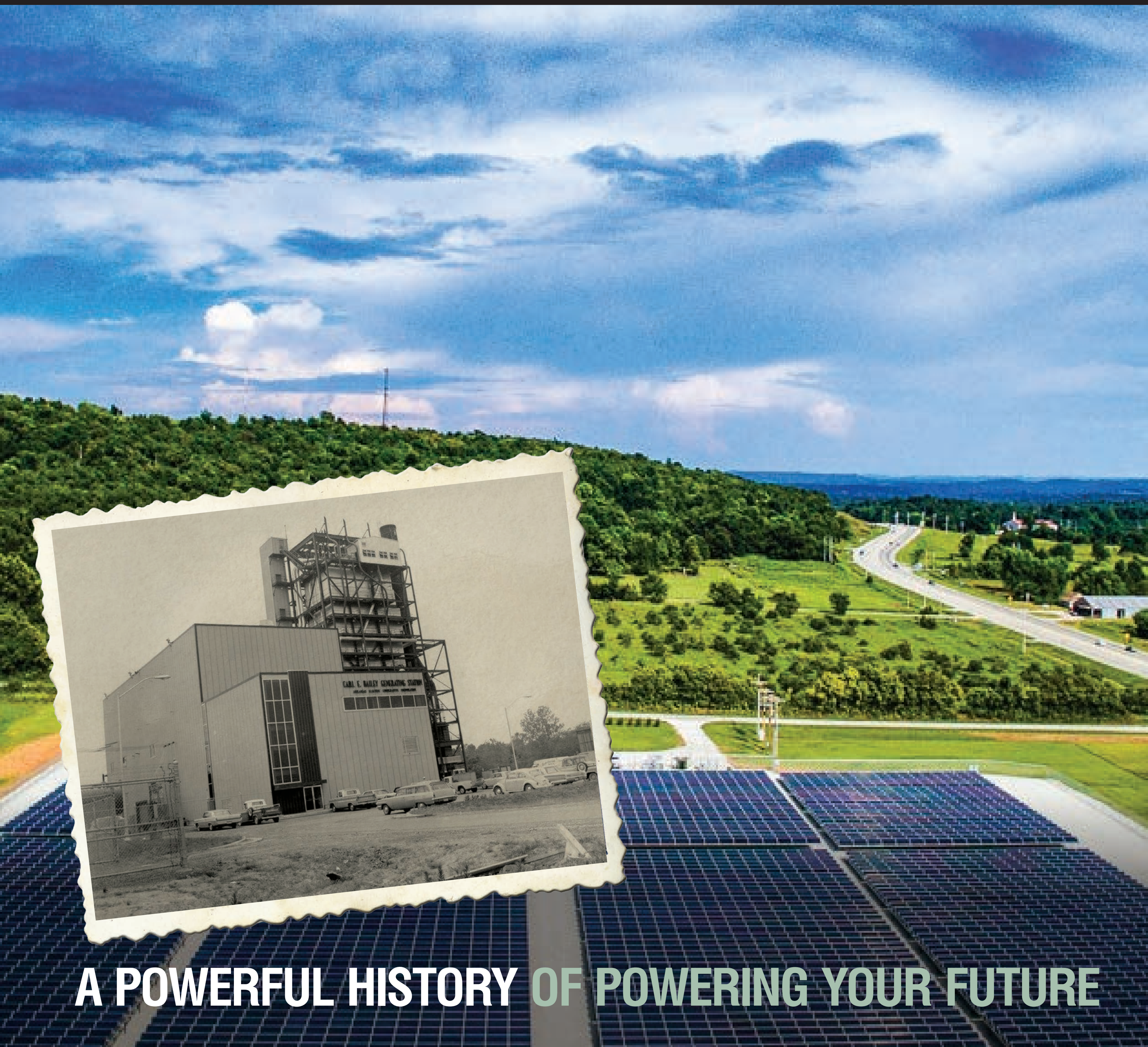
Arkansas Electric Cooperative Corporation

2018 ANNUAL REPORT



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Arkansas Electric Cooperative Corporation

Independent Auditor's Report and Financial Statements

October 31, 2018 and 2017

Contents

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Independent Auditor's Report

Board of Directors
Arkansas Electric Cooperative Corporation
Little Rock, Arkansas

We have audited the accompanying financial statements of Arkansas Electric Cooperative Corporation (AECC), which comprise the balance sheets as of October 31, 2018 and 2017, and the related statements of operations, members' equities and comprehensive income and cash flows for the years then ended, and the related notes to the financial statements.

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.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the 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 auditor's 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 entity'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 entity'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 AECC as of October 31, 2018 and 2017, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

2016 Audited by Other Auditors

The 2016 financial statements were audited by other auditors and their report thereon, dated January 3, 2017, expressed an unmodified opinion.

BKD, LLP

Little Rock, Arkansas
February 5, 2019

Arkansas Electric Cooperative Corporation

Balance Sheets

October 31, 2018 and 2017

(in thousands)

Assets

	2018	2017
Utility Plant		
Electric plant in service	$ 2,588,596	$ 2,500,067
Construction work in progress	69,597	78,975
Total utility plant	2,658,193	2,579,042
Less accumulated depreciation	1,288,647	1,234,383
Net utility plant	1,369,546	1,344,659
Long-Term Investments		
Gas reserves – net of amortization	11,646	12,249
Deposit with Rural Utilities Service – restricted investment	48,038	65,497
Other	26,154	25,052
Total long-term investments	85,838	102,798
Current Assets		
Cash and cash equivalents	117,664	138,258
Accounts receivable – members	57,595	60,153
Fuel inventories and prepaid fuel supply	23,694	26,981
Material and supply inventories	23,016	22,999
Deposit with Rural Utilities Service – restricted investment	-	11
Other current assets	33,167	19,650
Total current assets	255,136	268,052
Deferred Charges	58,445	80,231
Total	$ 1,768,965	$ 1,795,740

See notes to financial statements

Arkansas Electric Cooperative Corporation

Balance Sheets

October 31, 2018 and 2017

(in thousands)

Liabilities and Members' Equity

	2018	2017
Members' Equities		
Membership fees	$ 2	$ 2
Patronage capital	374,978	376,249
Accumulated margins	107,749	87,545
Other equities	118,140	118,140
Total members' equities	600,869	581,936
Long-Term Debt		
Federal Financing Bank	579,166	600,851
CoBank, ACB	46,439	49,171
CoBank, ACB – unsecured	5,550	7,052
Series 2011A First Mortgage Obligation Senior Notes	62,000	65,000
Series 2011B First Mortgage Obligation Senior Notes	120,000	120,000
Total long-term debt	813,155	842,074
Current Liabilities		
Notes payable – members	116,519	104,679
Notes payable – related party	30,000	30,000
Notes payable – others	77,710	99,834
Accounts payable and other accrued liabilities	73,319	81,019
Current maturities of long-term debt	29,123	28,933
Accrued property taxes	7,603	7,335
Accrued interest	5,289	5,229
Total current liabilities	339,563	357,029
Deferred Credits	15,378	14,701
Commitments and Contingencies	-	-
Total	$ 1,768,965	$ 1,795,740

See notes to financial statements

Arkansas Electric Cooperative Corporation

Statements of Operation

Years ended October 31, 2018, 2017 and 2016

(in thousands)

	2018	2017	2016
Operating Revenues	$ 827,494	$ 796,094	$ 734,612
Operating Expenses			
Operation and maintenance – generation	326,760	314,040	293,774
Power purchased	178,877	168,649	151,792
Operation and maintenance – transmission	148,027	145,620	134,148
Administrative and general	32,285	29,990	30,245
Depreciation	54,148	57,274	48,912
Interest	51,274	47,619	45,236
Property taxes	186	156	156
Total operating expenses	791,557	763,348	704,263
Margin from Electric Operations	35,937	32,746	30,349
Other (Loss) Gain - Net	(464)	1,708	(3,123)
Interest Income - Net	3,460	3,534	3,597
Allowance for Funds Used During Construction	-	-	78
Net Margin	$ 38,933	$ 37,988	$ 30,901

See notes to financial statements

Arkansas Electric Cooperative Corporation

Statements of Member's Equity

Years ended October 31, 2018, 2017 and 2016

(in thousands)

	Membership Fees	Patronage Capital	Accumulated Margins	Other Equities	Total Members' Equities
Balance - November 1, 2015	$ 2	$ 378,458	$ 47,011	$ 118,140	$ 543,611
Net margin	-	-	30,901	-	30,901
Allocation of patronage capital	-	10,144	(10,144)	-	-
Redemption of patronage capital	-	(10,419)	-	-	(10,419)
Balance - October 31, 2016	2	378,183	67,768	118,140	564,093
Net margin	-	-	37,988	-	37,988
Allocation of patronage capital	-	18,211	(18,211)	-	-
Redemption of patronage capital	-	(20,145)	-	-	(20,145)
Balance - October 31, 2017	2	376,249	87,545	118,140	581,936
Net margin	-	-	38,933	-	38,933
Allocation of patronage capital	-	18,729	(18,729)	-	-
Redemption of patronage capital	-	(20,000)	-	-	(20,000)
Balance - October 31, 2018	$ 2	$ 374,978	$ 107,749	$ 118,140	$ 600,869

See notes to financial statements

Arkansas Electric Cooperative Corporation

Statements of Cash Flows

Years ended October 31, 2018, 2017 and 2016

(in thousands)

	2018	2017	2016
Operating Activities			
Net margin	$ 38,933	$ 37,988	$ 30,901
Adjustments to reconcile net margin to net cash provided by operating activities:			
Depreciation	54,148	57,274	48,912
Loss on sale of coal	-	45	2,420
Amortization of gas reserves	603	739	695
Allowance for funds used during construction	-	-	(78)
Allocation of patronage from associated organization	(1,062)	(877)	(1,120)
Interest income on deposits with RUS – cushion of credit	(3,123)	(3,175)	(3,114)
Changes in operating assets and liabilities:			
Accounts receivable – members	2,558	(5,675)	(4,176)
Fuel inventories and prepaid fuel supply	3,287	14,469	4,439
Material and supply inventories	(17)	224	(1,061)
Other current assets	195	17,987	(9,287)
Deferred charges	15,726	9,751	12,515
Accounts payable and other accrued liabilities	(27,428)	(10,529)	(5,774)
Other deferred credits	(160)	850	(978)
Net cash provided by operating activities	83,660	119,071	74,294
Investing Activities			
Purchase of other investments	(403)	(1,623)	(498)
Sales of other investments	1,201	1,050	1,308
Withdrawals from RUS – restricted investment	20,594	22	10,889
Capital expenditures	(66,634)	(69,950)	(88,798)
Net cash used in investing activities	(45,242)	(70,501)	(77,099)
Financing Activities			
Net borrowings (payments) on notes payable, members	11,840	(40,814)	21,414
Net payments on notes payable, other	(22,124)	(80)	(50)
Principal payments on long-term debt	(28,728)	(29,449)	(34,563)
Redemption of patronage capital	(20,000)	(20,145)	(10,419)
Proceeds from long-term debt	-	-	58,869
Net cash (used in) provided by financing activities	(59,012)	(90,488)	35,251
(Decrease) Increase in Cash and Cash Equivalents	(20,594)	(41,918)	32,446
Cash and Cash Equivalents - Beginning of Year	138,258	180,176	147,730
Cash and Cash Equivalents - End of Year	$ 117,664	$ 138,258	$ 180,176
Supplemental Disclosures of Cash Flow Information - Noncash Transactions			
Increase in accounts payable related to capital expenditures	$ 4,252	$ 7,524	$ 8,178
Cash paid for interest – net of amounts capitalized	$ 37,387	$ 36,843	$ 35,291

See notes to financial statements

Arkansas Electric Cooperative Corporation

Notes to Financial Statements

October 31, 2018 and 2017

Note 1: Summary of Significant Accounting Policies

Organization

Arkansas Electric Cooperative Corporation (AECC), an electric generation and transmission cooperative, follows the Uniform System of Accounts prescribed by the Rural Utilities Service (RUS) and the Federal Energy Regulatory Commission (FERC).

AECC was organized and exists under Arkansas law to provide wholesale electric power and associated energy to its 17 members (Members). AECC provides electric power to its Members under wholesale power contracts, which may be terminated only upon 60 months' prior written notice and, in any event, no earlier than January 1, 2042. The wholesale power contracts require Members to purchase, with the limited exception of one Member, 100% of their energy requirements from AECC. AECC's rate to its Members includes a demand charge, an energy charge and certain rate riders, the combination of which are designed to recover the operating costs of AECC, plus a margin as approved by AECC's board of directors (the Board) and the Arkansas Public Service Commission (APSC). APSC approval is required for any rate adjustments and RUS approval is required for all rate decreases.

Pursuant to Arkansas Code Annotated §23-4-1101, et seq. (the Act), AECC's Board approved a requested wholesale rate increase for member revenues of 4.69% on December 9, 2015. AECC then sought and received approval of the APSC on April 7, 2016, to implement the increase for all bills rendered on or after May 1, 2016, which made it effective for April 2016 usage. Under the Act, within certain limits, AECC can receive modified and expedited rate treatment from the APSC. The Act also provides Members with a means of incorporating any wholesale rate relief granted to AECC under the Act into the Members' retail rates.

AECC's power supply resources are primarily composed of leased, owned and coowned generating facilities, which are offered into two separate, day-ahead and real-time energy markets. AECC provides energy over its owned and contracted transmission facilities via participation in two regional, FERC-designated regional transmission organizations.

Carrying Value of Certain Assets and Liabilities

AECC's accounting policies and the accompanying financial statements conform to accounting principles generally accepted in the United States of America applicable to rate-regulated enterprises and reflect, for financial reporting purposes, the effects of the ratemaking process in accordance with Financial Accounting Standards Board's Accounting Standards Codification (ASC) 980, *Regulated Operations*. In accordance with ASC 980, AECC has regulatory assets, primarily recorded in deferred charges, in the amount of approximately $55.4 million and $67.6 million as of October 31, 2018 and 2017, respectively.

As of October 31, 2018 and 2017, regulatory assets included $3.6 million and $4.2 million, respectively, attributable to premiums associated with debt refinancings and retirements (which are being amortized over the life of the related debt instruments); deferred past service pension cost of $0.2 million and $0.2 million, respectively; $17.1 million and $30.6 million, respectively, for the purchase of the lease residual and subsequent reclassification from an operating lease to a capital lease for the Independence Steam Electric Station Unit 2 (Independence 2) in June 2003; regulatory assets associated with the Clyde T. Ellis Hydroelectric Station (Ellis) lease and subsequent lease residual purchase of $20.8 million and $22.2 million, respectively (*see Note 9*); and $13.7 million and $10.4 million, respectively, related to the market value of congestion hedging that is included in monthly member billings through approved riders. In the event operations are no longer subject to the provisions of ASC 980, as a result of a change in regulation or the effects of competition, AECC would be required to recognize the effects of any regulatory change in assets currently in its statements of operations.

Utility Plant and Related Depreciation

All utility plant is recorded at original cost. The cost of additions to utility plant includes contracted work, direct labor, materials, allocable overhead, and an allowance for funds used during construction as allowed by the APSC. The major classes of utility plant as of October 31, 2018 and 2017, are listed below (in thousands):

	2018	2017
Generation plant	$ 2,344,104	$ 2,268,684
Transmission plant	198,406	192,885
General plant	46,086	38,498
Electric plant in service	2,588,596	2,500,067
Construction work in progress	69,597	78,975
Total	$ 2,658,193	$ 2,579,042

The cost of retirements, replacements or betterments are removed from utility plant and, in accordance with industry practice, the cost of the unit and its removal cost, less salvage, are charged to accumulated depreciation. Maintenance and repairs are charged to operating expenses as incurred.

Depreciation of utility plant is typically recorded using guidelines prescribed by the RUS. A provision has been made for depreciation of steam generation plant, gas turbine generation plant, hydroelectric generation plant and transmission plant at annual straight-line composite rates of 3.1%, 3%, 2% and 2.75%, respectively. Effective January 1, 2014, AECC received approval from the RUS to apply special rates to three existing coal plants. The special rates for these plants range from 0.73% to 1.08%.

General plant depreciation rates are applied on an annual straightline composite basis as follows:

Structures and improvements	2%
Office furniture and equipment	4.8 and 9.6
Transportation equipment	20
Power-operated equipment	15
Tools, shop, and garage equipment	5
Communication equipment	8
Other general plant	5 and 6

When indicators of impairment are identified, AECC evaluates the recoverability of assets by comparing the carrying amount of the relevant asset group against the related, estimated undiscounted future cash flows expected over the remaining useful life of the asset group. When an evaluation indicates that the future undiscounted cash flows are not sufficient to recover the carrying value of the asset group, the carrying value of the asset group would be reduced to its estimated fair value. AECC did not identify any triggering events for the year ended October 31, 2018.

Asset Retirement Obligations

AECC has recognized a conditional Asset Retirement Obligation (ARO) related to the future removal and disposal of materials from three oil/gasfired plants and one coalfired plant, and oil and gas plugging obligations. As of October 31, 2018, there are no assets legally restricted for the purpose of settling any AROs. These AROs are recorded as deferred credits on the balance sheets. A reconciliation of the aggregate carrying amount of the obligation as of October 31, 2018 and 2017, is as follows (in thousands):

Balance – November 1, 2016	$	2,564
Change in estimate		4,865
Accretion expense		115
Payments made		(2,496)
Balance – October 31, 2017	$	5,048
Accretion expense		393
Balance – October 31, 2018	$	5,441

Electric Revenues and Fuel

Revenues are recorded in the same month that power is generated and billed. AECC charges the cost of fuel to expense as fuel is consumed. Uncollectible accounts have historically been negligible, so AECC does not provide an allowance for doubtful accounts.

Carrying Costs Capitalized During Construction

AECC capitalizes the carrying costs on certain significant construction and development projects while in progress. AECC is allowed, with approval of the APSC, to capitalize the interest costs for debt specifically borrowed to finance projects during construction and development. Additionally, for the portion of construction and development projects funded without specific borrowings, the APSC allows AECC to capitalize carrying costs based first on the incremental rate incurred in relation to its notes payable, and to the extent the construction and development project costs exceed the balance of the notes payable, AECC may capitalize carrying costs attributable to the remaining costs based on the weighted-average interest rate of AECC's longterm debt, excluding any amounts representing specific borrowings.

AECC records the interest costs capitalized related to debt specifically borrowed for construction and development projects as interest during construction, which is reflected as a credit to interest expense as part of operating expenses in the accompanying statements of operations. Additionally, AECC is allowed to record the carrying costs capitalized related to construction and development projects funded without specific borrowings as an allowance for funds used during construction, which is reflected below the margin from operations in the accompanying statements of operations.

Interest cost capitalized related to debt specifically borrowed was approximately $2.5 million for the year ended October 31, 2016, and was recorded as a reduction in interest expense. In addition, for the year ended October 31, 2016, the carrying costs capitalized relating to projects funded without specific borrowings was approximately $0.1 million and were recorded as an allowance for funds used during construction in the accompanying statements of operations. There were no interest costs capitalized during the periods ended October 31, 2018 and 2017.

Statements of Cash Flows

For purposes of the statements of cash flows, cash and cash equivalents represent demand deposits in financial institutions and securities with original maturity dates of three months or less when purchased. No amounts were paid for income taxes for the years ended October 31, 2018, 2017 and 2016.

Inventories

Fuel inventories and material and supply inventories are stated at the lower of average cost or net-realizable value.

Use of 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 and assumptions used in preparing the accompanying financial statements.

Changes in Accounting Standards

In May 2014, the Financial Accounting Standards Board (FASB) issued ASU No. 2014-09 (ASU 2014-09), *Revenue from Contracts with Customers*. ASU 2014-09 introduces new, increased requirements for disclosure of revenue in financial statements and is intended to eliminate inconsistencies in revenue recognition and thereby improve financial reporting comparability across entities, industries and capital markets. In August 2015, ASU 2015-14 was issued that deferred the effective date of ASU 2014-09. The revised effective date is for annual reporting periods beginning after December 15, 2018. Early application is not permitted. FASB has since issued various updates clarifying ASU 2014-09 including ASU 2016-08 in March 2016, ASU 2016-10 in April 2016, and ASU 2016-12 in May 2016. All of these ASUs amend ASU 2014-09 and have the effective dates from the amendment ASU 2015-14. AECC is currently evaluating the potential impact of ASU 2014-09, however, currently the adoption of ASU 2014-09 is not expected to have a material effect on AECC's reported results of operations, financial condition or cash flows.

In 2015, FASB issued ASU 2015-17, *Balance Sheet Classification of Deferred Taxes.* ASU 2015-17 requires entities to present deferred tax assets (DTAs) and deferred tax liabilities (DTLs) as noncurrent in a classified balance sheet. The ASU simplifies the current guidance, which requires entities to separately present DTAs and DTLs as current and noncurrent in a classified balance sheet. Netting of DTAs and DTLs by tax jurisdiction is still required under the new guidance. AECC adopted ASU 2015-17 effective November 1, 2017.

In January 2016, FASB issued ASU 2016-01, *Recognition and Measurement of Financial Assets and Financial Liabilities.* ASU 2016-01 significantly revises an entity's accounting related to (1) the classification and measurement of investments in equity securities and (2) the presentation of certain fair value changes for financial liabilities measured at fair value. It also amends certain disclosure requirements associated with the fair value of financial instruments. The effective date is for annual reporting periods beginning after December 15, 2018. Early adoption of the amendment of disclosure requirements is permitted; AECC elected to adopt the amendment of disclosure requirements as of October 31, 2016. AECC will adopt the remainder of ASU 2016-01 in accordance with the required implementation date and does not expect it to materially affect AECC's financial condition, results of operations or cash flows.

In February 2016, FASB issued ASU 2016-02, *Leases*. The standard introduces a new lessee model that brings substantially all leases onto the balance sheet. Additionally, the guidance retains most of the principles of the existing lessor model in principles generally accepted in the United States of America, and it aligns many of those principles with *Revenue from Contracts with Customers*. This will be effective for annual reporting periods beginning after December 15, 2019. AECC is still evaluating the impact that this standard will have on its financial statements.

Restricted Investment

AECC has established a Cushion of Credit (COC) program administered by the RUS. Under the COC program, RUS borrowers may make voluntary irrevocable deposits into a special account. The account balance accrues interest at a rate of 5% per year (See Note 15). The amounts in the COC account (deposits and earned interest) can only be used to make scheduled payments on loans made or guaranteed by the RUS. As of October 31, 2018 and 2017, AECC's balances in the COC program were $48.0 million and $65.5 million, respectively. There were no deposits made into the program for the years ended October 31, 2018, 2017 and 2016. During the years ended October 31, 2018, 2017 and 2016, AECC made scheduled payments from the COC program in the amounts of $20.6 million, $0.02 million and $10.9 million, respectively. In addition, AECC earned interest income from the COC program in the amounts of $3.1 million, $3.2 million and $3.1 million for the years ending October 31, 2018, 2017 and 2016, respectively.

Fair Value Measurements

AECC applies ASC 820, *Fair Value Measurements and Disclosures,* which defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value measurements. The statement applies to reported balances that are required or permitted to be measured at fair value under existing accounting pronouncements.

ASC 820 emphasizes that fair value is a market-based measurement, not an entity-specific measurement. Therefore, a fair value measurement should be determined based on the assumptions that market participants would use in pricing the asset or liability. As a basis for considering market participant assumptions in fair value measurements, ASC 820 establishes a fair value hierarchy that distinguishes between market participant assumptions based on market data obtained from sources independent of the reporting entity (observable inputs that are classified within Levels 1 and 2 of the hierarchy) and the reporting entity's own assumptions about market participant assumptions (unobservable inputs classified within Level 3 of the hierarchy).

Level 1 inputs utilize observable market data in active markets for identical assets or liabilities. Level 2 inputs consist of observable market data, other than that included in Level 1, that are either directly or indirectly observable. Level 3 inputs consist of unobservable market data, which are typically based on an entity's own assumptions of what a market participant would use in pricing an asset or liability if there is little, if any, related market activity.

In instances where the determination of the fair value measurement is based on inputs from different levels of the fair value hierarchy, the level in the fair value hierarchy within which the entire fair value measurement falls is based on the lowest-level input that is significant to the fair value measurement in its entirety. AECC's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the asset or liability.

The following tables summarize AECC's assets and liabilities measured at fair value on a recurring basis as of October 31, 2018 and 2017, aggregated by the level in the fair value hierarchy within which those measurements fall (in thousands):

	Fair Value Measurements as of October 31, 2018			
	Level 1	**Level 2**	**Level 3**	**Total**
Assets – marketable securities	$ 5,558	$ -	$ -	$ 5,558

	Fair Value Measurements as of October 31, 2017			
	Level 1	**Level 2**	**Level 3**	**Total**
Assets – marketable securities	$ 4,911	$ -	$ -	$ 4,911

ASC 825, *Financial Instruments* permits entities to choose to measure many financial instruments and certain other items at fair value (Fair Value Option). Election of the Fair Value Option is made on an instrument-by-instrument basis and is irrevocable. At the adoption date, unrealized gains and losses on financial assets and liabilities for which the Fair Value Option has been elected would be reported as a cumulative adjustment to beginning accumulated margins. Following the election of the Fair Value Option for certain financial assets and liabilities, unrealized gains and losses would be reported due to changes in fair value in earnings at each subsequent reporting date.

Regional Transmission Organization Accounting

Starting on December 19, 2013, AECC began participating in both the day-ahead and real-time energy markets operated by the Midcontinent Independent System Operator Inc. (MISO) Regional Transmission Organization (RTO), and, with APSC approval, joined MISO as a transmission-owning member on June 1, 2014. Additionally, on March 1, 2014, AECC began participating in the Integrated Marketplace, which also includes day-ahead and real-time energy markets, launched by the Southwest Power Pool (SPP) RTO and effective July 1, 2016, again with APSC approval, AECC joined SPP as a transmission-owner member. MISO covers, among other areas, approximately the eastern two-thirds of Arkansas. SPP covers, among other areas, the western one-third of Arkansas. Both RTOs operate wholesale energy markets, in day-ahead and real-time, and are responsible for moving electricity over large interstate areas. They also coordinate, control and monitor the electricity transmission grid within their respective areas.

As a result of this, generally speaking, AECC offers its plant generation into the respective RTO markets and simultaneously purchases the energy to serve its load from the same, respective RTO markets.

Transactions within each individual hour are netted to a single purchase or sale, within each individual market (MISO and SPP) based on the actual load and net megawatt hour generation.

Note 2: Power Plants

AECC has an ownership or leasehold interest in and is responsible for providing its share of, the costs for wholly owned, jointly owned or certain leased facilities in Arkansas, with the corresponding direct expenses included in the statements of operations as operating expenses. AECC's generation mix based on installed capacity reported in megawatts (MW) as of October 31, 2018, is as follows:

Generating Resources	Current Installed Capacity (MW) (Unaudited)
Fossil Steam	1,740
Hydroelectric	167
Combined Cycle	1,373
Simple Cycle	213
Purchase Power Agreements	733
Other	57
Total	4,283

Under a power purchase agreement with Southwestern Power Administration (SPA), which expires June 30, 2020, AECC has the right to purchase, except in certain circumstances, up to 189 MW of power and associated energy from SPA. AECC can draw power and energy under this contract for up to 200 hours a month, but not more than 600 hours in any four consecutive months and not more than 1,200 hours over a contract year (July 1–June 30).

In March 2012, AECC entered into a power purchase agreement with BP Wind Energy North America, Inc., to purchase the net output from a wind-powered generating facility for a fixed price. Effective June 13, 2012, this agreement was assigned to Flat Ridge 2 Wind Energy, LLC.

The facility has 51 MW of installed capacity and became operational on December 26, 2012. The agreement is for a 20-year term.

AECC entered into a power purchase agreement on July 17, 2013, with Origin Wind Energy, LLC, to purchase the net output from a wind-powered generating facility for a fixed price. The facility has 150 MW of installed capacity and began commercial operation on November 24, 2014. The agreement is for a 20-year term.

AECC entered into a power purchase agreement with Drift Sand Project, LLC, on May 15, 2015, to purchase the net output from a wind-powered generating facility for a fixed price. The facility has 108 MW of installed capacity and began commercial operation on December 14, 2016. The agreement is for a 20-year term.

AECC entered into a power purchase agreement on November 9, 2015, with Enel Kansas, LLC, to purchase the net output from a wind-powered generating facility for a fixed price. Effective September 28, 2016, this agreement was assigned to Chisholm View Wind Project II, LLC. The facility has 64.8 MW of installed capacity and began commercial operation on December 21, 2016. The agreement is for a 25-year term.

On April 18, 2016, AECC extended an existing agreement originally dated September 9, 2011, with Eastman Cogeneration, L.P., for the purchase of 170 MW of unit capacity and associated energy from a gas-fired plant in Texas. The amendment extended the delivery period by five years with a new ending date of May 31, 2025.

AECC entered into a power purchase agreement on January 27, 2017, with Wildhorse Wind Energy, LLC, to purchase the net output from a wind-powered generating facility for a fixed price. The facility is expected to be 100 MW of installed capacity and to begin commercial operation by October 31, 2019. The agreement is for a 20-year term.

AECC entered into a power purchase agreement on January 16, 2018, with Crossett Solar Energy, LLC, to purchase the net output from a solar-powered generating facility for a fixed price. The facility is expected to have 100 MW of installed capacity and to begin commercial operation by October 2021. The agreement is for a 16-year term.

The above power purchase agreements have been determined to be derivatives under ASC 815, and qualify for the normal purchase, normal sales exception under the same guidance.

Note 3: Investments

Subordinated term certificates were purchased in connection with the issuance of the National Rural Utilities Cooperative Finance Corporation (CFC) Guaranteed Pollution Control Revenue Bonds. These amounts are recorded in the accompanying balance sheets as part of long-term investments—other, and totaled $6.7 million at October 31, 2018 and 2017. In accordance with ASC 320, *Investments: Debt and Equity Securities*, these investments have been classified as held to maturity and, accordingly, are recorded at amortized cost. These investments have maturity dates which extend through 2080.

AECC has a leasehold interest in the revenue stream of certain gas wells. AECC is accounting for its mineral interests using the successful efforts method of accounting and the mineral interests are being depleted on a field-by-field basis using the unit-of-production method based on estimated proven reserves. As of October 31, 2018 and 2017, AECC's leasehold interests in the gas reserves totaled approximately $11.6 million and $12.2 million, respectively. The net interest received less the depletion of the gas reserves resulted in losses of $0.6 million, $0.6 million and $0.8 million for the years ended October 31, 2018, 2017 and 2016, respectively.

AECC evaluates the recoverability of assets by comparing the carrying amount of the relevant asset group against the related, estimated undiscounted future cash flows expected over the remaining useful life of the asset group. When an evaluation indicates that the future undiscounted cash flows are not sufficient to recover the carrying value of the asset group, the carrying value of the asset group would be reduced to its estimated fair value. AECC completed an impairment valuation as of October 31, 2018, related to its leasehold interest in the gas reserves and concluded that the gas reserves were not impaired.

Note 4: Patronage Capital

Patronage allocations are based on an amount not less than the fiscal year's taxable income for federal income tax purposes. Patronage allocations are assigned to patrons' accounts as credits on a patronage basis. Using this allocation method, $18.7 million and $18.2 million of patronage capital was allocated for the years ended October 31, 2018 and 2017, respectively.

Patronage retirements are restricted by the *Indenture of Mortgage, Security and Financing Statement* dated as of June 1, 2009, as amended, made by AECC, as grantor, to Regions Bank, as trustee, as supplemented (the Indenture). The Indenture prohibits AECC from making any distribution of patronage capital to its members if, at the time of the distribution or immediately following the distribution, (i) an event of default exists or (ii) AECC's aggregate margins and equities at the end of the most recent fiscal quarter would be less than 20% of its total long-term debt and equities. AECC may, however, distribute up to the lesser of 5% of its aggregate margins and equities as of the end of the immediate preceding fiscal year, or 25% of its prior year's margins.

During the years ended October 31, 2018 and 2017, the Board authorized patronage retirements of approximately $20.0 million and $20.1 million, respectively.

Note 5: Other Equities

Other equities include proceeds of approximately $43.2 million from the sale of tax benefits in 1982 under the *Economic Recovery Tax Act of 1981*—net of applicable expenses. The tax benefits sold were the depreciation and tax credits applicable to the Independence Steam Electric Station Unit No. 1 (Independence 1) boiler and turbine, coal handling equipment, and certain common and related items having a cost of approximately $113.6 million.

The other equities balance also includes $75.6 million of income related to the amortization of the deferred gain resulting from the Independence 2 sale and leaseback transaction. In accordance with ASC 980, due to rate-making treatment, the gain from this sale was recognized for financial reporting purposes over the lease term until June 27, 2003, when AECC purchased the Independence 2 lease residual resulting in the operating lease being reclassified as a capital lease. On December 16, 2009, AECC entered into a purchase and sale agreement to buy out the Independence 2 leased assets. On December 30, 2009, closing of the transaction, the Independence 2 lease was terminated and now AECC owns a 35.0% undivided interest in Independence 2 (see *Note* 9).

Note 6: Long-Term Debt

Long-term debt as of October 31, 2018 and 2017, consisted of the following (in thousands):

	2018	2017
Mortgage notes payable to Federal Financing Bank (FFB) at varying interest rates from 2.111% to 5.868%, due in quarterly installments through December 2041	$ 601,056	$ 622,579
Series 2011A First Mortgage Obligation Senior Notes payable at an annual interest rate of 4.71%, due in semiannual installments through December 2030	65,000	68,000
Series 2011B First Mortgage Obligation Senior Notes payable at an annual interest rate of 5.62%, due in semiannual installments beginning December 2031 through December 2041	120,000	120,000
CoBank ACB (CoBank) notes payable at an annual interest rate of 3.59%, due in quarterly installments through October 2036	49,170	51,903
CoBank unsecured notes payable at an annual interest rate of 2.62%, due in quarterly installments through March 2023	7,052	8,514
RUS 2% mortgage notes, due in quarterly installments through May 2018	-	11
Total debt	842,278	871,007
Current maturities of long-term debt	29,123	28,933
Total long-term debt less current maturities	$ 813,155	$ 842,074

The estimated maturities of long-term debt for each of the next five years ending October 31 and in the aggregate thereafter are as follows (in thousands):

	2019	2020	2021	2022	2023	Thereafter	Total
FFB	$ 21,890	$ 22,619	$ 23,373	$ 24,115	$ 24,820	$ 484,239	$ 601,056
CoBank	2,731	2,732	2,732	2,732	2,732	35,511	49,170
CoBank – unsecured	1,502	1,542	1,583	1,626	799	-	7,052
Series 2011A	3,000	3,500	3,500	4,000	4,000	47,000	65,000
Series 2011B	-	-	-	-	-	120,000	120,000
Total	$ 29,123	$ 30,393	$ 31,188	$ 32,473	$ 32,351	$ 686,750	$ 842,278

All long-term debt, with the exception of the above disclosed CoBank unsecured debt, is secured equally and ratably by a first priority lien on substantially all of the owned tangible and certain of the intangible assets of AECC, subject to certain exceptions and limitations. Under the terms of AECC's Indenture, substantially all of the after-acquired assets of AECC become subject to the lien of the Indenture. Also, under the terms of the Indenture, the RUS loan contract and other loan agreements, AECC must maintain certain financial covenants. AECC was in compliance with these financial covenants at October 31, 2018.

AECC entered into a long-term loan agreement with CoBank on December 9, 2009, in the amount of $122.0 million for the purpose of funding the lease buyout and purchase of Independence 2. The original loan had a maturity date of January 20, 2020; however, it was refinanced on July 14, 2016, at a lower interest rate with a new maturity date of October 20, 2036. AECC incurred a refinance premium in the amount of $2.5 million as a result of the refinancing. As of October 31, 2018 and 2017, $49.2 million and $51.9 million, respectively, was outstanding to CoBank. On April 23, 2013, AECC entered into an unsecured longterm loan agreement with CoBank in the amount of $14.7 million for the purpose of funding certain pension plan prepayments (see Note 11). The loan has a maturity date of March 30, 2023. As of October 31, 2018 and 2017, $7.1 million and $8.5 million, respectively, was outstanding to CoBank – Unsecured.

AECC entered into a longterm loan agreement on December 8, 2010, with RUS on the FFB S-8 loan in the amount of $621.0 million. The loan commitment had an original maximum draw period ending on September 30, 2015. This draw period has been extended through December 31, 2018, with a maturity date of December 31, 2040. The total unadvanced amount as of October 31, 2018 and 2017, was $347.2 million.

AECC completed a private placement debt issuance on February 22, 2011, by issuing $200.0 million in First Mortgage Obligation Senior Notes. The debt issuance involved two tranches, with outstanding amounts of $65.0 million and $68.0 million at October 31, 2018 and 2017, respectively, in Series 2011A Notes, due December 30, 2030, at a coupon rate of 4.71% and $120.0 million in Series 2011B Notes, due December 30, 2041, at a coupon rate of 5.62%.

Note 7: Notes Payable

AECC maintains a $75.0 million perpetual line of credit with CFC, which bears interest at a rate of 1.0% above the prime rate or such lesser total rate per annum as may be fixed by CFC. AECC also has a $10.0 million committed line of credit with CoBank through September 6, 2019, which bears interest at 1.20% over the 30-day London InterBank Offered Rate (LIBOR). AECC has a $10.0 million uncommitted line of credit with Regions Bank through November 2, 2020, which bears interest at 0.85% over the 30-day LIBOR. No amounts were outstanding under these lines of credits during the fiscal years 2018 and 2017.

AECC has signed related-party master promissory notes with all of its Members. These notes allow Members to advance AECC funds with such advances payable upon demand. When needed, AECC may use such advances for its own operating requirements and, when it does, AECC recognizes interest as a component of interest expense in the statements of operations.

However, when AECC is in a financial position such that it does not require these advances for operations, Members may continue to advance funds to AECC for investment purposes, in which case, AECC recognizes the interest expense in interest income—net, in the statements of operations. AECC collectively invests such funds, along with AECC's general funds, and pays its Members an interest rate comparable to the monthly average rate earned on the combined investments. AECC invests these funds in U.S. Treasury notes, bills and bonds, other U.S. government agency securities, and various other debt securities, such as corporate notes, bonds, and commercial paper.

As of October 31, 2018 and 2017, Members' advances to AECC totaled approximately $116.5 million and $104.7 million, respectively. As of October 31, 2018 and 2017, the variable interest rate on the notes payable was 2.54% and 1.45%, respectively.

Total interest expense related to the Members' advances for the years ended October 31, 2018, 2017 and 2016, was as follows (in thousands):

	2018	2017	2016
Operating interest, included in interest expense	$ 1,587	$ 908	$ 1,234
Nonoperating interest, included in interest income – net	1,085	778	263
Total interest expense	$ 2,672	$ 1,686	$ 1,497

With its Board and APSC approval, AECC entered into a five year $250.0 million senior unsecured revolving credit agreement on December 21, 2015, with a syndication of financial institutions. This agreement has a maturity date of December 21, 2020. This $250.0 million credit facility is used to support AECC's commercial paper program, for general purposes and for the issuance of letters of credit. There was no outstanding balance on this credit agreement as of October 31, 2018 and 2017.

AECC has agreements with Goldman Sachs and Wells Fargo Securities, LLC to act as dealers for commercial paper notes issued by AECC. As of October 31, 2018, $77.7 million of commercial paper notes were outstanding at rates varying from 2.25% to 2.50% and with maturities varying from 2 to 91 days. As of October 31, 2017, $99.8 million of commercial paper notes were outstanding at rates varying from 1.21% to 1.38% and with maturities varying from 2 to 90 days.

AECC has a 3.57% promissory note with Arkansas Electric Cooperatives, Inc. (AECI) for $30.0 million with a maturity date of December 31, 2018. A new promissory note with AECI was executed to replace this expiring promissory note (see *Note* 15).

Note 8: Fuel Supply and Transmission Agreements

AECC pays Entergy Arkansas, LLC (Entergy), in accordance with provisions of joint operating agreements, for its 35% interest in the coal stockpiles at the White Bluff Steam Electric Station (White Bluff) and Independence generating plants. Entergy retains all ownership rights to the coal. AECC makes monthly payments to Entergy to maintain the stockpiles. These payments are classified as prepaid fuel supply in the accompanying balance sheets.

During 2016, AECC incurred $2.4 million in losses, which are recorded as a non-operating loss in the accompanying statements of operations. These losses are related to the sale of coal to a third party that was negotiated by Entergy. In addition, AECC incurred $1.3 million related to a liquidated damages provision under a coal supply agreement Entergy has with its coal supplier, for which AECC has financial responsibility as a partial owner of certain Entergy power plants that use coal for fuel. The liquidated damage charges were recorded as fuel expense and recovered through AECC's fuel and purchased energy adjustment rider. There were no losses related to liquidated damages during 2018 and 2017.

AECC also has a joint operating agreement with American Electric Power's Southwestern Electric Power Company (SWEPCO), in connection with its 50% interest of the Flint Creek generating station and 11.667% interest in the John W. Turk, Jr. Power Plant, whereby AECC pays for its share of the fuel consumed at those stations.

AECC owns approximately 353 miles of transmission lines, but relies primarily on the transmission facilities of Entergy, SWEPCO, Oklahoma Gas & Electric, and SPA to deliver electricity to the members pursuant to FERC approved tariffs.

Note 9: Rental and Lease Commitments

Independence 2

Pursuant to the terms of a sale-leaseback agreement dated December 4, 1984, AECC sold and leased back for 35 years its 35% undivided interest in Independence 2. On June 27, 2003, AECC repurchased its future ownership interest in the leased Independence 2 assets effective December 31, 2019.

As a result of this transaction, the operating lease was reclassified as a capital lease and an associated regulatory asset was created. The balance of this regulatory-created asset was $17.1 million and $30.6 million as of October 31, 2018 and 2017, respectively.

AECC executed a purchase and sale agreement on November 23, 2009, with General Electric Capital Corporation (GECC) to purchase the entire beneficial interest that GECC retained in the Independence 2 leased assets (the Transaction). On December 16, 2009, the APSC entered an order that the Transaction was in the public interest and approved the Transaction. The Transaction closed on December 30, 2009, with a purchase price of $122.2 million (see *Note* 6).

AECC negotiated with a lender for a 10-year term loan for approximately $122.0 million in order to fund the lease buyout and purchase of Independence 2 (see *Note* 6). As a result of this buyout transaction, the Independence 2 finance obligation of approximately $115.4 million was effectively refinanced with the new $122.0 million loan with CoBank. Upon the closing of the Transaction, the Independence 2 lease terminated and AECC now owns a 35.0% undivided interest in Independence 2.

Related expenses were $15.3 million for each of the years ended October 31, 2018, 2017 and 2016. These expenses include depreciation expense of approximately $.1 million, $3.7 million, and $3.9 for each of the years ended October 31, 2018, 2017 and 2016, respectively. In addition, interest expense was approximately $1.2 million, $2.0 million, and $2.5 million for the years ended October 31, 2018, 2017 and 2016, respectively. Amortization expense on the regulatory-created asset was approximately $14.0 million, $9.6 million and $8.8 million for the years ended October 31, 2018, 2017 and 2016, respectively.

Ellis

AECC sold and leased back on December 19, 1988, its interest in Ellis. As a result of the sale and leaseback, under the provisions of ASC 840, *Leases*, this transaction was accounted for as a longterm finance obligation. This lease was treated as an operating lease for rate-making purposes. In accordance with ASC 980, the timing of expense recognition was modified during the lease term to conform to rate treatment.

AECC executed an agreement of sale and purchase on November 30, 2011, with The Bank of New York Mellon as owner trustee, to purchase the Ellis leased assets and the entire beneficial interest that the owner trustee retained in the leased assets for $35.6 million (the Lease Buyout). On December 20, 2011, the purchase closed with the purchase price being funded by AECC's use of general funds in the amount of $25.6 million and $10.0 million of trust funds. Upon closing, the Ellis lease and trust agreement terminated.

As a result of the Lease Buyout, $25.9 million was accounted for as a deferred regulatory asset and is being amortized straight line over the remaining FERC license life for Ellis through 2033. As of October 31, 2018 and 2017, this regulatory asset had a balance of $17.8 million and $19.0 million, respectively. Upon the lease buyout the remaining unamortized regulatory and other deferred costs were $5.5 million which are also being amortized straight line through 2033.

As of October 31, 2018 and 2017, the remaining unamortized costs related to the sales and leaseback transaction and the Lease Buyout transaction were $3.8 million and $4.0 million, respectively. The ASPC and RUS approved the lease buyout transaction.

Related expenses, including the effect of the Lease Buyout and legal defeasance, were $2.9 million, for each of the years ended October 31, 2018, 2017 and 2016. These expenses include depreciation expense of approximately $1.5 million for each of the years ended October 31, 2018, 2017 and 2016. Amortization of regulatory and other deferred costs was approximately $1.4 million for each of the years ended October 31, 2018, 2017 and 2016.

Note 10: Income Taxes

In December 1982, AECC elected to revoke its tax-exempt status for federal income tax purposes. For state income tax purposes, AECC operates as a tax-exempt Cooperative under Arkansas statutes. No amounts were expensed for income taxes for the years ended October 31, 2018, 2017 and 2016.

The differences between the statutory federal income tax rate on income before income taxes and AECC's effective tax rate are summarized as follows (in thousands):

	2018	Percent	2017	Percent	2016	Percent
Statutory federal income	$ 8,176	21.0 %	$ 13,296	35.0 %	$ 10,815	35.0 %
Nontaxable member income	(8,176)	(21.0)	(13,296)	(35.0)	(10,815)	(35.0)
Tax credit carryforwards not benefited	-	0%	-	0%	-	0%
Effective income tax rate	$ -	0%	$ -	0%	$ -	0%

The components of the net deferred tax liability as of October 31, 2018 and 2017, were as follows (in thousands):

	2018	2017
Deferred tax assets:		
Patronage exclusions available	$ 72,723	$ 113,835
Alternative minimum tax (AMT) credit carryforwards	2,533	4,052
Other	3,975	7,296
	79,231	125,183
Valuation allowance	(2,533)	(4,052)
	76,698	121,131
Deferred tax liabilities:		
Utility plant	(57,984)	(88,057)
Safe harbor lease	(18,172)	(30,287)
Other	(542)	(2,787)
	(76,698)	(121,131)
Net deferred tax liability	$ -	$ -

As of October 31, 2018, AECC had an AMT credit carryforward of approximately $2.5 million. Based on AECC's historical transactions resulting in nonmember losses and the patronage provisions of its bylaws, AECC does not anticipate any future taxable income sufficient to realize the benefit of the tax credits existing as of October 31, 2018. Accordingly, AECC has established a valuation allowance for these credits as reflected above. AECC has net operating loss carryforwards of approximately $148.5 million, which expire in 2019, and thereafter.

On December 22, 2017, the United States enacted tax reform legislation through the Tax Cuts and Jobs Act, which significantly changes the existing U.S. tax laws, including a reduction in the corporate tax rate from 35% to 21%. As a result of this tax act, AECC does not expect to see any change in its income tax expense.

Note 11: Employee Benefits

The National Rural Electric Cooperative Association (NRECA) Retirement Security Plan (RS Plan) is a defined benefit pension plan qualified under Section 401 and is taxexempt under Section 501(a) of the Internal Revenue Code.

It is considered a master multiple employer plan under the accounting standards. The RS Plan sponsor's Employer Identification Number is 53-0116145 and the RS Plan Number is 333.

A unique characteristic of a master multiple employer plan compared to a single employer plan is that all plan assets are available to pay benefits of any plan participant. Separate asset accounts are not maintained for participating employers. This means that assets contributed by one employer may be used to provide benefits to employees of other participating employers.

AECC's contributions to the RS Plan in 2018, 2017 and 2016, represented less than 5% of the total contributions made to the RS Plan by all participating employers. AECC made contributions to the RS Plan of $6.4 million, $5.8 million and $5.3 million for the years ended October 31, 2018, 2017 and 2016, respectively.

For the RS Plan, a "zone status" determination is not required, and therefore not determined, under the *Pension Protection Act* of 2006 (PPA). In addition, the accumulated benefit obligations and plan assets are not determined or allocated separately by individual employer. In total, the RS Plan was over 80% funded on January 1, 2018 and 2017, based on the PPA funding target and PPA actuarial value of assets on those dates.

Because the provisions of the PPA do not apply to the RS Plan, funding improvement plans and surcharges are not applicable. Future contribution requirements are determined each year as part of the actuarial valuation of the plan and may change as a result of plan experience.

At the December 2012 meeting of the Insurance and Financial Services Committee of the NRECA Board of Directors (Committee), the Committee approved an option to allow participating cooperatives in the RS Plan to make a contribution prepayment and reduce future required contributions. The prepayment amount is AECC's share, as of January 1, 2013, of future contributions required to fund the RS Plan's unfunded value of benefits earned to date using RS Plan actuarial valuation assumptions.

The prepayment amount will typically equal approximately 2.5 times a cooperative's annual RS Plan required contribution as of January 1, 2013. After making the prepayment, for most cooperatives, the billing rate is reduced by approximately 25%, retroactive to January 1, 2013. The 25% differential in billing rates is expected to continue for approximately 15 years. However, changes in interest rates, asset returns and other plan experience different from that expected, plan assumption changes, and other factors may have an impact on the differential in billing rates and the 15-year period. On April 3, 2013, the Board approved a prepayment of $14.7 million to the RS Plan. AECC is amortizing this amount over ten years as approved by the RUS. As of October 31, 2018 and 2017, the balance of the prepayment was $6.1 million and $7.6 million, respectively.

AECC also has a defined contribution plan for eligible employees, for which contributions are determined annually.

Additionally, AECC contributes a portion of the premiums related to medical insurance for eligible employees. Total benefit costs were approximately $12.0 million, $11.2 million, and $11.0 million for the years ended October 31, 2018, 2017 and 2016, respectively.

AECC has deferred compensation agreements with certain employees that provide benefits upon death, disability, at age 65 and retired, or retirement. The present value of total estimated deferred compensation is being accrued over the remaining years to the full eligibility date. Contributions to the plans were $0.2 million for the years ended October 31, 2018, 2017 and 2016.

AECC has acquired certain assets, principally life insurance policies and mutual fund shares, to provide benefits under the deferred compensation agreements. As of October 31, 2018 and 2017, AECC had accrued deferred compensation liabilities of $9.7 million and $9.5 million, respectively, which are reflected in deferred credits in the accompanying balance sheets.

In addition, as of October 31, 2018 and 2017, AECC had $13.4 million and $12.5 million, respectively, related to life insurance policies and mutual fund shares to fund the deferred compensation plans, which are reflected in other longterm investments in the accompanying balance sheets.

In accordance with ASC 715, *Compensation-Retirement Benefits*, AECC is required to record the funded status of the postretirement health care plans. On December 31, 2016, AECC froze its plan to new retirees. The current retirees active in the plan were allowed to remain in the plan until December 31, 2017, at which time, the plan terminated. The liability accrued for the remaining participants is immaterial to the financial statements.

Note 12: Related-Party Transactions

AECC and AECI have limited staff who provide shared services to one another and certain members of the Board also serve on each board. AECI, among other things, is engaged, via subsidiaries, in the construction and maintenance of electrical substations and transmission facilities, the marketing of new pole-mount and pad-mount transformers and pole-line hardware as well as the construction and maintenance of utility-scale solar projects. Under a contractual agreement, AECC and AECI allocate the costs between them for certain facilities and personnel. Separate accounting records and related information are maintained for each cooperative. AECC had patronage allocations outstanding from AECI in the amount of $1.0 million at October 31, 2018 and 2017.

AECI pays AECC monthly rent for use of the general office facilities and other expenses. The total amounts paid to AECC for the years ended October 31, 2018, 2017 and 2016, were approximately $6.0 million, $4.4 million and $4.3 million, respectively. AECI owed AECC approximately $0.6 million at October 31, 2018 and $0.3 million at October 31,2017, related to the reimbursement of these expenses. As of October 31, 2018 and 2017, AECC owed AECI $30.0 million in notes payable (see *Note* 7).

Interest paid to AECI for each of the years ended October 31, 2018, 2017 and 2016 was $1.1 million. Interest payable to AECI at October 31, 2018, 2017 and 2016 was $0.1 million.

AECI provides various services for AECC. The amounts incurred by AECC for its allocable share of certain AECI personnel's salaries, reimbursement of expenses, purchases of supplies and services, and right-of-way clearing and construction were approximately $6.9 million, $7.8 million and $7.5 million for the years ended October 31, 2018, 2017 and 2016, respectively.

As of October 31, 2018 and 2017, AECC owed AECI approximately $0.7 million for materials and services.

Note 13: Commitments and Contingencies

AECC is not a party to any pending legal proceedings that management believes are material to its financial condition, results of its operations, or cash flows. AECC maintains liability insurance against risks, subject to certain self-insurance limits, arising out of the normal course of its business.

AECC purchased a leasehold interest in Magnet Cove on September 10, 2012. At that time, AECC also purchased the Hot Spring Power Company, LLC interest in a long-term warranty agreement with Siemens and executed a new agreement (the Agreement) between AECC and Siemens. The Agreement calls for quarterly payments to Siemens based on, among other items, the number of hours that Magnet Cove runs during a quarter.

The Agreement covers, among other items, regularly scheduled maintenance and replacement costs related to the 501G Combustion Turbine replacements at regularly scheduled intervals during the life of the Agreement. As of October 31, 2018 and 2017, a balance of $5.2 million and $8.2 million, respectively, was included in deferred charges on AECC's balance sheets.

As of October 31, 2018, contractual commitments have been entered into for construction totaling approximately $35.1 million related to capital improvements estimated for 2019, at AECC's jointly owned coal-fired power plants.

Projects to install flue gas desulfurization equipment (scrubber) and activated carbon injection (ACI) equipment at Flint Creek are complete. This equipment became operational on June 12, 2016, and has been operating as designed and in compliance with its permit. ACI equipment has been installed and is currently in operation on the four units at White Bluff and Independence. This equipment allows each plant to achieve compliance with the Utility Mercury and Air Toxics Standard (MATS), and in the case of Flint Creek, compliance with the current Regional Haze Rule (RHR)[1] requirements[2].

1 The RHR is a federal rule that protects visibility in Class I areas.

2 The scrubber at Flint Creek is required by the current RHR FIP. The Federal Implementation Plan (FIP) may be replaced by a State Implementation Plan (SIP), but AECC anticipates that the final SIP requirements will be the same as the current FIP requirements for Flint Creek.

In 2015 and 2016, the federal Environmental Protection Agency (EPA) finalized the Clean Power Plan (CPP), the National Ambient Air Quality Standard (NAAQS) for ozone, the Coal Combustion Residuals (CCR) rule and the updated effluent limitation guidelines (ELG) for steam electric generating stations.

- Clean Power Plan: In October 2017, EPA issued a proposed rule to repeal the CPP. EPA is expected to finalize that rule in March 2019. EPA issued the proposed Affordable Clean Energy (ACE) rule in August 2018 to replace the CPP. The proposed ACE rule focuses primarily on efficiency upgrades at coal units, AECC is unable to determine potential financial impacts until the final rule is issued.
- National Ambient Air Quality Standard: There are no areas in Arkansas that are in non-attainment with the new NAAQS ozone standards, and AECC expects Arkansas will remain in compliance as Arkansas' air quality continues to improve.
- Coal Combustion Residuals Rule and updated effluent limitation guidelines: CCR rule impacts at Flint Creek for AECC are estimated at $7.8 million during the next three years for dry bottom ash conversion and $1.6 million for cap and cover on the landfill during the next two years. There will be additional costs for ash pond closure at Flint Creek, but closure of that pond is not expected for several years.

Due to CCR study results and a district court ruling in August 2018, Entergy believes that the recycling ponds at White Bluff and Independence are subject to the CCR rule and will require closure. Entergy is currently working with consultants to develop a permanent replacement solution for the recycling ponds. AECC expects cost estimates for such replacement during the first quarter of 2019.

In October 2016, the EPA finalized the Cross-State Air Pollution Rule Update (CSAPRU) which addresses interstate transport of nitrogen oxide and sulfur dioxide. CSAPRU requires AECC to procure allowances to cover its emissions of nitrogen oxides (NOx) during the ozone season (May 1 to September 30). The final CSAPRU reduced Arkansas' current emission allowance allocation by 20% beginning in 2017 and another 19% in 2018 and beyond.

Low NOx burners and separated overfire air (LNB/SOFA) have been installed at Flint Creek Unit 1, White Bluff Units 1 and 2, and Independence Units 1 and 2. Both technologies lower NOx emissions. AECC did not have to purchase additional allowances for the 2017 or the 2018 ozone season. AECC also does not anticipate issues with complying with CSAPRU going forward due to the reduction in NOx emissions from the LNB/SOFA installations.

In October 2018, ADEQ submitted its final Regional Haze Phase II State Implementation Plan to the EPA for approval. The SIP requires that an SO2 scrubber be installed at Flint Creek Unit 1 (which is already in service) and that Entergy does not have to install scrubbers on Units 1 and 2 at White Bluff if Entergy agrees to cease burning coal at White Bluff by December 31, 2028. There are no capital improvement requirements for other AECC owned units in the SIP.

AECC's current estimate, based on certain plans and cost estimates provided by Entergy and SWEPCO, for its total ownership share of environmental compliance upgrades is $9.4 million plus the cost of capital compliance solutions and pond closures at White Bluff and Independence. AECC has incurred related project costs of approximately $262.7 million as of October 31, 2018. AECC has secured financing for these equipment upgrades from the RUS with an FFB loan in the amount of $621.0 million (see *Note* 6).

Note 14: Significant Customers

Sales to members amounted to 92% of operating revenues for each of the years ended October 31, 2018, 2017, and 2016. For the years ended October 31, 2018, 2017 and 2016, AECC had the following members that accounted for more than 10% of operating revenues (in thousands):

	2018		2017		2016	
Customer	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**
Mississippi County Electric Cooperative, Inc.	$ 158,639	19.2 %	$ 150,990	19.0 %	$ 127,093	17.3 %
Carroll Electric Cooperative Corporation	115,233	13.9	111,080	14.0	103,432	14.1
First Electric Cooperative Corporation	114,154	13.9	110,716	13.9	106,412	14.5

Note 15: Subsequent Events

AECC has evaluated events or transactions through February 5, 2019, in conjunction with the preparation of these financial statements.

AECC's Board authorized a patronage retirement on December 4, 2018, to be paid on December 14, 2018, in the amount of $20.0 million.

Effective December 31, 2018, AECC executed a new 3.57% promissory note in the amount of $30.0 million with AECI with a maturity date of March 31, 2019.

On November 27, 2018 AECC received $140.8 million in loan funds from the FFB S-8 loan. The loan has an interest rate of 3.129% and a maturity date of December 31, 2040. This was the final advance of the FFB S-8 loan. The draw period had been extended through December 31, 2018, and the total unadvanced amount was $206.4 million.

On December 20, 2018, the President signed the 2019 Farm Bill. Provisions have modified the RUS COC Program. No new deposits into the COC will be allowed after December 20, 2018. The new bill allows for COC balance holders to prepay their RUS/FFB debt without a prepayment penalty through September 30, 2020. Existing COC balances will continue to earn interest until October 1, 2020, at which time the interest rate drops to 4%. Beginning October 1, 2021, the COC balances will earn interest at a 1-year Treasury rate. AECC made deposits of $55.0 million into the COC on December 12, 2018.