits in the construction account are included in Investments in Current assets on the Statements of Net Position. Restricted investments (noncurrent and current) are not available for general operations.

Unrestricted cash deposits, certificates of deposits and money market funds are fully collateralized or covered by FDIC.

Fair Value Measurements—According to GASB Statement No. 72, *Fair Value Measurement and Application*, the Authority is required to disclose the valuation technique and level of inputs for all investments. The Authority’s investments fall into input Level 1 and Level 2.

Level 1 inputs are quoted (unadjusted) prices in active markets for identical assets or liabilities that the government can access at the measurement date. Observable markets include exchange markets, dealer markets, brokered markets and principal-to-principal markets.

Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. These inputs are derived from or corroborated by observable market data through correlation or by other means, e.g., “market-corroborated” inputs. Level 2 inputs include:

- Quoted prices for similar assets or liabilities in active markets
- Quoted prices for identical or similar assets or liabilities in inactive markets
- Inputs other than quoted prices that are observable for the asset or liability
- Market-corroborated inputs

Level 3 inputs are unobservable inputs for the asset or liability; they should be used only when relevant Level 1 and Level 2 inputs are unavailable. Governments may use their own data to develop unobservable inputs if there is no information available without undue cost and effort. The Authority has no investments that fall into Level 3.

Money Market Funds and Certificates of Deposit are not subject to classification.

The following table shows the levels used to measure the fair value of investments:

	Fair Value			
	Level 1	Level 2	Level 3	Total
U.S. government securities	\$ 200,729,138	\$ -	\$ -	\$ 200,729,138
U.S. government sponsored enterprises	118,312,159	88,092,815	-	206,404,974
Derivative instruments	-	700,390	-	700,390

	Fair Value			
	Level 1	Level 2	Level 3	Total
U.S. government securities	\$ 188,093,307	\$ -	\$ -	\$ 188,093,307
U.S. government sponsored enterprises	68,868,768	88,065,095	-	156,933,863
Derivative instruments	-	(539,198)	-	(539,198)

Carrying Values—Cash and cash equivalents and current and noncurrent investments at December 31, 2018 and 2017, follows:

	2018							Total
	General Operations	Board Designated	Rate Stabilization	Bond Service (Restricted)	Construction (Restricted)	Bond Service Reserve (Restricted)	Other Special Purposes (Restricted)	
Current:								
Cash deposits—net	\$ 1,978,222	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,173,538	\$ 4,151,760
Money market funds—cash and investments	18,819,662	-	-	341,622	1,505,309	-	135,583	20,802,176
U.S. government securities and sponsored enterprises	91,211,889	-	-	18,816,955	-	-	-	110,028,844
Certificates of deposits—maturity < 12 months	<u>1,845,343</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1,845,343</u>
Total current	<u>113,855,116</u>	<u>-</u>	<u>-</u>	<u>19,158,577</u>	<u>1,505,309</u>	<u>-</u>	<u>2,309,121</u>	<u>136,828,123</u>
Noncurrent:								
U.S. government securities and sponsored enterprises	149,151,131	39,615,000	21,000,000	-	-	87,339,137	-	297,105,268
Money market funds	-	-	-	-	-	1,653,466	-	1,653,466
Certificates of Deposit Account Registry Service	<u>10,031,247</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>10,031,247</u>
Total noncurrent	<u>159,182,378</u>	<u>39,615,000</u>	<u>21,000,000</u>	<u>-</u>	<u>-</u>	<u>88,992,603</u>	<u>-</u>	<u>308,789,981</u>
Total cash and investments	<u>\$ 273,037,494</u>	<u>\$ 39,615,000</u>	<u>\$ 21,000,000</u>	<u>\$ 19,158,577</u>	<u>\$ 1,505,309</u>	<u>\$ 88,992,603</u>	<u>\$ 2,309,121</u>	<u>\$ 445,618,104</u>

2017

	General Operations	Board Designated	Rate Stabilization	Bond Service (Restricted)	Construction (Restricted)	Bond Service Reserve (Restricted)	Other Special Purposes (Restricted)	Total
Current:								
Cash deposits—net	\$ 1,061,206	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,203,264	\$ 3,264,470
Money market funds—cash and investments	40,645,275	-	-	117,285	20,705	-	27,000	40,810,265
U.S. government securities and sponsored enterprises	17,948,474	-	-	12,406,427	-	-	-	30,354,901
Certificates of deposits— maturity < 12 months	<u>4,057,060</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>4,057,060</u>
Total current	<u>63,712,015</u>	<u>-</u>	<u>-</u>	<u>12,523,712</u>	<u>20,705</u>	<u>-</u>	<u>2,230,264</u>	<u>78,486,696</u>
Noncurrent:								
U.S. government securities and sponsored enterprises	153,896,661	39,232,000	21,000,000	-	14,401,226	86,142,382	-	314,672,269
Money market funds	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1,999,465</u>	<u>664,915</u>	<u>-</u>	<u>2,664,380</u>
Total noncurrent	<u>153,896,661</u>	<u>39,232,000</u>	<u>21,000,000</u>	<u>-</u>	<u>16,400,691</u>	<u>86,807,297</u>	<u>-</u>	<u>317,336,649</u>
Total cash and investments	<u>\$ 217,608,676</u>	<u>\$ 39,232,000</u>	<u>\$ 21,000,000</u>	<u>\$ 12,523,712</u>	<u>\$ 16,421,396</u>	<u>\$ 86,807,297</u>	<u>\$ 2,230,264</u>	<u>\$ 395,823,345</u>

The restricted balances are the minimum amounts required to be maintained.

Additional information relating to cash and investment restrictions follows:

Rate Stabilization—As of December 31, 2017, the Authority established and deposited \$21.0 million into the Rate Stabilization Account in the accompanying Statements of Net Position. Customer contracts contain requirements for the establishment and funding of a Rate Stabilization Account. Resolution No. 5107 and Board Resolution No. 5154 contain further guidelines for the establishment and maintenance of the fund. This amount was funded from operating revenues and will be used at the discretion of the Authority's Board of Directors to reduce or defer future rate increases.

Bond Service—On December 31, the bond service fund in the accompanying Statements of Net Position reflects the minimum restricted amount sufficient to pay seven months of principal and one month of interest due the following June 1.

Construction—On December 31, the construction fund in the accompanying Statements of Net Position reflects insurance proceeds received in a trust fund for the final settlement related to the July 2016 GREC Fire.

Bond Service Reserve—The restricted amount in the accompanying Statements of Net Position reflects the maximum aggregate debt service for all bonds outstanding per Resolution No. 5107.

Restricted for Other Special Purposes—Due to agreements with FERC, the Authority has restricted money for two purposes. The first restriction is for the Fish and Wildlife Mitigation Fund, established in June 2003 as required by FERC. The Authority funded an initial deposit of \$260,000 in 2003, and was required to make \$100,000 annual contributions (adjusted for inflation) each year the Pensacola Dam license is in effect. In December 2015, the Authority funded the balance of \$1.45 million, which represented the estimated annual contributions through the year 2022. Generally, the purpose of this fund is to support projects to protect and enhance fish and wildlife resources at the direction of various groups external to the Authority. Expenditures of approximately \$39,472 and \$153,986 were made from the fund in 2018 and 2017, respectively. The second restriction is for the Nature Conservancy Fund, established in May 2008 as required by FERC. The Authority funded an initial deposit of \$27,000 in 2008. The Authority is required to replenish the fund to \$27,000 on the first working day in January of each year. Generally, the purpose of this fund is to maintain bat caves protection on Grand Lake. No expenditures were made from the fund in either 2018 or 2017.

In addition to these restricted funds, two special funds (designated by the Authority's Board of Directors in December 2004) are unrestricted:

The Special Reserve and Contingency Fund I and II—These designated, though unrestricted, funds were established in December 2004 as Board-designated funds for future use, if needed, for extraordinary maintenance, operational, and environmental expenses and for expenses related to unforeseen risk, including, but not limited to, unscheduled outages, unexpected purchased power expense, and other extraordinary expense not covered by insurance proceeds. These Board-designated funds had a balance of \$39.6 million and \$39.2 million as of December 31, 2018 and 2017, respectively.

Line of Credit—In 2015, the Authority established an unsecured line of credit with Bank of Oklahoma to meet the requirements for participating in the SPP Integrated Marketplace. In December 31, 2018 and 2017 the line of credit is for \$8.0 million and \$7.0 million, respectively, and expires on May 31, 2019, with an auto-renewal clause.

Realized Gains and Realized Losses—For purposes of computing gross realized gains and gross realized losses, cost is determined by specific identification. The calculation of realized gains is independent of the calculation of the net increase in the fair value of investments. Realized gains and losses on any investments that had been held for more than the current year may have been recognized as an increase or decrease in the fair value of investments reported in prior years.

Gross realized gains and gross realized losses on sales of investment securities for the years ended December 31, 2018 and 2017, were as follows:

	2018	2017
Gross realized gains	\$ 1,182,583	\$ 1,111,126
Gross realized losses	(1,563,277)	(3,762,218)

Gross realized gains and losses are included in Investment income in the accompanying Statements of Revenues, Expenses, and Changes in Net Position.

3. RECEIVABLES

Accounts receivable is comprised at December 31, 2018 and 2017, of the following amounts:

	2018	2017
Customers	\$ 34,807,775	\$ 32,475,599
Less allowance for doubtful accounts	(100,000)	(100,000)
Other	<u>7,734,582</u>	<u>7,617,577</u>
Total	<u>\$ 42,442,357</u>	<u>\$ 39,993,176</u>

At December 31, 2018, the Authority's other current accounts receivable included insurance recoveries related to the July 2016 GREC Fire (for 2017 & 2018), Chouteau Fuels Company, LLC (2016), reimbursable work for other entities, the current portion of receivables for aid of construction, and dock billings.

At December 31, 2018 and 2017, the Authority had noncurrent receivables included in Other noncurrent assets of \$512,387 and \$75,724, respectively.

4. UTILITY PLANT

A summary of changes in utility plant for the years ended December 31, 2018 and 2017, follows:

	2018			Balance December 31, 2018
	Balance December 31, 2017	Additions/ Transfers	Retirements	
Capital assets—nondepreciable:				
Land	\$ 37,660,499	\$ 578,728	\$ -	\$ 38,239,227
Construction work in progress	<u>17,350,950</u>	<u>8,298,445</u>	<u>-</u>	<u>25,649,395</u>
Total capital assets—nondepreciable	<u>55,011,449</u>	<u>8,877,173</u>	<u>-</u>	<u>63,888,622</u>
Capital assets—depreciable:				
GREC 1 coal-fired plant (Note 1)	366,504,055	9,291,494	(977,681)	374,817,868
GREC 2 coal-fired plant (Note 1)	489,714,816	(5,615,580)	(701,200)	483,398,036
GREC 3 combined-cycle gas plant	442,787,735	13,978,838	-	456,766,573
Redbud combined-cycle gas plant	366,319,550	4,864,518	(9,455,064)	361,729,004
Hydraulic production plants	171,147,116	12,626,944	(31,511)	183,742,549
Transmission system	384,978,880	14,421,180	(5,378,432)	394,021,628
Other properties and production plant	<u>142,419,321</u>	<u>(5,178,031)</u>	<u>(4,165,994)</u>	<u>133,075,296</u>
	<u>2,363,871,473</u>	<u>44,389,363</u>	<u>(20,709,882)</u>	<u>2,387,550,954</u>
Less accumulated depreciation:				
GREC 1 coal-fired plant	(318,783,546)	(2,290,169)	996,764	(320,076,951)
GREC 2 coal-fired plant	(385,931,813)	(17,591,369)	382,437	(403,140,745)
GREC 3 combined-cycle gas plant	(9,397,534)	(13,079,221)	-	(22,476,755)
Redbud combined-cycle plant	(170,427,357)	(18,414,044)	4,248,205	(184,593,196)
Hydraulic production plants	(37,108,653)	(3,352,798)	28,378	(40,433,073)
Transmission system	(171,027,944)	(8,404,034)	3,234,454	(176,197,524)
Other properties and production plant	<u>(80,164,596)</u>	<u>(10,161,602)</u>	<u>4,054,802</u>	<u>(86,271,396)</u>
	<u>(1,172,841,443)</u>	<u>(73,293,237)</u>	<u>12,945,040</u>	<u>(1,233,189,640)</u>
Total capital assets—depreciable	<u>1,191,030,030</u>	<u>(28,903,874)</u>	<u>(7,764,842)</u>	<u>1,154,361,314</u>
Net utility plant	<u>\$ 1,246,041,479</u>	<u>\$ (20,026,701)</u>	<u>\$ (7,764,842)</u>	<u>\$ 1,218,249,936</u>

	2017			
	Balance December 31, 2016	Additions/ Transfers	Retirements	Balance December 31, 2017
Capital assets—nondepreciable:				
Land	\$ 37,648,820	\$ 11,679	\$ -	\$ 37,660,499
Construction work in progress	<u>441,028,879</u>	<u>(423,631,145)</u>	<u>(46,784)</u>	<u>17,350,950</u>
Total capital assets—nondepreciable	<u>478,677,699</u>	<u>(423,619,466)</u>	<u>(46,784)</u>	<u>55,011,449</u>
Capital assets—depreciable:				
GREC 1 coal-fired plant (Note 1)	356,544,729	9,626,130	333,196	366,504,055
GREC 2 coal-fired plant (Note 1)	479,506,761	12,278,438	(2,070,383)	489,714,816
GREC 3 combined-cycle gas plant	-	442,787,735	-	442,787,735
Redbud combined-cycle gas plant	364,941,662	2,136,244	(758,356)	366,319,550
Hydraulic production plants	167,725,358	3,801,955	(380,197)	171,147,116
Transmission system	374,775,708	19,509,083	(9,305,911)	384,978,880
Other properties and production plant	<u>133,850,118</u>	<u>10,163,026</u>	<u>(1,593,823)</u>	<u>142,419,321</u>
	<u>1,877,344,336</u>	<u>500,302,611</u>	<u>(13,775,474)</u>	<u>2,363,871,473</u>
Less accumulated depreciation:				
GREC 1 coal-fired plant	(312,447,782)	(6,635,419)	299,655	(318,783,546)
GREC 2 coal-fired plant	(370,876,749)	(17,066,193)	2,011,129	(385,931,813)
GREC 3 combined-cycle gas plant	-	(9,397,534)	-	(9,397,534)
Redbud combined-cycle plant	(152,486,128)	(18,267,342)	326,113	(170,427,357)
Hydraulic production plants	(34,926,064)	(2,411,418)	228,829	(37,108,653)
Transmission system	(168,457,199)	(7,941,435)	5,370,690	(171,027,944)
Other properties and production plant	<u>(72,166,279)</u>	<u>(8,730,836)</u>	<u>732,519</u>	<u>(80,164,596)</u>
	<u>(1,111,360,201)</u>	<u>(70,450,177)</u>	<u>8,968,935</u>	<u>(1,172,841,443)</u>
Total capital assets—depreciable	<u>765,984,135</u>	<u>429,852,434</u>	<u>(4,806,539)</u>	<u>1,191,030,030</u>
Net utility plant	<u>\$ 1,244,661,834</u>	<u>\$ 6,232,968</u>	<u>\$ (4,853,323)</u>	<u>\$ 1,246,041,479</u>

The change in construction work in progress during 2018 and 2017 is presented on a net basis to avoid a duplication of additions and retirements in the preceding tables. The change in construction work in progress includes capitalized interest of approximately \$152,000 and \$3,004,000 for 2018 and 2017, respectively, which also increases investment income. The Authority had depreciation and amortization expense of \$80,383,786 and \$71,935,555 for 2018 and 2017, respectively.

The Authority had construction contractual commitments at December 31, 2018, of approximately \$40,281,000 for equipment and construction contracts. Major projects include the construction of transmission lines and substations for approximately \$19,914,000; upgrades of the natural gas combined-cycle plant, GREC 3, for approximately \$6,861,000; SCADA, upgrades of communications and network security for approximately \$4,930,000; refurbishment of the Pensacola flood gates for approximately \$3,492,000; and upgrades of the Salina Pump Storage plant for approximately \$2,057,000.

On the evening of July 1, 2016, a lightning strike precipitated a fire at the GREC, which resulted in a short outage of GREC 1 and the impairment of assets within GREC 2. GREC 1 successfully returned to operation July 19, 2016, and the Authority determined that no portion of GREC 1 was impaired. The GREC 2 turbine-generator and auxiliary systems were extensively damaged and required significant restoration before the assets were able to return to service. GREC 2 successfully returned to operation September 14, 2017. According to GASB Statement No. 42, the capital assets damaged by the turbine-generator fire were considered impaired. The Authority utilized the restoration cost approach based on current-year dollars to measure the impairment. Under the restoration cost approach, the amount of the impairment is derived from the ratio of estimated costs to restore the utility of the affected capital assets to the total cost to replace the assets. This ratio is then multiplied by the

carrying value of the impaired assets. As a result, the Authority reduced the carrying amount of its electric plant and equipment by approximately \$4,264,954 in 2016 along with an insurance recovery amount of \$38,658,526. For 2017, Insurance recoveries net of impairment loss of \$96,591,410 was recorded.

The property and casualty insurer of the GREC 2 turbine-generator acknowledged that the damage was subject to insurance coverage. In lieu of a lump sum payment of insurance proceeds, the insurer opted to advance the insurance proceeds periodically as needed. The Authority established a Fire Insurance Fund with Bank of Oklahoma to handle all insurance proceeds and reimbursements. All insurance advancements have been credited to Other Deferred Credits. In 2016, \$50.0 million in insurance proceeds were advanced of which \$32,132,511 was reimbursed, resulting in a balance of \$17,867,489 on December 31, 2016, on the Statements of Net Position as Deferred inflows of resources related to insurance proceeds. The Authority also had a receivable recorded for items that were paid by the Authority but not reimbursed from the Fire Insurance Fund as of December 31, 2016, in the amount of \$14,027,810. This amount was a portion of the Current Assets: Accounts receivable-net on the Statements of Net Position. In addition to the insurance proceeds balance at December 31, 2016, the insurer advanced GRDA \$90,613,186 in insurance proceeds during 2017 for a total available balance for reimbursement of \$108,480,675. Reimbursements of \$108,459,969 were processed from the fund during 2017, resulting in a balance of \$20,705 on December 31, 2017, on the Statements of Net Position as unearned revenue related to insurance proceeds. The receivable recorded for items that were paid by the Authority but not reimbursed from the Fire Insurance Fund as of December 31, 2017 was \$1,259,685. In addition to the insurance proceeds balance at December 31, 2017, the insurer advanced GRDA \$1,484,603 in insurance proceeds during 2018 for a total available balance for reimbursement of \$1,505,309, which is the balance as of December 31, 2018, on the Statements of Net Position as unearned revenue related to insurance proceeds as no reimbursements were processed from the fund during 2018. The Authority also has a receivable recorded for items that were paid by the Authority but not reimbursed from the Fire Insurance Fund as of December 31, 2018, in the amount of \$1,563,990. This amount is a portion of the Current Assets: Accounts receivable-net on the Statements of Net Position. As a consequence of the GREC 2 turbine-generator fire, GREC 2 was idled until the restoration was complete.

The Authority entered into a lease vehicle program in 2016, initially leasing 14 passenger vehicles with a term of 48 months. The leased equipment is amortized on a straight-line basis over the shorter of the useful life of the related assets or the lease term. The gross amount of assets acquired under capital leases for 2017 is \$371,890. Total accumulated amortization related to the leased vehicles was \$136,487 at December 31, 2017. The balance of capital leases payable at December 31, 2017, was \$235,403 and recorded as a portion of accounts payable and accrued liabilities. Total accumulated amortization related to the leased vehicles was \$229,459 at December 31, 2018. The balance of capital leases payable at December 31, 2018, was \$142,431 and recorded as a portion of accounts payable and accrued liabilities. The Authority currently has no plans to expand the program beyond 2018. The interest rate related to the lease obligation is variable based on the current interest rate on delivery date. The interest portion of the capital lease minimum payments were \$14,668 and \$13,794 in 2018 and 2017, respectively.

The following is a schedule detailing the minimum lease payments under capital leases:

	Minimum Lease Payments
2019	\$ 92,972
2020	43,813
2021	5,646
2022	-
2023	-
	<hr/>
Total	<u>\$ 142,431</u>

In 2017, the Authority entered into a Riparian Conservation Easement program partnered with the Oklahoma Conservation Commission. The goal of this program is to increase the amount of long term protected riparian area by securing 30-year minimum easement agreements with landowners within the Illinois River Watershed. Each easement is paid to the landowner in a lump sum payment and subject to reimbursement to the Authority from the Conservation Commission. The Authority had 19 easements in place, 17 of which were assumed in the Oklahoma Scenic Rivers Commission acquisition, for a gross amount of \$890,152 at December 31, 2017. The easements are amortized on a straight-line basis over the shorter of the useful life of the related asset or the lease term. Total accumulated amortization related to the easements was \$251,624 at December 31, 2017, and was offset by a corresponding recognition of revenue from the reimbursement from the Conservation Commission. During 2018 the Authority added 3 additional easements, fully terminated one of the assumed easements and partially terminated another assumed easement. The landowners were required to pay back a pro-rated amount of the remaining years of the lump-sum payment received to the Authority as outlined in the agreement, which created a liability of \$107,125 as of December 31, 2018, with the obligation to use the funds to secure additional easements within the Illinois River Watershed. The Authority currently has 21 easements in place, 16 of which were assumed in the Oklahoma Scenic Rivers Commission acquisition, for a gross amount of \$1,018,911 at December 31, 2018. Total accumulated amortization related to the easements is \$229,520 at December 31, 2018, and is offset by a corresponding recognition of revenue from the reimbursement from the Conservation Commission.

5. COST TO BE RECOVERED

In 2017, the Authority determined that it should defer the capital asset portion of the revenue proceeds from insurance recoveries resulting from the July 2016 GREC fire restoration as per GASB Statement No. 62. Deferral of revenue in accordance with this Statement requires Board Resolution. Board Resolution No. 5325 pertaining to this matter was passed and adopted by the Board of Directors on December 13, 2017. This Board Resolution grants the Chief Financial Officer the discretion to record certain revenues as regulated assets in regards to revenues related to third-party reimbursement for capital assets procured or constructed and recognize those revenues proportionately as said assets are depreciated.

At December 31, 2018, the deferred inflow of resources consists of recognized revenues associated with all third party reimbursement on capital assets, as approved by the Chief Financial Officer. This amount is a portion of deferred inflows related to regulated operations on the Statements of Net Position. A roll forward of costs to be recovered from future revenues follows:

	2018
Beginning balance	\$ 21,959,617
Deferral of revenues	5,090,997
Amortization of revenues	<u>(1,102,821)</u>
Ending balance	<u>\$ 25,947,793</u>

In 2016, the Authority determined that it should defer the capital asset portion of the revenue proceeds from insurance recoveries resulting from the July 2016 GREC fire restoration as per GASB Statement No. 62. Deferral of revenue in accordance with this Statement requires Board Resolution. Board Resolution No. 5307 pertaining to this matter was passed and adopted by the Board of Directors on March 8, 2017.

At December 31, 2017, the deferred regulatory asset consists of recognized revenues associated with the GREC fire insurance proceeds on capital assets. This amount is a portion of deferred inflows related to regulated operations on the Statements of Net Position. A roll forward of costs to be recovered from future revenues follows:

	2017
Beginning balance	\$ 7,501,794
Deferral of revenues	14,993,539
Amortization of revenues	<u>(535,716)</u>
Ending balance	<u>\$ 21,959,617</u>

6. BONDS PAYABLE

A summary of changes in bonds payable for the years ended December 31, 2018 and 2017, follows:

	2018			December 31, 2018
	December 31, 2017	Bonds Issued	Retirements	
Revenue Bonds, 2010 Series A & B: 3% to 5.25% Series 2010A—maturing in 2015 through 2040	\$ 11,825,000	\$ -	\$ (3,790,000)	\$ 8,035,000
3.71% to 7.155% Series 2010B (fully taxable)—maturing 2015 through 2040	<u>73,165,000</u>	<u>-</u>	<u>(1,435,000)</u>	<u>71,730,000</u>
Total Series 2010 A & B	<u>84,990,000</u>	<u>-</u>	<u>(5,225,000)</u>	<u>79,765,000</u>
Revenue Bonds, 2014 Series A, B & C: 3% to 5% Series 2014A—maturing in 2018 through 2039	225,635,000	-	(7,080,000)	218,555,000
1.804% to 3.961% Series 2014B (fully taxable)—maturing 2018 through 2039	<u>84,845,000</u>	<u>-</u>	<u>(2,455,000)</u>	<u>82,390,000</u>
Total Series 2014 A, B & C	<u>310,480,000</u>	<u>-</u>	<u>(9,535,000)</u>	<u>300,945,000</u>
Revenue Bonds, 2016 Series A & B: 3% to 5% Series 2016A—maturing in 2019 through 2039	475,330,000	-	-	475,330,000
1.828% to 3.503% Series 2016B (fully taxable)—maturing 2020 through 2033	<u>21,075,000</u>	<u>-</u>	<u>-</u>	<u>21,075,000</u>
Total Series 2016 A & B	<u>496,405,000</u>	<u>-</u>	<u>-</u>	<u>496,405,000</u>
Revenue Bonds, 2017 Series: 3% to 5% Series 2017—maturing in 2021 through 2040	<u>90,455,000</u>	<u>-</u>	<u>-</u>	<u>90,455,000</u>
Total bonds payable	<u>\$ 982,330,000</u>	<u>\$ -</u>	<u>\$ (14,760,000)</u>	<u>\$ 967,570,000</u>
Less current portion	<u>(14,760,000)</u>	<u>-</u>	<u>-</u>	<u>(26,205,000)</u>
Long-term portion	967,570,000			941,365,000
Add (deduct):				
Unamortized debt premium	119,709,435	-	(11,206,324)	108,503,111
Unamortized debt discount	<u>(224,494)</u>	<u>-</u>	<u>92,894</u>	<u>(131,600)</u>
Long-term bonds payable	<u>\$ 1,087,054,941</u>	<u>\$ -</u>	<u>\$ (11,113,430)</u>	<u>\$ 1,049,736,511</u>

	2017			
	December 31, 2016	Bonds Issued	Retirements	December 31, 2017
Revenue Bonds, 2008 Series A: 3.625% to 5% Series 2008A—maturing in 2018	\$ 19,760,000	\$ -	\$ (19,760,000)	\$ -
Revenue Bonds, 2010 Series A & B: 3% to 5.25% Series 2010A—maturing in 2015 through 2040	111,055,000	-	(99,230,000)	11,825,000
3.71% to 7.155% Series 2010B (fully taxable)—maturing 2015 through 2040	74,540,000	-	(1,375,000)	73,165,000
Total Series 2010 A & B	<u>185,595,000</u>	<u>-</u>	<u>(100,605,000)</u>	<u>84,990,000</u>
Revenue Bonds, 2014 Series A, B & C: 3% to 5% Series 2014A—maturing in 2018 through 2039	225,635,000	-	-	225,635,000
1.804% to 3.961% Series 2014B (fully taxable)—maturing 2018 through 2039	84,845,000	-	-	84,845,000
Total Series 2014 A, B & C	<u>310,480,000</u>	<u>-</u>	<u>-</u>	<u>310,480,000</u>
Revenue Bonds, 2016 Series A & B: 3% to 5% Series 2016A—maturing in 2019 through 2039	475,330,000	-	-	475,330,000
1.828% to 3.503% Series 2016B (fully taxable)—maturing 2020 through 2033	21,075,000	-	-	21,075,000
Total Series 2016 A & B	<u>496,405,000</u>	<u>-</u>	<u>-</u>	<u>496,405,000</u>
Revenue Bonds, 2017 Series: 3% to 5% Series 2017—maturing in 2021 through 2040	-	90,455,000	-	90,455,000
Total bonds payable	<u>\$ 1,012,240,000</u>	<u>\$ 90,455,000</u>	<u>\$ (120,365,000)</u>	<u>\$ 982,330,000</u>
Less current portion	<u>(24,780,000)</u>	<u>24,780,000</u>	<u>(14,760,000)</u>	<u>(14,760,000)</u>
Long-term portion	987,460,000			967,570,000
Add (deduct):				
Unamortized debt premium	116,184,969	13,975,419	(10,450,953)	119,709,435
Unamortized debt discount	<u>(2,433,740)</u>	<u>-</u>	<u>2,209,246</u>	<u>(224,494)</u>
Long-term bonds payable	<u>\$ 1,101,211,229</u>	<u>\$ 13,975,419</u>	<u>\$ (8,241,707)</u>	<u>\$ 1,087,054,941</u>

Oklahoma state statutes have authorized the Authority to issue revenue bonds from time to time with the aggregate outstanding indebtedness not to exceed \$1,410,000,000.

In 2017, the Authority issued \$90,455,000 of 2017 Series Revenue Bonds to (i) advance refund \$95,585,000 of the Authority's Revenue Bonds Series 2010A, and (ii) to finance certain costs of issuance of the Series 2017 Bonds. The Authority recorded an initial accounting loss of approximately \$11.3 million in connection with this advance refunding, which was recorded as a deferred asset and is being amortized to expense over the life of the new bonds. The economic gain on the transaction was \$12.2 million. The difference between the present values of the old and new debt service payments is \$11.1 million. The Authority will realize \$17.1 million in decrease aggregate debt service payments.

In 2016, the Authority issued \$496,405,000 of 2016 Series A and Series B Revenue Bonds to (i) advance refund \$481,790,000 of the Authority's Revenue Bonds, Series 2008A and advance refund \$44,160,000 of the Authority's Revenue Bonds, Series 2010A, and redeem all of the Authority's \$65,000,000 Revenue Bonds, Series 2014C (Federally Taxable), and (ii) to finance certain costs of issuance of the Series 2016 Bonds. The Authority recorded

an initial accounting loss of approximately \$30.0 million in connection with this advance refunding, which was recorded as a deferred asset and is being amortized to expense over the life of the new bonds. The economic gain on the transaction was \$111.4 million. The difference between the present values of the old and new debt service payments is \$69.5 million. The Authority will realize \$132.5 million in decrease aggregate debt service payments.

In 2014, the Authority issued \$375,480,000 of 2014 Series A, Series B, and Series C Revenue Bonds to fund a portion of the construction of a nominal 495 MW combined-cycle plant (GREC 3), environmental upgrades to the existing nominal 520 MW coal-fired plant (GREC 2), other capital requirements for power supply and transmission needs and to pay certain costs of issuance of the 2014 Bonds. The \$225,635,000 Series 2014A (tax-exempt) and the \$84,845,000 Series B (taxable) bonds were issued in October 2014 and have a fixed interest rate. The \$65,000,000 Series 2014C (taxable) bonds were issued in December 2014 and have a variable rate. The 2014C Bonds were issued in the weekly mode and will bear interest at the weekly rate, which, in the sole and exclusive judgment of the remarketing agent, would equal (but not exceed) the interest rate necessary to enable the remarketing agent to sell such Series 2014C Bonds (exclusive of accrued interest, if any) on the relevant rate adjustment date and for such rate period at a price equal to one hundred percent (100%) of the principal amount thereof. While in the weekly mode, the Series 2014C Bonds are subject to redemption and optional and mandatory tender for purchase prior to maturity. Additionally, the Series 2014C Bonds have the benefit of credit facility in the form of an irrevocable direct pay letter of credit issued by Barclays Bank PLC. Barclays Capital Inc. is the remarketing agent for the Series 2014C Bonds. The Series 2014C Bonds were redeemed by the 2016 refunding issues.

In December 2010, the Authority issued \$239,315,000 of 2010 Series A and Series B Revenue Bonds to fund capital additions, repairs and improvements to the system, to fund a portion of the interest accruing on the 2010 Bonds to December 1, 2012, and to pay certain costs of issuance of the 2010 Bonds. \$44,160,000 of the Series 2010A Bonds were advance refunded with the 2016 refunding issues and \$95,585,000 of the Series 2010A Bonds were advance refunded with the 2017 refunding issues.

In September 2008, the Authority issued \$575,375,000 of 2008 Series A and Series B Revenue Bonds for the purchase of a 36% interest in the 1230MW gas-fired, combined-cycle Redbud Power Plant (see Note 1), to fund capital additions, repairs and improvements to the system, to make deposits into the bonds service reserve, reserve, and contingency accounts and to pay certain costs of issuance for the 2008 bonds. \$481,790,000 of the Series 2008A Bonds were advance refunded with the 2016 refunding issues.

Monies from the 2017 and 2016 refunding bonds were placed in escrow for the payment of principal and interest on all the defeased bonds and were invested in obligations of the United States, which were deposited in irrevocable trusts with recourse against the trustee if funds are not available to pay principal, interest and any redemption premium on a timely basis. Since the revenue bonds that are defeased are no longer direct liabilities of the Authority, they are not reflected on the accompanying Statements of Net Position.

Defeased bonds of \$139,745,000 were outstanding at December 31, 2018, and consisted of a portion of the Series 2008A and Series 2010A Bonds. The scheduled maturities of bonds payable at December 31, 2018, are as follows and reflect the scheduled payments to be remitted by the trustee to the bondholders:

Year Ended December 31	Due to Bond Holders		
	Annual Principal	Semiannual Interest	Calendar Year Bond Payments
2019	\$ 26,205,000	\$ 23,233,962	
2020	37,505,000	22,706,933	\$ 72,145,895
2021	39,240,000	21,841,374	82,053,307
2022	41,675,000	20,965,270	82,046,644
2023	43,080,000	20,046,383	82,686,653
2024–2028	252,860,000	159,951,282	412,811,282
2029–2033	301,515,000	93,529,315	395,044,315
2034–2038	173,030,000	35,628,989	208,658,989
2039–2040	52,460,000	2,299,733	54,759,733
	<u>\$ 967,570,000</u>	<u>\$ 504,767,305</u>	<u>\$ 1,472,337,305</u>

While the Authority makes monthly sinking fund payments for cash management purposes, per the Resolution No. 5107, the payments from the revenue fund to the debt service fund only need to be sufficient to pay the June 1st interest and principal payments and the December 1st interest payments.

To secure the bonds, the Authority has pledged all revenues of the Authority. Resolution No. 5107 and supplemental bond resolutions specify multiple covenants made by the Authority to the Bond Fund Trustee and bondholders. Among the more significant requirements, the Authority has covenanted to charge adequate rates, operate and maintain the facilities, and make any necessary repairs, renewals, replacements and improvements. System properties are not to be encumbered or sold or disposed of and additional parity bonds are not to be issued unless certain conditions are met. As of December 31, 2018, the Authority was in compliance with bond covenants.

In general, federal tax laws require the Authority to rebate to the US Treasury any profit from investments that yield a higher rate than the tax-exempt revenue bond proceeds. The Authority had no accrued liability balance for arbitrage rebate at December 31, 2018 and 2017, respectively.

7. RETIREMENT PLANS, POSTRETIREMENT, AND OTHER EMPLOYEE BENEFITS

The Authority participated in five retirement plans during 2018 and 2017. The plans currently available to the Authority personnel include three defined benefit plans and two defined contribution plans. The defined benefit plans include the Oklahoma Public Employees Retirement System (OPERS) plan, the Oklahoma Law Enforcement Retirement System (OLERS) plan, and the GRDA postemployment Healthcare Plan. The defined contribution plans include the Oklahoma State Employees Deferred Compensation Plan (the “State Plan”) and the OPERS Pathfinder plan. A summary of significant data for each of the retirement plans and discussion of postemployment and other employee benefits follows:

The Authority is a participant in two multiple employer defined benefit pension plans, the Oklahoma Public Employees Retirement Plan (the “OPERS Plan”) and the Oklahoma Law Enforcement Retirement Plan (the “OLERS Plan”). The table below shows both pensions as reported in the basic financial statements.

For the year ended December 31, 2018:

	OPERS		OLERS		Total
Deferred outflows of resources	\$ 6,618,443	\$	708,163	\$	7,326,606
Deferred inflows of resources	3,461,331		112,858		3,574,189
Pension liability (asset)	5,138,160		1,574,732		6,712,892
Pension liability recognized	3,574,944		1,269,280		4,844,224

For the year ended December 31, 2017:

	OPERS		OLERS		Total
Deferred outflows of resources	\$ 9,497,418	\$	861,574	\$	10,358,992
Deferred inflows of resources	2,235,117		1,347,172		3,582,289
Pension liability (asset)	12,498,665		1,891,434		14,390,099
Pension liability recognized	6,430,718		2,769,361		9,200,079

Oklahoma Public Employees Defined Benefit Retirement Plan

General Information about the Pension Plan

Plan Description. The Authority contributes to the OPERS Plan, a cost-sharing multiple-employer public employee defined benefit retirement plan administered by the OPERS, a component unit of the State of Oklahoma (the “State”). The OPERS Plan provides retirement, disability and death benefits to its members and beneficiaries, primarily state, county, and local agency employees. The benefits provided are established by and may be amended by the legislature of the State. Title 74 of the Oklahoma Statutes, Sections 901 through 943, assigns the authority for management and operation of the OPERS Plan to the OPERS Board of Trustees.

In 2014, the Oklahoma Legislature enacted legislation effective November 1, 2015, requiring a defined contribution system be established by the OPERS for most state employees first employed by a participating State employer on or after November 1, 2015, and ceasing the acceptance of any new participants to the defined benefit retirement plan.

OPERS issues a publicly available financial report that includes financial statements and required supplementary information for OPERS. That annual report may be obtained online at www.opers.ok.gov, by writing to OPERS, PO Box 53007, Oklahoma City, OK 73152 3007, or by calling 1 800 733 9008.

Vesting. OPERS requires eight years of credited service (including six full years of full-time equivalent employment) to be eligible to vest.

Benefits Provided. Employees who became a member of OPERS before November 1, 2011, can begin receiving full, unreduced retirement benefits at the age of 62 with six full years of full-time equivalent employment; or when the sum of the member’s age and years of service equals 80 when membership began before July 1, 1992; or when the sum of the member’s age and years of service equals 90 when membership began on or after July 1, 1992.

Employees who became a member of OPERS on or after November 1, 2011, can begin receiving full, unreduced retirement benefits at the age of 65 with six full years of full-time equivalent employment; or when the member is at least 60 years of age and the sum of the member’s age and years of service equals 90.

Employees may retire at age 60 (55 when membership began before November 1, 2011) and receive reduced benefits with at least 10 years of participating service. Members who choose early retirement will receive a permanent actuarial reduction in benefit based on the age at retirement.

The benefit on or after normal retirement, payable monthly for life, is 2% of final average compensation, multiplied by years of credited service. For members who have elected the Step-Up Option, a 2.5% multiplier is applied to the “stepped-up” full years.

Contributions. OPERS members and the Authority are required to contribute to the OPERS Plan at a rate set by statute. Contribution rates are established and may be amended by the State. Each member participates based on gross salary earned (excluding overtime). As state employees, the Authority employees contribute 3.5% on salary. The Authority contributed 16.5%, on all salary for the fiscal years ended June 30, 2018 and 2017.

OPERS members have the option to elect to increase the benefit computation factor for all future service from 2.0% to 2.5%. The election is irrevocable, binding for all future employment under OPERS, and applies only to full years of service. Those who make the election pay the standard contribution rate plus an additional contribution rate of 2.91% which is actuarially determined. The election is available for all state, county, and local government employees, except for elected officials and hazardous duty members.

During the reporting period for 2018 and 2017, the OPERS recognized \$6,485,378 and \$6,516,168, respectively, in contributions from the Authority.

Contribution rates as of December 31, 2018 and 2017, were as follows:

Employee Category	Employee	Employer
General	3.50 %	16.50 %
Elected Officials	3.50	16.50

OPERS Hazardous Duty Employees. On July 1, 2016, SB 1388 became effective, which required the Authority’s public safety officers to participate in OPERS as Hazardous Duty Employees. This group of employees contributes 8% of allowable compensation as defined in 74 O.S. § 902(9) for a maximum of 20 years of hazardous duty participating service, while the Authority contributes 16.5%, on allowable compensation. After the employee has contributed at the higher rate for 20 years, the employee will contribute at the nonhazardous duty rate. Employees vest when they have eight years of credited service (including six full years of full-time-equivalent employment). Because all Authority employees will have become members of the plan after November 1, 2011, the employee can begin receiving full, unreduced retirement benefits when he or she is at least age 65 with six full years of full-time-equivalent employment or is at least 60 years of age and the sum of age and years of service equals 90.

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pension, and pension expense, information about the fiduciary net position of the Plan and additions to/deductions from the Plan’s fiduciary net position have been determined on the same basis as they are

reported by the Plan. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms, investments are reported at fair value.

At December 31, 2018, the Authority reported a liability of \$5,138,160 for its cumulative proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2018, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of July 1, 2018. The Authority's proportion of the net pension liability was based on the Authority's share of contributions to the pension plan relative to the contributions of all participating employers. At June 30, 2018, the Authority's proportion was 2.4418%. At June 30, 2017, the Authority's proportion, which included the proportion previously designated for Oklahoma Scenic Rivers Commission was 2.3117%. For the year ended December 31, 2018, the Authority recognized pension expense of \$3,574,944. For the year ended December 31, 2017, the Authority reported a liability of \$12,498,665 and recognized pension expense of \$6,430,718. As of December 31, 2018, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	OPERS Plan 2018	
	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ -	\$ 2,682,260
Changes in assumptions	2,169,106	-
Net differences between projected and actual earnings on pension plan investments	-	779,071
Employer contributions subsequent to the measurement date	3,167,997	-
Change in proportion	<u>1,281,340</u>	<u>-</u>
Total	<u>\$ 6,618,443</u>	<u>\$ 3,461,331</u>

As of December 31, 2017, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	OPERS Plan 2017	
	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ -	\$ 2,235,117
Changes in assumptions	5,318,183	-
Net differences between projected and actual earnings on pension plan investments	377,703	-
Employer contributions subsequent to the measurement date	3,182,375	-
Change in proportion	<u>619,157</u>	<u>-</u>
Total	<u>\$ 9,497,418</u>	<u>\$ 2,235,117</u>

The amounts reported as deferred outflows related to employer contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the subsequent year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pension will be recognized in pension expense as follows:

Year Ended December 31	OPERS Plan		
	Deferred Outflow of Resources	Deferred Inflows of Resources	Net Pension Expense
2019	\$ 3,483,360	\$ -	\$ 3,483,360
2020	180,595	(385,645)	(205,050)
2021	-	(2,698,721)	(2,698,721)
2022	-	(590,474)	(590,474)
	<u>\$ 3,663,955</u>	<u>\$ (3,674,840)</u>	<u>\$ (10,885)</u>

Actuarial Assumptions. The total pension liability in the July 1, 2018, actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

	2018	2017
Actuarial valuation date:	July 1, 2018	July 1, 2017
Measurement date of net pension liability:	June 30, 2018	June 30, 2017
Actuarial cost method:	Entry age	Entry age
Asset valuation method for contributions:	Five-year moving average of expected and actual market values	Five-year moving average of expected and actual market values
Asset valuation method for assets under GASB 68:	Fair value of assets	Fair value of assets
Long-term expected rate of return:	7%	7.25%
Discount rate:	7%	7.25%
Salary increases:		
Inflation:	2.75%	2.75%
Seniority/merit:	3.5% to 9.5% per year including inflation	3.5% to 9.5% per year including inflation
Mortality:	RP-2014 Blue Collar Active Mortality Table	RP-2014 Blue Collar Active Mortality Table

Actuarial assumptions are based upon the most recent experience study, which covered the three year period ending June 30, 2016. The experience study report is dated April 13, 2017.

Long-Term Expected Return on Plan Assets. The long-term expected rate of return on pension plan investments was determined using a lognormal distribution analysis in which best estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major

asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimates of geometric real rates of return for each major asset class used in the June 30, 2016 experience study, are summarized in the following table:

Asset Class	Long-Term Real Rate of Return	Target Allocation
U.S. Large Cap Equity	3.8 %	38.0 %
U.S. Small Cap Equity	4.9	6.0
Non-US Equity	9.2	24.0
U.S. Fixed Income	1.4	<u>32.0</u>
Total		<u>100.0 %</u>

Single Discount Rate. The discount rate used to measure the total pension liability was 7% for 2018 and 7.25% for 2017. The projection of cash flows used to determine the discount rate assumed that contributions from plan members and the employees will be made at the current contribution rate as set out in state statute. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability. The discount rate determined does not use a municipal bond rate.

Sensitivity of the Authority's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate. The following presents the Authority's proportionate share of the net pension liability calculated using the discount rate of 7%, as well as what the Authority's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6%) or 1-percentage-point higher (8%) than the current rate:

	2018		
	1% Decrease to Discount Rate (6%)	Current Discount Rate (7%)	1% Increase To Discount Rate (8%)
Proportionate share of the net pension liability	<u>\$ 30,558,162</u>	<u>\$ 5,138,160</u>	<u>\$ (17,097,640)</u>
	2017		
	1% Decrease to Discount Rate (6.25%)	Current Discount Rate (7.25%)	1% Increase To Discount Rate (8.25%)
Proportionate share of the net pension liability	<u>\$ 36,940,351</u>	<u>\$ 12,498,674</u>	<u>\$ (8,197,691)</u>

Pension Plan Fiduciary Net Position. Detailed information about the pension plan's fiduciary net position is available in separately issued financial statements available at www.operators.ok.gov.

Payables to the Pension Plan

At December 31, 2018 and 2017, the Authority has outstanding payables to OPERS of \$672,034 and \$645,712, respectively, related to December 2018 and 2017 employer, employee, and voluntary contributions, which are payable in the following month. These amounts are included in accounts payable on the Statements of Net Position.

Oklahoma Law Enforcement Retirement Plan

General Information about the Pension Plan

Plan Description. Legislation passed during 2003 mandated that any lake patrolmen and dispatchers hired on or after July 1, 2003, shall participate as members of the OLERS Plan, a cost-sharing multiple-employer public employee-defined benefit retirement plan administered by the Oklahoma Law Enforcement Retirement System (OLERS), a component unit of the State. The OLERS Plan provides retirement, disability, and death benefits to its members and beneficiaries, primarily state employees providing law enforcement. The benefits provided are established and may be amended by the legislature of the State. Three of the Authority's patrolmen elected to transfer from the OPERS Plan to the OLERS Plan under Oklahoma Statutes, Title 47, Section 2-315, which provided that Authority lake patrolmen and dispatchers as of June 30, 2003, could make an irrevocable written election by January 1, 2004, to either pay the difference between the amount transferred between the plans or receive eligible prorated service credit as defined in statute. Oklahoma Statutes, Title 47, Sections 2-300, *et seq.*, established the Oklahoma Law Enforcement Retirement Board to administer this retirement system.

SB 1388, as codified in Oklahoma Statutes, Title 47, Sections 902, *et seq.*, placed all GRDA public safety officers hired after July 1, 2016, under the OPERS plan as hazardous duty employees.

The System issues a publicly available annual financial report that includes financial and required supplementary information for OLERS. That annual report may be obtained online at www.olders.state.ok.us, by writing to OLERS, 421 NW 13th St, Suite 100, Oklahoma City, OK 73103 or by calling 1 877 213 0856.

Vesting. OLERS requires ten years of credited service to be eligible to vest.

Benefits Provided. Employees can begin receiving full, unreduced retirement benefits after twenty years of service or at the age of 62 with ten full years of full-time equivalent employment.

The benefit on or after normal retirement is 2.5% of the greater of final average salary or the salary paid to active employees as described under "salary considered" multiplied by the years and completed months of credited service. There is no maximum service.

Contributions. System members and the Authority are required to contribute to the OLERS Plan at a rate set by statute. These contributions are established and may be amended by the legislature of the State. Each member participates based on gross salary earned (excluding overtime). The Authority's patrolmen and dispatchers participating in the OLERS Plan contributed 8.0%, and the Authority contributed 10% of total base salary through October 2012. Beginning November 2012, the Authority contribution rates increased to 11% of total base salary. Additional funds are also provided by the State of Oklahoma as summarized in the table below. Non-employer contributions are recorded as non-operating revenue in the Statements of Revenues, Expenses, and Changes in Net Position.

During the reporting period for 2018 and 2017, the OLERS recognized \$134,432 and \$134,826 in contributions from the Authority, respectively.

Contribution rates as of December 31, 2018 and 2017, were as follows:

Category	Contribution Rate
State	License Agency Fees equal to 1.2% of Driver's License Taxes, plus 5% of Insurance Premium Tax
Agency	10% of actual base salary until October 31, 2012, and 11% of actual base salary as of November 1, 2012
Member	8% of paid salary. Accumulated contributions after tax up to December 31, 1989, and before-tax after December 31, 1989

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pension, and pension expense, information about the fiduciary net position of the Plan and additions to/deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by the Plan. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms, investments are reported at fair value.

At December 31, 2018, the Authority reported a liability of \$1,574,732 for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2018, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of July 1, 2018. The Authority's proportion of the net pension liability was based on the Authority's share of contributions to the pension plan relative to the contributions of all participating employers. At June 30, 2018, the Authority's proportion was 1.4701%. At June 30, 2017, the Authority's proportion was 1.4556%. For the year ended December 31, 2018, the Authority recognized pension expense of \$1,269,280. For the year ended December 31, 2017, the Authority reported a liability of \$1,891,434 and recognized pension expense of \$2,769,361.

At December 31, 2018, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	OLERS Plan 2018	
	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 260,375	\$ 111,759
Changes in assumptions	10,320	-
Net differences between projected and actual earnings on pension plan investments	108,040	-
Employer contributions subsequent to the measurement date	70,500	-
Change in proportion	<u>258,928</u>	<u>1,099</u>
Total	<u>\$ 708,163</u>	<u>\$ 112,858</u>

At December 31, 2017, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	OLERS Plan 2017	
	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 405,587	\$ 70,033
Changes in assumptions	13,163	-
Net differences between projected and actual earnings on pension plan investments	-	1,269,486
Employer contributions subsequent to the measurement date	65,373	-
Change in proportion	<u>377,451</u>	<u>7,654</u>
 Total	 <u>\$ 861,574</u>	 <u>\$ 1,347,173</u>

The amounts reported as deferred outflows related to employer contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the subsequent year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pension will be recognized in pension expense as follows:

Year Ended December 31	OLERS Plan		
	Deferred Outflows of Resources	Deferred Inflows of Resources	Net Pension Expenses
2019	\$ 321,522	\$ -	\$ 321,522
2020	228,317	-	228,317
2021	-	(18,735)	(18,735)
2022	-	(5,529)	(5,529)
2023	-	(770)	(770)
	<u>\$ 549,839</u>	<u>\$ (25,034)</u>	<u>\$ 524,805</u>

Actuarial Assumptions. The total pension liability in the July 1, 2018, actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

	2018	2017
Actuarial valuation date:	July 1, 2018	July 1, 2017
Measurement date of net pension liability:	June 30, 2018	June 30, 2017
Actuarial cost method:	Entry age	Entry age
Asset valuation method for contributions:	Five-year moving average of expected and actual market values	Five-year moving average of expected and actual market values
Asset valuation method for assets under GASB 68:	Fair value of assets	Fair value of assets
Long-term expected rate of return:	7.5%	7.5%
Discount rate:	7.5%	7.5%
Salary increases:		
Inflation:	2.75%	2.75%
Seniority/merit:	3.5% – 9.75%, including inflation	3.5% – 9.75%, including inflation
Mortality:	RP-2014 Blue Collar Healthy Employees with Generational Projection using Scale MP-2016	RP-2014 Blue Collar Healthy Employees with Generational Projection using Scale MP-2016

Actuarial assumptions used in the July 1, 2018, valuation are based upon an experience study conducted using experience from the five-year period ending June 30, 2016.

Long-Term Expected Return on Plan Assets. The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation) were developed for each major class. These ranges were combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the target asset allocation percentages and adding expected inflation.

The assumption is intended to be a long-term assumption (30 to 50 years) and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.

The target asset allocation and best estimates of arithmetic real rates of return for each major asset class, as provided by the System's investment consultant, are summarized in the following table:

Asset Class	Long-Term Expected Real Rate of Return	Target Allocation
Large Cap Equity	11.01 %	20 %
Small Cap Equity	12.27	10
Long/Short Equity	9.75	10
International	11.99	10
Emerging Market	13.28	5
Private Equity	13.64	5
Fixed Income	19.30	30
Real Assets	15.05	<u>10</u>
 Total		 <u><u>100 %</u></u>

Single Discount Rate. A single discount rate of 7.5% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 7.5% for both the June 30, 2018 and June 30, 2017 measurement dates. A municipal bond rate was not used in determining the discount rate.

The projection of cash flows used to determine the discount rate assumed that plan contributions from members, state agencies, insurance premium taxes, and other state sources would be made at the current contribution rates set out in state statute.

Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Authority's Proportionate Share of the Net Pension Liability (Asset) to Changes in the Discount Rate. The following presents the Authority's proportionate share of the net pension liability (asset) calculated using the discount rate of 7.5%, as well as what the Authority's proportionate share of the net pension liability (asset) would be if it were calculated using a discount rate that is 1-percentage-point lower (6.5%) or 1-percentage-point higher (8.5%) than the current rate:

	2018		
	1% Decrease to Discount Rate (6.5%)	Current Discount Rate (7.5%)	1% Increase To Discount Rate (8.5%)
Proportionate share of the net pension liability	\$ 3,599,261	\$ 1,574,732	\$ (85,607)

	2017		
	1% Decrease to Discount Rate (6.5%)	Current Discount Rate (7.5%)	1% Increase To Discount Rate (8.5%)
Proportionate share of the net pension liability	\$ 3,882,094	\$ 1,891,434	\$ 259,692

Pension Plan Fiduciary Net Position. Detailed information about the pension plan's fiduciary net position is available in separately issued financial statements available at www.olders.state.ok.us.

Payables to the Pension Plan

At December 31, 2018 and 2017, the Authority has outstanding payables to OLERS of \$20,855 and \$19,376, respectively, related to December 2018 and 2017, employer, employee, and voluntary contributions, which are payable in the following month. These amounts are included in accounts payable on the Statements of Net Position.

Oklahoma Public Employees Retirement Defined Contribution Plan

In 2014, the Oklahoma Legislature enacted legislation in HB 2630 requiring a Defined Contribution System be established by the OPERS for most state employees first employed by a participating State employer on or after November 1, 2015. This bill is codified in Oklahoma Statutes as Title 74, Section 935.1, *et seq.* Employees of the Authority who first became employees on or after November 1, 2015, and have no prior participation in OPERS must participate in the mandatory Defined Contribution Plan created in accordance with Internal Revenue Code Section 401(a) and 457(b) and Title 590, Chapter 40 of the Oklahoma Administrative Code. The Defined Contribution Plan is known as Pathfinder. Pathfinder and its related Trust(s) are intended to meet the requirements of the Internal Revenue Code. Pathfinder is administered by the OPERS.

Contribution rates are established by Oklahoma Statute and may be amended by the Oklahoma Legislature. For 2015, the initial period of implementation, employees must make mandatory employee contributions of 4.5% of pretax salary to the 401(a) plan and may make additional voluntary contributions to the 457(b) plan, subject to the maximum deferral limit allowed under the Internal Revenue Code. Employees are vested 100% for all employee contributions. The Authority must make mandatory contributions of 6% of the employee's pretax salary and 7% if the employee elects to participate in the 457(b) plan. Employees become vested for the employer contributions based on an established vesting schedule. The amount of the Authority's contributions for Pathfinder for the year ended December 31, 2018 and 2017, was approximately \$262,349 and \$153,263, respectively.

Additionally, in order to reduce the liabilities of the defined benefit plan, the Authority is required to contribute the difference between the established 16.5% defined benefit employer contribution rate and the amount required to match the participating employees' contribution in the defined contribution plan. The amount contributed by the Authority for the year ended December 31, 2018 and 2017, to meet this requirement is \$372,710 and \$220,137, respectively. The Authority had outstanding payables to OPERS for the defined benefit plan for the year ended December 31, 2018 and 2017, of \$46,612 and \$29,440, respectively, which were payable in the following month.

Oklahoma State Employees Deferred Compensation Plan

Plan Description. Employees of the Authority may also participate in the Oklahoma State Employees Deferred Compensation Plan (the "State Plan"), a voluntary deferred compensation plan administered by OPERS. The State Plan is a defined contribution plan available to all Authority employees, which permits participants to defer receipt of a portion of their salary until future years as authorized by Section 457 of the Internal Revenue Code and in accordance with the provisions of Oklahoma Statutes, Title 74, Sections 1701, *et seq.* The State Plan is established by and may be amended by the Legislature of the State. Oklahoma Statutes assign the authority for management and operation of the State Plan to the Board of Trustees of the OPERS. The minimum amount allowable to be deferred under the State Plan is \$25 per month. Under state law, each employee is eligible to receive a \$25 monthly matching contribution from the Authority to be deposited in a 401(a) retirement account. Employee contributions to the Plan totaled \$1,120,013 and \$1,087,927 for the years ended December 31, 2018 and 2017, respectively. The Authority paid matching contributions and administrative fees of \$141,943 and \$151,273 for the years ended December 31, 2018 and 2017, respectively.

GRDA Postemployment Healthcare Plan

Plan Guidance. The Authority implemented GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions effective January 1, 2018. The total OPEB liability was not restated due to the measurement date used for the calculation of the balances and the timing of information received by the plan. For this reason, prior year OPEB footnote disclosures are included under GASB Statement No. 45.

Plan Description. GRDA Postemployment Healthcare Plan is a single-employer defined benefit healthcare plan administered by the Authority. GRDA Postemployment Healthcare Plan provides medical and dental insurance benefits to eligible retirees. Beginning in 2003, Oklahoma Statutes, Title 82, Section 864.1 authorized the Authority to subsidize up to \$60 per month of eligible employee-only health insurance premiums for each Authority retiree. Legislation passed in 2005 removed the \$60 limitation. At the December 2005 Board meeting, the Authority's directors authorized the Authority to increase the subsidy to a defined benefit allowance of \$105 per month for eligible retirees, effective January 1, 2006. At the November 2007 Board meeting, the Authority's directors authorized the Authority to increase the subsidy to \$200 per month for eligible retirees, effective January 1, 2008. This stipend is provided for life to employees hired prior to November 1, 2015.

Benefits Provided. The OPEB plan provides for employee and dependent healthcare coverage from the date of retirement to age 65, provided the participant was covered by the plan before retiring. The participant can elect to enroll in spousal coverage. Surviving spouses may continue in the plan until age 65. Spouses do not receive the \$200 per month subsidy.

Annual OPEB Cost and Total OPEB Obligation. The Authority's annual other postemployment benefit (OPEB) cost (expense) is calculated based on the annual required contribution (ARC) of the employer, an amount actuarially determined in accordance with the parameters of GASB Statement No. 45, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal costs each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years. The following table shows the components of the Authority's annual OPEB cost for the year, the amount actually contributed to the plan, and changes in the Authority's total OPEB obligation to GRDA Postemployment Healthcare Plan (included in Other Noncurrent Liabilities on the Statements of Net Position):

	2017
Annual required contribution	\$ 818,771
Interest on net OPEB obligation	105,733
Adjustment to annual required contribution	<u>(93,820)</u>
Annual OPEB cost	830,684
Contributions made	<u>(584,188)</u>
Increase in net OPEB obligation	246,496
Net OPEB obligation—beginning of year	<u>3,020,934</u>
Net OPEB obligation—end of year	<u>\$ 3,267,430</u>

The Authority's annual OPEB cost, the percentage of annual OPEB cost contributed to the plan, and the total OPEB obligation for December 31, 2017, and the two preceding years were as follows:

Year-End	Annual OPEB Cost	Percentage of Annual OPEB Cost Contributed	Net OPEB Obligation
December 31, 2015	\$ 775,437	69.21 %	\$ 2,815,571
December 31, 2016	775,437	73.52	3,020,934
December 31, 2017	830,684	70.33	3,267,430

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the health care cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress immediately following the Notes to the Financial Statements and presented as required supplementary information, presents multiyear trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

Funded Status and Funding Progress. As of January 1, 2017, the plan was 0% funded. The actuarial accrued liability for benefits was \$12,852,859, and the actuarial value of assets was \$0, resulting in an unfunded actuarial accrued liability (UAAL) of \$12,852,859. The covered payroll (annual payroll of active employees covered by the plan) was \$37,581,377, and the ratio of the UAAL to the covered payroll was 34.2%.

Employees Covered by the Plan: The following table details the Authority's number of employees covered by the benefit terms:

Participant Data**December 31, 2018**

Active participants:	
Employees hired prior to 11/01/2015 and eligible for \$200 subsidy	460
Employees hired 11/01/2015 or later and not eligible for \$200 subsidy	63
Total active participants	<u>523</u>
Inactive participants entitled to but not yet receiving benefits	0
Inactive participants receiving benefits:	
Retirees	258
Covered Spouses (below age 65)	26
Total inactive participants receiving benefits	<u>284</u>
Total Participants	<u><u>807</u></u>

Funding Policy. The contributions of plan members and the Authority are established and may be amended by the Board of Directors within the limits of Oklahoma statutes. The contribution is based on estimated pay-as-you-go financing requirements. For the years ended December 31, 2018 and 2017, the Authority contributed \$626,363 and \$583,877, respectively, to the plan which consisted entirely of current premiums and included no additional contribution to prefund benefits.

Actuarial Methods and Assumption. Projections of benefits for financial reporting purposes are based on the benefits provided under the terms of the substantive plan (the plan as understood by the employer and the plan members) at the time of each valuation and the historical pattern of sharing the benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations. In the previous actuarial valuation, as of January 1, 2017, the Entry Age Normal method was used, as opposed to the unit credit actuarial cost method which was used in the actuarial valuation as of January 1, 2015. The actuarial assumptions included a 4% inflation rate assumption, a 3.5% discount rate, which is approximately based on the employer's own long-term rate of return on investments, a 4% projected annual payroll increase, and no increase to the postretirement benefit. The unfunded actuarial accrued liability is being amortized over the maximum permissible amortization period of thirty years as a level percentage of payroll on an open basis. In the most recent actuarial valuation, as of January 1, 2018, the Entry Age Normal method was used. The total OPEB liability in the December 31, 2018 actuarial valuation was determined using the following assumptions:

Inflation	2.10%
Discount Rate	3.44% (From the Bond Buyer GO-20 Index)
Salary Increases	Variable from 9.50% to 3.50% based on age and service group
Healthcare cost trend rates	2018-2019 at 7.00% decreasing .3% each year to 2021 then decrease by .2% to 2024 to an ultimate rate of 4.6% for 2025 and beyond
Mortality	RP-2006 combined healthy mortality table with a fully generational projection using Scale MP-2018

Changes in the Total OPEB Liability. Changes of assumptions and other inputs reflect a change in discount rate from 3.78% in 2017 to 3.44% in 2018.

Changes in the Total OPEB Liability	Total OPEB Liability	Plan Fiduciary Net Position	Total OPEB Liability
Balance at December 31, 2017	\$ 16,760,009	\$ -	\$ 16,760,009
Changes for the Year			
Service Cost	575,830	-	575,830
Interest on Total OPEB Liability	639,391	-	639,391
Changes in benefits	-	-	-
Difference between expected and actual experience	-	-	-
Changes in assumptions	542,673	-	542,673
Employer Contributions	-	849,335	(849,335)
Contributions - Special Funding Situations	-	-	-
Employee Contributions	-	-	-
Net investment income	-	-	-
Benefit payments, including employee refunds	(849,335)	(849,335)	-
Administrative expense (negative number)	-	-	-
Net changes	<u>908,559</u>	<u>-</u>	<u>908,559</u>
Balance at December 31, 2018	<u>\$ 17,668,568</u>	<u>\$ -</u>	<u>\$ 17,668,568</u>

Sensitivity of the Total OPEB liability to changes in the discount rate. The following presents the Authority's total OPEB liability calculated using the discount rate of 3.44%, as well as what the Authority's total OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (2.44%) or 1-percentage-point higher (4.44%) than the current rate:

	2018		
	1% Decrease to Discount Rate (2.44%)	Current Discount Rate (3.44%)	1% Increase To Discount Rate (4.44%)
Net OPEB liability	<u>\$ 19,432,778</u>	<u>\$ 17,668,568</u>	<u>\$ 16,144,567</u>

Sensitivity of the Total OPEB liability to changes in the healthcare cost trend rate. The following presents the Authority's total OPEB liability calculated using the healthcare cost trend rate of 7.00%, as well as what the Authority's total OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.00% decreasing to 3.60%) or 1-percentage-point higher (8.00% decreasing to 5.60%) than the current rate:

	2018		
	1% Decrease to Healthcare Cost Trend Rate (6% decreasing to 3.6%)	Current Healthcare Cost Trend Rate (7% decreasing to 4.6%)	1% Increase to Healthcare Cost Trend Rate (8% decreasing to 5.6%)
Net OPEB liability	<u>\$ 17,195,782</u>	<u>\$ 17,668,568</u>	<u>\$ 18,216,014</u>

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB. For the year ended December 31, 2018 the Authority recognized OPEB expense of \$1,315,716. The following table indicates the components of the recognized OPEB expense:

Components of OPEB Expense	2018
Service Cost	\$ 575,830
Interest on Total OPEB Liability - over measurement period	639,391
Benefit Changes (if any)	-
Recognition of Experience Changes	-
Recognition of Assumption Changes	100,495
Employee Contributions	-
Projected earnings on pension plan investments	-
Differences between projected and actual earnings on plan investments	-
Administrative Expense (entered as a positive number)	-
Other changes	-
	<hr/>
Total OPEB Expense recognized	<u>\$ 1,315,716</u>

The authority also reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

Summary of deferred outflows and inflows	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between projected and actual experiences	\$ -	\$ -
Changes of actuarial assumptions	442,178	-
Net Differences between projected and actual investment earnings on pension plan investment	-	-
Employer contributions - subsequent to measurement date	626,363	-
	<hr/>	<hr/>
Total	<u>\$ 1,068,541</u>	<u>\$ -</u>

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Amortization of deferred outflows and inflows:

2019	\$ 100,495
2020	100,495
2021	100,495
2022	100,495
2023	40,198
Thereafter	-

8. OTHER RELATED-PARTY TRANSACTIONS

The primary organizations considered related parties are those municipal, industrial, electric cooperative and other governmental organizations or lake area organizations that have representatives serving on the Authority's Board of Directors. The primary transactions in the ordinary course of business with these related parties, except for various transactions with KAMO (see Note 1), which are described elsewhere in the Notes to Financial Statements, include sales of electrical power and transmission and memberships in related trade associations or organizations, or tourism and economic development activities associated with the management of the lakes, including commercial and private dock permit fees.

OG&E operates the Redbud facility under an operating agreement with the Authority and OMPA and allocates certain costs and expenses attributable to Redbud to the Authority and OMPA in accordance with their undivided ownership interests—see further discussion of Redbud facility in sections “Joint Participant” and “Joint Ownership” in Note 1.

9. COMMITMENTS AND CONTINGENCIES

In the normal course of business, the Authority makes and receives commitments for purchases of coal, natural gas, wind power, and long-term service agreements. In addition, in the normal course of business, the Authority enters into agreements, which commit the Authority to provide varying amounts of electric power to its customers. Management of the Authority does not believe the honoring of these commitments will have any material adverse effect on the Authority.

The Authority had contractual commitments at December 31, 2018, for long-term coal and freight purchases through 2025 under contracts with estimated minimum obligations. The obligations below are based on the Authority's contract rates and represents management's best estimate of future expenditures for those minimum obligations under long-term arrangements.

Year Ended December 31

2019	\$	42,585,600
2020		43,893,600
2021		45,237,600
2022		46,629,600
2023		48,081,600
2024		49,569,600
2025		<u>51,117,600</u>
Total	\$	<u>327,115,200</u>

The Authority had contractual commitments as of December 31, 2018, for long-term service agreements at the Redbud facility for the maintenance of the gas and steam turbines of approximately \$45.7 million through the year 2028. The Authority had contractual commitments as of December 31, 2018, for natural gas at the Redbud facility of approximately \$9.4 million through the year 2019 as well as for transportation of natural gas to the Redbud facility of approximately \$18.9 million through March 31, 2024.

The Authority had contractual commitments as of December 31, 2018, for long-term service agreements at the GREC 3 facility for the maintenance of the gas and steam turbines of approximately \$63.8 million through the year 2030. The Authority had contractual commitments as of December 31, 2018, for natural gas at the GREC 3 facility of approximately \$2.0 million through the year 2019 as well as for transportation of natural gas to the GREC 3 facility of approximately \$143.1 million through the year 2046.

The Authority had contractual commitments as of December 31, 2018, for long-term wind power purchase agreements of approximately \$726.0 million through the year 2037 and for customer generation capacity agreements of approximately \$288.0 million through the year 2042.

The Authority was a defendant in a lawsuit in Ottawa County, Oklahoma, brought by approximately 50 landowners claiming a constitutional taking of and damages to real and personal property due to flooding beginning in the 1990s. All except five of the claims were settled in 2016. The remaining five claims were settled in 2018.

The Authority is a defendant in a class action lawsuit in Ottawa County, Oklahoma, arising from 2007 flood events. There are approximately 400 potential class members. After filing the lawsuit, the plaintiffs deferred prosecuting this case, pending the outcome of the lawsuit described in the preceding paragraph. Potential exposure related to this case, if any, cannot be predicted by management of the Authority.

The Authority was a party in an arbitration with KAMO Electric Cooperative to resolve a dispute arising from the First Integrated Transmission Agreement between the Authority and KAMO. The parties settled the dispute in March 2018 with KAMO's agreement to pay to the Authority \$8,142,608 for the settlement of load ratio share calculation and with KAMO's agreement to pay the Authority \$1,267,693 for the settlement of the losses calculation.

The Authority is a party to two coal purchase contracts with Peabody Energy. Under these contracts, the Authority was obligated to purchase 1.8 million tons of coal during 2016, 1.2 million tons of coal during 2017, and 1.2 million tons of coal during 2018. Due to a force majeure event beginning on July 1, 2016, and continuing through September 2017, the Authority accepted 929,858 tons of coal in 2016 and 0 tons in 2017 leaving a shortfall of 870,142 in 2016 and 1.2 million tons in 2017. In 2018, the Authority accepted 242,719 tons of coal leaving a shortfall of 957,281 tons. Peabody Energy claims that it is entitled to damages of \$5.00 per shortfall ton for a total of \$4,350,710 for 2016, \$6,000,000 for 2017, and \$4,700,000 for 2018. The Authority disputes this claim. The parties are attempting to negotiate a resolution to this dispute.

10. FLYASH LANDFILL CLOSURE AND POSTCLOSURE COSTS

The Authority maintains a flyash landfill in Chouteau, Oklahoma. The Authority accounts for this flyash landfill in accordance with GASB Statement No. 18, *Accounting for Municipal Solid Waste Landfill Closure and Postclosure Care Costs*.

State regulations will require the Authority to place a final cover on the flyash site when it discontinues its depositing of flyash and to perform certain maintenance and monitoring functions at the site for eight years after closure. Although closure costs occur as the landfill is used, and in a manner consistent with the closure plan, postclosure costs are required to be paid near or after the date of discontinuance of use of the landfill. GASB Statement No. 18 requires proprietary funds to report a portion of these costs as an operating expense in each period based on capacity and utilization. The amount recorded as a liability for the closure and postclosure costs in Other Noncurrent Liabilities at December 31, 2018 and 2017, was \$2,089,923 and \$2,027,937, respectively, which represents 89% of the total estimated closure and postclosure costs for December 31, 2018 and 2017, respectively. There was an increase in the liability from 2018 to 2017 of \$61,986. The Authority will recognize the remaining estimated cost of closure and postclosure care of approximately \$261,000 as the remaining estimated capacity is filled. These estimated closure amounts are based on what it would cost to perform all closure and postclosure care in 2018. Actual costs are subject to change resulting from inflation, deflation, technology, or changes in applicable laws or regulations.

This flyash landfill has a total capacity of 7,449,987 cubic yards of which 4,334,245 cubic yards have been used through December 31, 2018. The remaining useful life at December 31, 2018, was approximately 74 years.

11. RISK MANAGEMENT

Resolution No. 5107 requires the Authority to, in each case where it is obtainable at a reasonable rate and on reasonable terms, insure its facilities, maintain liability insurance, and bond certain officers and employees. In general, all insurance coverage, including property (all risk coverage, including earthquake and flood), equipment, aircraft, employment practices liability, directors and officers liability, excess liability (including an endorsement for certified “acts of terrorism” as defined in the Federal Terrorism Risk Insurance Act), is purchased from private insurance carriers through the State of Oklahoma Risk Management Department (State Risk Management) of the Office of Management and Enterprise Services. State Risk Management contracts with a third-party insurance broker for brokerage services and advice. The Authority also participates in the State of Oklahoma’s Consolidated Workers’ Compensation Program, a self-insured program operated by States Risk Management. A private insurance carrier provides excess insurance coverage for the Consolidated Workers’ Compensation Program and a private company provides claims administration services. Settled claims have not exceeded commercial insurance coverage in any of the past three years. In addition, the Authority is subject to generation supply and market price risks, which are continually evaluated as to level of risk and how to best mitigate exposure to loss. Concentration of revenues from a single external customer also increases credit and market concentration risks. The Authority had two customers in 2018 and two customer in 2017 that each accounted for 10% or more of the Authority’s operating revenues for the year. In 2018, sales to Google Inc. totaled approximately \$71.4 million and sales to Western Farmers Electric Cooperative totaled approximately \$57.2 million. In 2017, sales to Western Farmers Electric Cooperative totaled approximately \$63.1 million and sales to Google Inc. totaled approximately \$56.8 million.

In compliance with GASB Statement No. 53, the annual changes in the fair value of effective hedging derivative instruments are required to be deferred (reported as deferred outflows of resources and deferred inflows of resources) on the Statements of Net Position. Deferral of changes in fair value generally lasts until the transaction involving the hedged item ends.

The Authority continued its hedging program for natural gas futures in 2018, a core business commodity input, in an effort to mitigate gas cost risk by reducing cost volatility and improving cost effectiveness. Unrealized gains and losses related to such activity are deferred and recognized as fuel expense incurred in the production cycle.

As of December 31, 2018 and 2017, the Authority had the following fair value balances and notional amounts of derivative instruments and the changes in fair value of such derivative instruments:

Business-Type Activities	Changes in Fair Value	Fair Value at December 31, 2018		
		Classification	Amount	Notional Amount (MMBTU’s)
Cash flow hedges:				
Commodity forward (swap)	\$ 1,239,588	Derivative instruments	\$ 700,390	10,962,500
Business-Type Activities	Changes in Fair Value	Fair Value at December 31, 2017		
		Classification	Amount	Notional Amount (MMBTU’s)
Cash flow hedges:				
Commodity forward (swap)	\$ 539,198	Derivative instruments	\$ (539,198)	5,545,000

The aggregate fair value of hedging derivative instruments in asset positions at December 31, 2018, is \$700,390. This represents the maximum gain that would be recognized as of the reporting date if all counterparties perform as contracted.

All of the Authority's derivative instruments are held with a single counterparty, which has a credit rating of "A/A".

The following table displays the objective and terms of the Authority's hedging derivative instruments outstanding at December 31, 2018, along with the credit rating of the associated counterparty.

Item	Type	Objective	Notional Amount (MMBTUs)	Effective Date	Maturity Date	Terms	Counterparty Credit Rating
A	Commodity forward contract (swap)	Hedge of changes in cash flows due to market price fluctuations related to expected purchase of natural gas	912,500	12/27/18	11/26/19	Pay \$2.900/MMBTU; scheduled monthly settlements based on 2,500 MMBTUs/day and Henry Hub pricing point at settlement date	"A/A"
B	Commodity forward contract (swap)	Hedge of changes in cash flows due to market price fluctuations related to expected purchase of natural gas	1,825,000	12/27/18	11/26/19	Pay \$2.820/MMBTU; scheduled monthly settlements based on 5,000 MMBTUs/day and Henry Hub pricing point at settlement date	"A/A"
C	Commodity forward contract (swap)	Hedge of changes in cash flows due to market price fluctuations related to expected purchase of natural gas	1,830,000	12/27/19	11/25/20	Pay \$2.800/MMBTU; scheduled monthly settlements based on 5,000 MMBTUs/day and Henry Hub pricing point at settlement date	"A/A"
D	Commodity forward contract (swap)	Hedge of changes in cash flows due to market price fluctuations related to expected purchase of natural gas	1,825,000	12/27/18	11/26/19	Pay \$2.746/MMBTU; scheduled monthly settlements based on 5,000 MMBTUs/day and Henry Hub pricing point at settlement date	"A/A"
E	Commodity forward contract (swap)	Hedge of changes in cash flows due to market price fluctuations related to expected purchase of natural gas	915,000	12/27/19	11/25/20	Pay \$2.718/MMBTU; scheduled monthly settlements based on 2,500 MMBTUs/day and Henry Hub pricing point at settlement date	"A/A"

Item	Type	Objective	Notional Amount (MMBTUs)	Effective Date	Maturity Date	Terms	Counterparty Credit Rating
F	Commodity forward contract (swap)	Hedge of changes in cash flows due to market price fluctuations related to expected purchase of natural gas	915,000	12/27/19	11/25/20	Pay \$2.620/MMBTU; scheduled monthly settlements based on 2,500 MMBTUs/day and Henry Hub pricing point at settlement date	"A/A"
G	Commodity forward contract (swap)	Hedge of changes in cash flows due to market price fluctuations related to expected purchase of natural gas	1,825,000	12/29/20	11/26/21	Pay \$2.625/MMBTU; scheduled monthly settlements based on 5,000 MMBTUs/day and Henry Hub pricing point at settlement date	"A/A"
H	Commodity forward contract (swap)	Hedge of changes in cash flows due to market price fluctuations related to expected purchase of natural gas	915,000	12/27/19	11/25/20	Pay \$2.680/MMBTU; scheduled monthly settlements based on 2,500 MMBTUs/day and Henry Hub pricing point at settlement date	"A/A"

The fair values of the forward contracts are estimated based on the present value of their estimated future cash flows calculated using the Henry Hub forward curve. GRDA enters into natural gas transactions to hedge its price exposure to fluctuations in the market price of natural gas. A portion of GRDA's natural gas transactions are physical in nature (normal purchase, normal sale) and are excluded from the scope of the financial trades disclosed.

Contracts are accounted for in accordance with GASB Statement No. 53, which addresses recognition, measurement, and disclosure related to derivative instruments with reporting required in the Statements of Net Position or recognized on the Statements of Revenues, Expenses, and Changes in Net Position depending on effectiveness. Contracts are evaluated to determine whether they meet the definition of derivative instruments and, if so, whether they effectively hedge the expected change in cash flow associated with natural gas prices. Effectiveness testing is performed at the end of each month. If the derivative instrument(s) passes effectiveness testing, the change in fair value of the instrument(s) is deferred in the Statements of Net Position. If deemed to be ineffective, the change in fair value of the instrument(s) is immediately recognized in the Statements of Revenues, Expenses, and Changes in Net Position. GRDA does not intend to enter into any hedges that would be deemed ineffective.

Credit Risk: Credit risk is the risk of loss due to a counterparty defaulting on its obligations. GRDA's derivative contracts and physical bi-lateral transactions expose GRDA to custodial credit risk. In the event of default or nonperformance by bi-lateral counterparties and brokers, New York Mercantile Exchange (NYMEX) or Intercontinental Exchange (ICE), GRDA's operations could be materially affected. However, GRDA does not expect the exchanges to fail in meeting their obligations given their high credit ratings and the credit requirements upheld by NYMEX, of which these brokerage firms are members.

Termination Risk: Termination risk is the risk that a derivative or physical bi-lateral trade will terminate prior to its scheduled maturity due to a contractual event. Contractual events include illegality, tax and credit events upon merger and other events. One aspect of termination risk is GRDA would lose the hedging benefit of a derivative or bi-lateral trade that becomes subject to a termination event. Another aspect of termination risk is that, if, at the time of termination, the mark to market value of the derivative was a liability to GRDA, it would be required to pay the market value of the derivative to the counterparty. GRDA addresses this risk through the use of the International Swaps and Derivatives Association (ISDA) agreements and individual contracts have language to address termination risk. Termination risk is associated with all of GRDA's derivatives up to the fair value amounts. GRDA believes termination risk is very low.

Basis Risk: Basis risk in the financial markets arises when an underlying position and the product used as a hedge are based on different quality or trade at different locations. GRDA is exposed to basis risk because GRDA's assets and customer obligations do not always match locations. For GRDA's natural gas requirements, the NYMEX is the exchange futures contract used which trades at Henry Hub Louisiana while operationally GRDA purchases are based on the Enable Gas (EIOT) or the OneOk (OGT) index. This exposes GRDA to the basis risk between NYMEX and EIOT or OGT indices. GRDA is hedging the Henry Hub portion of the gas price only, not the basis for the individual pipeline(s)—EIOT/OGT.

* * * * *

**REQUIRED SUPPLEMENTARY INFORMATION
(UNAUDITED)**

GRAND RIVER DAM AUTHORITY
(A Component Unit of the State of Oklahoma)

SCHEDULE OF PROPORTIONATE SHARE OF THE NET PENSION LIABILITY (UNAUDITED)
OKLAHOMA PUBLIC EMPLOYEES RETIREMENT PLAN

Fiscal Year Ending	Proportion of the Net Pension Liability	Proportionate Share of the Net Pension Liability	Covered Payroll	Proportionate Share of the Net Pension Liability as a Percentage of Covered Payroll	Plan Fiduciary Net Position as a Percentage of the Total Pension Liability
December 31, 2018	2.4118 %	\$ 5,138,160	\$ 37,965,024	13.53 %	97.96 %
December 31, 2017	2.3117	12,498,665	38,404,273	32.54	94.28
December 31, 2016	2.2462	21,890,211	38,995,445	56.14	89.48
December 31, 2015	2.1715	7,810,649	37,304,843	20.94	96.00

SCHEDULE OF EMPLOYER CONTRIBUTIONS (UNAUDITED)
OKLAHOMA PUBLIC EMPLOYEES RETIREMENT PLAN

Fiscal Year Ending	Contractually Required Contributions	Contributions in Relation to the Contractually Required Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a Percentage of Covered Payroll
December 31, 2018	\$ 6,309,340	\$ 6,485,378	\$ (176,038)	\$ 37,001,348	17.53 %
December 31, 2017	6,218,254	6,516,168	(297,914)	38,300,232	17.01
December 31, 2016	6,641,675	6,615,357	26,318	38,811,001	17.05
December 31, 2015	6,333,952	6,343,582	(9,630)	38,557,227	16.45

The amounts determined for each fiscal year were determined as of June 30 in the calendar year.

The Authority is required to present the last ten fiscal years of data; however, until a full ten-year trend of data is compiled, GASB Statement No. 68 allows the presentation for those years for which information is available.

Changes in Benefit Terms. There were no changes of benefit terms for any participating employer in the Plan.

Changes in Assumptions are as follows:

	2018	2017	2016	2015
Long-term expected rate of return	7.00 %	7.25 %	7.25 %	7.50 %
Discount rate	7.00	7.25	7.25	7.50
Price inflation	2.75	2.75	3.00	3.00
Real wage growth	0.75	0.75	1.00	1.00

There were no other changes in assumptions.

GRAND RIVER DAM AUTHORITY
(A Component Unit of the State of Oklahoma)

SCHEDULE OF PROPORTIONATE SHARE OF THE NET PENSION LIABILITY (UNAUDITED)
OKLAHOMA LAW ENFORCEMENT RETIREMENT PLAN

Fiscal Year Ending	Proportion of the Net Pension Liability	Proportionate Share of the Net Pension Liability	Covered Payroll	Proportionate Share of the Net Pension Liability as a Percentage of Covered Payroll	Plan Fiduciary Net Position as a Percentage of the Total Pension Liability
December 31, 2018	1.4701 %	\$ 1,574,732	\$ 1,222,118	128.8527 %	90.31 %
December 31, 2017	1.4556	1,891,434	1,225,700	154.3146	87.85
December 31, 2016	1.3370	1,631,598	1,234,942	132.1194	81.88
December 31, 2015	0.8627	894,807	736,838	121.4388	89.62

SCHEDULE OF EMPLOYER CONTRIBUTIONS (UNAUDITED)
OKLAHOMA LAW ENFORCEMENT RETIREMENT PLAN

Fiscal Year Ending	Contractually Required Contributions	Contributions in Relation to the Contractually Required Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a Percentage of Covered Payroll
December 31, 2018	\$ 133,523	\$ 134,432	\$ (909)	\$ 1,268,728	10.60 %
December 31, 2017	134,827	134,826	1	1,209,093	11.15
December 31, 2016	136,630	136,630	-	1,241,483	11.01
December 31, 2015	81,430	81,430	-	1,098,422	7.41

The amounts determined for each fiscal year were determined as of June 30 in the calendar year.

The Authority is required to present the last ten fiscal years of data; however, until a full ten-year trend of data is compiled, GASB Statement No. 68 allows the presentation for those years for which information is available.

Changes in Benefit Terms. There were no changes of benefit terms for any participating employer in the Plan.

Changes in Assumptions are as follows:

	2018	2017	2016	2015
Price inflation	2.75 %	2.75 %	3.00 %	3.00 %

There were no other changes in assumptions.

GRAND RIVER DAM AUTHORITY
(A Component Unit of the State of Oklahoma)

SCHEDULE OF FUNDING PROGRESS (UNAUDITED)
OTHER POSTEMPLOYMENT BENEFITS PLAN
FOR THE YEAR ENDED DECEMBER 31, 2017

Actuarial Valuation Date	Actuarial Values of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
January 1, 2014	\$ -	\$ 12,736,244	\$ 12,736,244	- %	\$ 34,520,427	36.89 %
January 1, 2015	\$ -	\$ 12,852,859	\$ 12,852,859	- %	\$ 37,581,377	34.20 %
January 1, 2017	\$ -	\$ 12,813,019	\$ 12,813,019	- %	\$ 39,473,804	32.46 %

Funded Status and Funding Progress—As of January 1, 2017, the most recent actuarial valuation date, the plan was 0% funded. The projected unit credit actuarial cost method was used for the schedule of funding progress. Covered payroll (annual payroll of active employees covered by the plan) prior to 2010 is estimated. The discount rate was lowered to 3.5% for the actuarial valuation dated January 1, 2012, January 1, 2014, January 1, 2015 and January 1, 2017. See Note 7 to Financial Statements, Retirement Plans, Postretirement, and Other Employee Benefits for additional information about GRDA’s Postemployment Healthcare Plan.

(A Component Unit of the State of Oklahoma)

SCHEDULE OF CHANGES IN TOTAL OPEB LIABILITY AND RELATED RATIOS FOR THE LAST 10 FISCAL YEARS (UNAUDITED)¹
OTHER POSTEMPLOYMENT BENEFITS PLAN
FOR THE YEAR ENDED DECEMBER 31, 2018

	Total OPEB Liability
Balance at December 31, 2017	\$ 16,760,009
Service Cost	575,830
Interest on Total OPEB Liability	639,391
Changes in benefits	-
Difference between expected and actual experience	-
Changes in assumptions	542,673
Employer Contributions	-
Contributions - Special Funding Situations	-
Employee Contributions	-
Net investment income	-
Benefit payments, including employee refunds	(849,335)
Administrative expense (negative number)	-
Net changes	908,559
Balance at December 31, 2018	<u>\$ 17,668,568</u>
Schedule of Changes in the Total OPEB Liability and related Ratios	
Covered-employee payroll	\$ 37,001,348
Total OPEB Liability as a percentage of covered-employee payroll	47.75%

Notes to the Schedule:

¹ Until a full year trend is compiled, only available information is shown

REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND
OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED
IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

Independent Auditors' Report

To the Board of Directors
Grand River Dam Authority
Vinita, Oklahoma

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the Grand River Dam Authority as of and for the year ended December 31, 2018, and have issued our report thereon dated March 28, 2019.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered Grand River Dam Authority's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Grand River Dam Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Grand River Dam Authority's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal controls such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the financial statements of Grand River Dam Authority are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Baker Tilly Virchow Krause, LLP

Madison, Wisconsin
March 28, 2019