MGE ENERGY INC
Form 10-K
February 22, 2019

United States

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

[X] Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the fiscal year ended:

December 31, 2018

[ ] Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the transition period from _______________ *to* _______________

Commission File No.	Name of Registrant, State of Incorporation, Address of Principal Executive Offices, and Telephone No.	IRS Employer Identification No.
000-49965	**MGE Energy, Inc.**	39-2040501
	(a Wisconsin Corporation)	

133 South Blair Street

Madison, Wisconsin 53788

(608) 252-7000

mgeenergy.com

000-1125	**Madison Gas and Electric Company**	39-0444025

(a Wisconsin Corporation)

133 South Blair Street

Madison, Wisconsin 53788

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SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT:

	Title of Class	Name of Each Exchange on which Registered
MGE Energy, Inc.	Common Stock, $1 Par Value Per Share	The Nasdaq Stock Market

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT:

	Title of Class
Madison Gas and Electric Company	Common Stock, $1 Par Value Per Share

Indicate by check mark if the registrants are well-known seasoned issuers, as defined in Rule 405 of the Securities Act.

MGE Energy, Inc.	Yes [X] No [ ]
Madison Gas and Electric Company	Yes [X] No [ ]

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Indicate by check mark if the registrants are not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

MGE Energy, Inc.	Yes [ ] No [X]
Madison Gas and Electric Company	Yes [ ] No [X]

Indicate by check mark whether the registrants (1) have filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrants were required to file such reports) and (2) have been subject to such filing requirements for the past 90 days. Yes [X] No [ ]

Indicate by check mark whether the registrants have submitted electronically every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrants were required to submit and post such files): Yes [X] No [ ]

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrants' knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [ ]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act:

	Large Accelerated Filer	**Accelerated Filer**	**Non-accelerated Filer**	**Smaller Reporting Company**	**Emerging Growth Company**
MGE Energy, Inc.	X				
Madison Gas and Electric Company			X		

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).

MGE Energy, Inc.	Yes [ ] No [X]
Madison Gas and Electric Company	Yes [ ] No [X]

The aggregate market value of the voting and nonvoting common equity held by nonaffiliates of each registrant as of June 30, 2018, was as follows:

MGE Energy, Inc.	$2,180,572,457
Madison Gas and Electric Company	$0

The number of shares outstanding of each registrant's common stock as of February 1, 2019, were as follows:

MGE Energy, Inc.	34,668,370
Madison Gas and Electric Company	17,347,894

DOCUMENTS INCORPORATED BY REFERENCE

Portions of MGE Energy, Inc.'s definitive proxy statement to be filed before April 30, 2019, relating to its annual meeting of shareholders, are incorporated by reference into Part III of this annual report on Form 10-K.

Madison Gas and Electric Company meets the conditions set forth in General Instruction (I)(1)(a) and (b) of Form 10-K and is therefore omitting (i.) the information otherwise required by Item 601 of Regulation S-K relating to a list of subsidiaries of the registrant as permitted by General Instruction (I)(2)(b), (ii.) the information otherwise required by Item 6 relating to Selected Financial Data as permitted by General Instruction (I)(2)(a), (iii.) the information otherwise required by Item 10 relating to Directors and Executive Officers as permitted by General Instruction (I)(2)(c), (iv.) the information otherwise required by Item 11 relating to executive compensation as permitted by General Instruction (I)(2)(c), (v.) the information otherwise required by Item 12 relating to Security Ownership of Certain Beneficial Owners and Management as permitted by General Instruction (I)(2)(c), and (vi.) the information otherwise required by Item 13 relating to Certain Relationships and Related Transactions as permitted by General Instruction (I)(2)(c).

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Filing Format

This combined Form 10-K is being filed separately by MGE Energy, Inc. (MGE Energy) and Madison Gas and Electric Company (MGE). MGE is a wholly owned subsidiary of MGE Energy and represents a majority of its assets, liabilities, revenues, expenses, and operations. Thus, all information contained in this report relates to, and is filed by, MGE Energy. Information that is specifically identified in this report as relating solely to MGE Energy, such as its financial statements and information relating to its nonregulated business, does not relate to, and is not filed by, MGE. MGE makes no representation as to that information. The terms "we" and "our," as used in this report, refer to MGE Energy and its consolidated subsidiaries, unless otherwise indicated.

Forward-Looking Statements

This report, and other documents filed by MGE Energy and MGE with the Securities and Exchange Commission (SEC) from time to time, contain forward-looking statements that reflect management's current assumptions and estimates regarding future performance and economic conditions especially as they relate to economic conditions, future load growth, revenues, expenses, capital expenditures, financial resources, regulatory matters, and the scope and expense associated with future environmental regulation. These forward-looking statements are made pursuant to the provisions of the Private Securities Litigation Reform Act of 1995. Words such as "believe," "expect," "anticipate," "estimate," "could," "should," "intend," "will," and other similar words generally identify forward-looking statements. Both MGE Energy and MGE caution investors that these forward-looking statements are subject to known and unknown risks and uncertainties that may cause actual results to differ materially from those projected, expressed, or implied.

The factors that could cause actual results to differ materially from the forward-looking statements made by a registrant include (a) those factors discussed in Item 1A. Risk Factors, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, and Item 8. Financial Statements and Supplementary Data, Footnote 17. Commitments and Contingencies, and (b) other factors discussed herein and in other filings made by that registrant with the SEC.

Readers are cautioned not to place undue reliance on these forward-looking statements, which apply only as of the date of this report. MGE Energy and MGE undertake no obligation to release publicly any revision to these forward-looking statements to reflect events or circumstances after the date of this report, except as required by law.

Where to Find More Information

The public may read and copy any reports or other information that MGE Energy and MGE file with the SEC at the SEC's public reference room at 100 F Street, NE, Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. These documents also are available to the public from commercial document retrieval services, the website maintained by the SEC at sec.gov, MGE Energy's website at mgeenergy.com, and MGE's website at mge.com. Copies may be obtained from our websites free of charge. Information contained on MGE Energy's and MGE's websites shall not be deemed incorporated into, or to be a part of, this report.

Definitions, Abbreviations, and Acronyms Used in the Text and Notes of this Report

Abbreviations, acronyms, and definitions used in the text and notes of this report are defined below.

MGE Energy and Subsidiaries:	
CWDC	Central Wisconsin Development Corporation
MAGAEL	MAGAEL, LLC
MGE	Madison Gas and Electric Company
MGE Energy	MGE Energy, Inc.
MGE Power	MGE Power, LLC
MGE Power Elm Road	MGE Power Elm Road, LLC
MGE Power West Campus	MGE Power West Campus, LLC
MGE Services	MGE Services, LLC
MGE State Energy Services	MGE State Energy Services, LLC
MGE Transco	MGE Transco Investment, LLC (which holds our interest in ATC)
MGEE Transco	MGEE Transco, LLC (which holds our interest in ATC Holdco)
North Mendota	North Mendota Energy & Technology Park, LLC
Other Defined Terms:	
ACE	Affordable Clean Energy
AFUDC	Allowance for Funds Used During Construction
ANPR	Advanced Notice of Proposed Rulemaking
ANR	ANR Pipeline Company
ARO	Asset Retirement Obligation
ATC	American Transmission Company LLC
ATC Holdco	ATC Holdco, LLC
BART	Best Available Retrofit Technology
Blount	Blount Station

BSER	Best System of Emissions Reductions
BTA	Best Technology Available
CAA	Clean Air Act
CAVR	Clean Air Visibility Rule
CCR	Coal Combustion Residual
CNG	Compressed Natural Gas
CO2	Carbon Dioxide
Codification	Financial Accounting Standards Board Accounting Standards Codification
Columbia	Columbia Energy Center
Cooling degree days	Measure of the extent to which the average daily temperature is above 65 degrees Fahrenheit, which is considered an indicator of possible increased demand for energy to provide cooling
COSO	Committee of Sponsoring Organizations
CPP	Clean Power Plan
CSAPR	Cross-State Air Pollution Rule
CWA	Clean Water Act
DTA	Deferred Tax Assets
Dth	Dekatherms
EEI	Edison Electric Institute
EGUs	Electric Generating Units
electric margin	Electric revenues less fuel for electric generation and purchase power costs, a non-GAAP measure
ELG	Effluent Limitations Guidelines
Elm Road Units	Elm Road Generating Station
EPA	United States Environmental Protection Agency
FASB	Financial Accounting Standards Board
FERC	Federal Energy Regulatory Commission
Forward Wind	Forward Wind Energy Center
FTR	Financial Transmission Rights

GAAP	Generally Accepted Accounting Principles
gas margin	Gas revenues less cost of gas sold, a non-GAAP measure
GHG	Greenhouse Gas
Heating degree days (HDD)	Measure of the extent to which the average daily temperature is below 65 degrees Fahrenheit, which is considered an indicator of possible increased demand for energy to provide heating
ICF	Insurance Continuance Fund
IRS	Internal Revenue Service
kVA	Kilovolt Ampere
kWh	Kilowatt-hour
MISO	Midcontinent Independent System Operator Inc. (a regional transmission organization)
MRO	Midwest Reliability Organization
MW	Megawatt
MWh	Megawatt-hour
NAAQS	National Ambient Air Quality Standards
Nasdaq	The Nasdaq Stock Market
NERC	North American Electric Reliability Corporation
NGO	Nongovernment Organizations
NNG	Northern Natural Gas Company
NOV	Notice of Violation
NOx	Nitrogen Oxides
NYSE	New York Stock Exchange
PCBs	Polychlorinated Biphenyls
PGA	Purchased Gas Adjustment clause
PJM	PJM Interconnection, LLC (a regional transmission organization)
PM	Particulate Matter
PPA	Purchased power agreement
PSCW	Public Service Commission of Wisconsin
REC	Renewable Energy Credit
Riverside	Riverside Energy Center in Beloit, Wisconsin
ROE	Return on Equity
RTO	Regional Transmission Organization
Saratoga	Saratoga Wind Farm
SCR	Selective Catalytic Reduction
SEC	Securities and Exchange Commission
SIP	State Implementation Plan

SO2	Sulfur Dioxide
the State	State of Wisconsin
Stock Plan	Direct Stock Purchase and Dividend Reinvestment Plan of MGE Energy
Tax Act	Tax Cuts and Jobs Act
UW	University of Wisconsin at Madison
VIE	Variable Interest Entity
WCCF	West Campus Cogeneration Facility
WDNR	Wisconsin Department of Natural Resources
WEPCO	Wisconsin Electric Power Company
Working capital	Current assets less current liabilities
WPDES	Wisconsin Pollutant Discharge Elimination System
WPL	Wisconsin Power and Light Company
WPSC	Wisconsin Public Service Corporation
WRERA	Worker, Retiree and Employer Recovery Act of 2008
XBRL	eXtensible Business Reporting Language

PART I.

Item 1. Business.

MGE Energy operates in the following business segments:

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Regulated electric utility operations generating, purchasing, and distributing electricity through MGE.

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Regulated gas utility operations purchasing and distributing natural gas through MGE.

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Nonregulated energy operations owning and leasing electric generating capacity that assists MGE through MGE Energy's wholly owned subsidiaries MGE Power Elm Road and MGE Power West Campus.

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Transmission investments representing our investment in American Transmission Company LLC, a company engaged in the business of providing electric transmission services primarily in Wisconsin, and our investment in ATC Holdco LLC, a company created to facilitate out-of-state electric transmission development and investments.

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All other investing in companies and property that relate to the regulated operations and financing the regulated operations, through its wholly owned subsidiaries CWDC, MAGAEL, MGE State Energy Services, North Mendota, and Corporate functions.

MGE's utility operations represent a majority of the assets, liabilities, revenues, expenses, and operations of MGE Energy. MGE Energy's nonregulated energy operations currently include an undivided interest in two coal-fired generating units located in Oak Creek, Wisconsin, which we refer to as the Elm Road Units, and an undivided interest in a cogeneration facility located on the Madison campus of the University of Wisconsin, which we refer to as the West Campus Cogeneration Facility or WCCF.

As a public utility, MGE is subject to regulation by the PSCW and the FERC. The PSCW has authority to regulate most aspects of MGE's business including rates, accounts, issuance of securities, and plant siting. The PSCW also has authority over certain aspects of MGE Energy as a holding company of a public utility. FERC has jurisdiction, under the Federal Power Act, over certain accounting practices and certain other aspects of MGE's business.

MGE Energy's subsidiaries are also subject to regulation under local, state, and federal laws regarding air and water quality and solid waste disposal. See "Environmental" below.

MGE Energy was organized as a Wisconsin corporation in 2001. MGE was organized as a Wisconsin corporation in 1896. Their principal offices are located at 133 South Blair Street, Madison, Wisconsin 53788, and their telephone number is (608) 252-7000.

Electric Utility Operations

MGE distributes electricity in a service area covering a 264 square-mile area of Dane County, Wisconsin. The service area includes the city of Madison, Wisconsin. It owns or leases ownership interests in electric generation facilities located in Wisconsin and Iowa.

As of December 31, 2018, MGE supplied electric service to approximately 153,000 customers, with approximately 90% located in the cities of Fitchburg, Madison, Middleton, and Monona and 10% in adjacent areas. Of the total number of customers, approximately 87% were residential and 13% were commercial or industrial. Electric retail revenues for 2018, 2017, and 2016 were comprised of the following:

	Year Ended December 31,		
	2018	2017	2016
Residential	35.4%	33.5%	33.9%
Commercial	52.3%	53.2%	52.9%
Industrial	3.6%	4.0%	4.4%

Public authorities (including the UW)	8.7%	9.3%	8.8%
Total	100.0%	100.0%	100.0%

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Electric operations accounted for approximately 71.8%, 73.6%, and 75.2% of MGE's total 2018, 2017, and 2016 regulated revenues, respectively.

See Item 2. Properties for a description of MGE's electric utility plant.

MGE is registered with North American Electric Reliability Corporation (NERC) and one regional entity, the Midwest Reliability Organization (MRO). The essential purposes of these entities are the development and implementation of regional and NERC reliability standards; and determining compliance with those standards, including enforcement mechanisms.

Transmission

American Transmission Company LLC (ATC) was formed by utilities who were required by Wisconsin law to contribute their transmission facilities to it in 2001, and is owned by those utilities and their affiliates. ATC's purpose is to provide reliable, economic transmission service to all customers in a fair and equitable manner. ATC plans, constructs, operates, maintains, and expands transmission facilities that it owns to provide adequate and reliable transmission of power. ATC is regulated by FERC for all rate terms and conditions of service, is regulated by the PSCW as to some aspects of its governance and is a transmission-owning member of the MISO.

Regional Transmission Organizations (RTO)

MISO

MGE is a nontransmission owning member of the MISO. MISO, a FERC approved RTO, is responsible for monitoring the electric transmission system that delivers power from generating plants to wholesale power transmitters. MISO's role is to ensure equal access to the transmission system and to maintain or improve electric system reliability in the Midwest.

MISO maintains a bid-based energy market. MGE offers substantially all of its generation on the MISO market and purchases much of its load requirement from the MISO market in accordance with the MISO Tariff. MGE participates in the ancillary services market operated by MISO. That market is an extension of the existing energy market in which

MISO assumes the responsibility of maintaining sufficient generation reserves. In the ancillary services market, MISO provides the reserves for MGE's load, and MGE may offer to sell reserves from its generating units.

MGE participates in the voluntary capacity auction, which provides an optional monthly forum for buyers and sellers of aggregate planning resource credits to interact. Load serving entities, such as MGE, may participate in the voluntary capacity auction potentially to obtain the necessary aggregate planning resource credits needed to meet their planning reserve margin requirement established by the PSCW. Generator owners may participate to sell any excess aggregate planning resource credits that are not needed by them.

PJM

MGE is a member of PJM. PJM, an RTO, is a neutral and independent party that coordinates and directs the operation of the transmission grid within its area of coverage, administers a competitive wholesale electricity market, and plans regional transmission expansion improvements to maintain grid reliability and relieve congestion.

Fuel supply and generation

MGE satisfies its customers' electric demand with internal generation and purchased power. MGE's current fuel mix for generation will fluctuate from year-to-year due to fuel pricing in the market, generating unit availability, weather, and customer demand. MGE has a responsibility to its customers to dispatch the lowest cost generation available pursuant to regulatory requirements.

MGE's Energy 2030 framework details our plan for growth in generation for renewables. This growth will continue as legacy fossil fuel-fired generation assets are retired and replace with renewables, such as wind and solar assets. The transition or displacement of coal-fired resources is ongoing and active. Currently two utility-scale solar projects are awaiting regulatory approval, totaling approximately 100 MW of MGE's combined ownership share.

MGE's carbon intensity is expected to decrease as our use of coal decreases over time, due in part to our investments in cost-effective, efficient renewables like the Saratoga Wind farm, which is expected to come online in 2019, and the purchase of the Forward Wind farm in 2018.

During 2018, 2017, and 2016, MGE's electric energy delivery requirements were satisfied from the following fuel sources:

	Year Ended December 31,		
	2018	2017	2016
Coal	52.3%	52.7%	48.3%
Natural gas[(a)]	13.8%	11.3%	18.6%
Renewable sources[(b)]	10.5%	12.4%	10.8%
Purchased power	23.4%	23.6%	22.3%
Total	100.0%	100.0%	100.0%

(a)

MGE's electric operations burn natural gas in several of its peaking power plants. The market price of natural gas decreased in 2016, which improved the economics of natural gas-fueled generation over other types of generation.

(b)

Includes both internal generation and purchased power.

Generation sources

MGE receives electric generation supply from coal-fired, gas-fired, and renewable energy sources. These sources include owned facilities as well as facilities leased from affiliates and accounted for under our nonregulated energy operations. See Item 2. Properties for more information regarding these generation sources, including location, capacity, ownership or lease arrangement, and fuel source. See "Nonregulated Energy Operations" below for more information regarding generating capacity leased to MGE by nonregulated subsidiaries.

Purchased power

MGE enters into short and long-term purchase power commitments with third parties to meet a portion of its anticipated electric energy supply needs. The following table identifies purchase power commitments as of December 31, 2018, with unaffiliated parties for the next five years.

(Megawatts)	2019	2020	2021	2022	2023
Purchase power commitments	83	83	83	33	30

Gas Utility Operations

MGE transports and distributes natural gas in a service area covering 1,684 square miles in seven south-central Wisconsin counties. The service area includes the city of Madison, Wisconsin and surrounding areas.

As of December 31, 2018, MGE supplied natural gas service to approximately 161,000 customers in the cities of Elroy, Fitchburg, Lodi, Madison, Middleton, Monona, Prairie du Chien, Verona, and Viroqua; 25 villages; and all or parts of 49 townships. Of the total number of customers, approximately 90% were residential and 10% were commercial or industrial. Gas revenues for 2018, 2017, and 2016 were comprised of the following:

	Year Ended December 31,		
	2018	2017	2016
Residential	59.4%	59.6%	60.2%
Commercial	35.8%	35.8%	34.9%
Industrial	1.6%	1.3%	1.1%
Transportation service and other	3.2%	3.3%	3.8%
Total	100.0%	100.0%	100.0%

Gas operations accounted for approximately 28.2%, 26.4%, and 24.8% of MGE's total 2018, 2017, and 2016 regulated revenues, respectively.

MGE can curtail gas deliveries to its interruptible customers. Approximately 3% of retail gas deliveries in 2018 and 2016 and approximately 4% in 2017 were to interruptible customers.

Gas supply

MGE has physical interconnections with ANR Pipeline Company (ANR) and Northern Natural Gas Company (NNG). MGE's primary service territory, which includes Madison and the surrounding area, receives deliveries at one NNG and four ANR gate stations. MGE's outlying territory receives deliveries at NNG gate stations located in Elroy, Prairie du Chien, Viroqua, and Crawford County. Interconnections with two major pipelines provide competition in interstate

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pipeline service and a more reliable and economical gas supply mix, which includes gas from Canada and from the mid-continent and Gulf/offshore regions in the United States.

During the winter months, when customer demand is high, MGE is primarily concerned with meeting its obligation to firm customers. MGE meets customer demand by using firm supplies under contracts finalized before the heating season, supplies in storage (injected during the summer), and other firm supplies purchased during the winter period.

By contract, a total of 5,934,489 Dth of gas can be injected into ANR's storage fields in Michigan from April 1 through October 31. These gas supplies are then available for withdrawal during the subsequent heating season, November 1 through March 31. Using storage allows MGE to buy gas supplies during the summer season, when prices are normally lower, and withdraw these supplies during the winter season, when prices are typically higher. Storage also gives MGE more flexibility in meeting daily load fluctuations.

MGE's contracts for firm transportation service of gas include winter maximum daily quantities of:

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167,150 Dth (including 106,078 Dth of storage withdrawals) on ANR.

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65,828 Dth on NNG.

Nonregulated Energy Operations

MGE Energy, through its subsidiaries, has developed generation sources that assist MGE in meeting the electricity needs of its customers. These sources consist of the Elm Road Units and the WCCF, which are leased by MGE Power Elm Road and MGE Power West Campus, respectively, to MGE. See Item 2. Properties for a description of these facilities, their joint owners, and the related lease arrangements.

Transmission Investments

ATC owns and operates electric transmission facilities primarily in Wisconsin. MGE received an interest in ATC when it, like other Wisconsin electric utilities, contributed its electric transmission facilities to ATC as required by Wisconsin law. That interest is presently held by MGE Transco, which is owned by MGE Energy. As of December 31, 2018, MGE Transco held a 3.6% ownership interest in ATC.

In 2016, ATC Holdco was formed by several of the members of ATC, including MGE Energy, to facilitate electric transmission development and investments outside of Wisconsin. MGE Energy's ownership interest in ATC Holdco is held by MGEE Transco, a wholly-owned subsidiary. As of December 31, 2018, MGEE Transco held a 4.4% ownership interest in ATC Holdco. In the near term, it is expected that ATC Holdco will be pursuing transmission development opportunities that typically have long development and investment lead times before becoming operational.

Environmental

MGE Energy and MGE are subject to frequently changing local, state, and federal regulations concerning air quality, water quality, land use, threatened and endangered species, hazardous materials handling, and solid waste disposal. These regulations affect the manner in which they conduct their operations, the costs of those operations, as well as capital and operating expenditures. Regulatory initiatives, proposed rules, and court challenges to adopted rules, have the potential to have a material effect on our capital expenditures and operating costs. In addition to the regulations discussed below, MGE continues to track state and federal initiatives such as potential changes to regulations governing polychlorinated biphenyl (PCB), potential changes to air and water standards, and potential climate change legislation.

Water Quality

EPA's Effluent Limitations Guidelines and Standards for Steam Electric Power Generating Point Source Category

In November 2015, the EPA published its final rule setting Effluent Limitations Guidelines (ELG) for the steam electric power generating industry. The ELG rule establishes federal limits on the amount of metals and other pollutants that can be discharged in wastewater from new and existing steam electric generation plants. The rule will be applied to Wisconsin-based power plants as they renew their WPDES permits, no later than 2023. The operators of the Columbia and Elm Road Units have indicated that equipment upgrades may be necessary to comply with the new discharge standards. Management believes that any compliance costs will be recovered in future rates based on previous treatment of environmental compliance projects.

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EPA Cooling Water Intake Rules (Section 316(b))

Section 316(b) of the Clean Water Act requires that the cooling water intake structures at electric power plants meet best available technology standards so that mortality from entrainment (drawing aquatic life into a plant's cooling system) and impingement (trapping aquatic life on screens) are reduced. The EPA finalized its Section 316(b) rule for existing facilities in 2014. Section 316(b) requirements are implemented in Wisconsin through modifications to plants' WPDES permits, which govern plant wastewater discharges.

The WCCF, Blount, and Columbia plants are considered existing plants under this rule. The WCCF facility already employs a system that meets the Section 316(b) rule. The Blount plant's WPDES permit assumes that Blount meets best technology available (BTA) for the duration of the permit, which expires in 2023. However, MGE needs to perform an entrainment study by the end of 2021 to determine future BTA, which will be included with the next permit renewal. Section 316(b) applies to river intakes at the Columbia plant. The operator of the Columbia plant is in the process of a WPDES permit renewal. The draft permit directs the Columbia operator to conduct similar studies on their intake structures. The study requirements will not be known until the permit is final. Future BTA requirements at Blount and Columbia will be based on the results of these required intake studies and will be specified in the next permits issued in 2023 or later. MGE expects that the Section 316(b) rule will not have a material effect on its existing plants.

Energy Efficiency and Renewables

The Wisconsin Energy Efficiency and Renewables Act requires that 10% of the state's electricity be generated from renewable sources. MGE is in compliance with the requirement. The costs to comply with the Act and its accompanying regulations are being recovered in rates.

Air Quality

Air quality regulations promulgated by the EPA and Wisconsin Department of Natural Resources (WDNR) in accordance with the Federal Clean Air Act and the Clean Air Act Amendments of 1990 impose restrictions on emission of particulates, sulfur dioxide (SO_2), nitrogen oxides (NO_x), hazardous air pollutants and other pollutants, and require permits for operation of emission sources. These permits must be renewed periodically. Various newly enacted and/or proposed federal and state initiatives may result in additional operating and capital expenditure costs for fossil-fueled electric generating units.

Ozone NAAQS

In May 2018, the EPA issued a final rule which designated the northeast portion of Milwaukee County as being in nonattainment with Ozone National Ambient Air Quality Standards (NAAQS). The Elm Road Units are located in Milwaukee County, outside the designated nonattainment area. In August 2018, several environmental groups, the City of Chicago, and the State of Illinois filed federal lawsuits challenging several of the EPA's attainment designation decisions, including the EPA's partial Milwaukee County designation as being too narrow and not sufficiently protective. MGE is monitoring the outcome of this lawsuit and how it may affect the Elm Road Units in Milwaukee County. See Footnote 17 of the Notes to Consolidated Financial Statements in this Report for additional information.

EPA's Cross-State Air Pollution Rule: Proposed Ozone Season Update based on 2008 Ozone NAAQS

The EPA's CSAPR is an interstate air pollution transport rule designed to reduce ozone and fine particulate (PM2.5) air levels in areas that the EPA has determined are being significantly impacted by pollution from neighboring and upwind states. This is accomplished in the CSAPR through a reduction in SO_2 and NO_x from qualifying fossil-fuel fired power plants in upwind or "contributing" states. NO_x and SO_2 contribute to fine particulate pollution and NO_x contributes to ozone formation in downwind areas. Reductions are achieved through a cap and trade system. Individual plants can meet their caps through modifications and/or buying allowances on the market.

In October 2016, the EPA finalized rulemaking for an update to CSAPR that incorporated 2008 Ozone NAAQS standards into the rule (the original CSAPR is based on 1997 Ozone NAAQS standards) and began further reducing summertime ozone season NO_x allowances in 2017. The update affects 22 states, including Wisconsin, by further limiting statewide NO_x allowances in each of those states. The rule also includes revisions to CSAPR that are designed to address issues remaining from the D.C. Circuit remand of CSAPR, including Wisconsin's inclusion in the NO_x ozone season portion of the rule. The State of Wisconsin filed a legal challenge to the CSAPR update rule asserting, among other things, that the rule over-controls NO_x emissions in Wisconsin.

MGE has met our CSAPR obligations in 2017 and 2018 through a combination of reduced emissions through pollution control (e.g. SCR installation at Columbia), as well as owned, received, and purchased allowances. There remains uncertainty around CSAPR due to legal challenges, however, MGE expects that we will meet ongoing CSAPR obligations for the foreseeable future. MGE will continue to monitor developments and litigations to this rule.

Clean Air Visibility Rule (CAVR)

Columbia is subject to the best available retrofit technology (BART) regulations, a subsection of the EPA's CAVR, which may require pollution control retrofits. Columbia's existing pollution control upgrades, and the EPA's stance that compliance with the CSAPR equals compliance with BART, should mean that Columbia will not need to do additional work to meet BART requirements. At this time, however, the BART regulatory obligations, compliance strategies, and costs remain uncertain in Wisconsin due to the continued legal challenges surrounding CSAPR and CAVR. MGE will continue to monitor developments to this rule.

Global Climate Change

MGE is a producer of greenhouse gas (GHG) emissions, primarily from the fossil fuel generating facilities it uses to meet customers' energy needs, as well as from its natural gas pipeline system and fleet vehicles. Climate change and the regulatory response to it could significantly affect our operations in a number of ways, including increased operating costs and capital expenditures, restrictions on energy supply options, operational limits on our fossil fuel fired plants, permitting difficulties, and emission limits. MGE management would expect to seek and receive rate recovery of such compliance costs, if and when required. MGE continues to monitor proposed climate change legislation and regulation.

MGE has taken steps to address GHG emissions through voluntary actions. In 2005, MGE implemented its Energy 2015 Plan, which committed to ensuring a balanced, economic energy supply with reduced environmental emissions. The Plan emphasized increased renewable energy, energy efficiency, and new cleaner generation three strategies that reduced GHG emissions. Under the Plan and other actions, our CO_2 emissions declined from 2005 to 2015 by approximately 20% even though total system energy increased. In 2015, MGE announced its Energy 2030 framework that continues steps to reduce CO_2 emissions. Subject to regulatory approvals and other conditions, MGE aims to increase renewable energy to 25% of retail electric sales by 2025 and to 30% by 2030. Under our Energy 2030 framework, we will also work to reduce CO_2 emissions by 40% from 2005 levels by 2030. MGE is further committed to reducing carbon emissions by 80% from 2005 levels by 2050.

EPA's Greenhouse Gas Reduction Guidelines under the Clean Air Act 111d Rule

The EPA's Clean Power Plan (CPP) rule became effective in December 2015, setting guidelines for states to use in developing plans to control GHG emissions from existing fossil fuel-fired EGUs and systems. When fully implemented in 2030, the CPP was projected to reduce GHG emissions from this sector by 32% below 2005 levels. States were given up to three years to submit a plan or be subject to a federal plan to meet the reduction goals, and states were expected to meet interim goals starting in 2022 and the final goals in 2030. Implementation of the rule was expected to have a direct impact on coal and natural gas fired generating units, including possible changes in dispatch and additional operating costs. In February 2016, the U.S. Supreme Court stayed implementation of the CPP which remains in effect. In October 2017, the EPA proposed to rescind the CPP.

In August 2018, the EPA proposed the Affordable Clean Energy (ACE) rule which would replace the CPP, if successfully implemented. The ACE proposal directs states to submit plans to the EPA for approval that implement standards of performance (called Best System of Emissions Reductions, or BSER) for individual EGUs over 25 MW. ACE defines BSER as on-site, heat-rate efficiency improvements, whereas the CPP defines BSERs using carbon

dioxide emission performance rates. Simple cycle units such as the smaller combustion units, and combined cycle units such as the WCCF are exempt from the proposed rule. Under the ACE proposal, if a state fails to prepare a plan, or its plan is not approved by the EPA, a federal implementation plan will be issued for that state. The proposed ACE as it is currently written has the potential to impact Blount, Columbia, and the Elm Road Units.

Given the pending CPP legal proceedings, and the proposed ACE rule, the nature and timing of any final requirements is subject to uncertainty. MGE is unable to determine with any certainty the impact of the CPP and proposed ACE rule on our operations. If an ACE rule is implemented substantially in the form of the CPP rule, it is expected to have a material impact on MGE. MGE will continue to monitor developments with the proposed ACE rule, the CPP rule, and related litigation.

Solid Waste

EPA's Coal Combustion Residuals Rule

EPA's Coal Combustion Residuals (CCR) rule regulates landfills, ash ponds, and other surface impoundments used to manage coal combustion residuals by regulating their design, location, monitoring, and operation. The CCR rule is implemented in phases to allow for sites with onsite storage and/or disposal to evaluate their compliance with the rule's design criteria. Landfills, impoundments and ash storage systems, such as ash ponds, that cannot meet design criteria will need to close formally within defined timeframes.

Columbia and the Elm Road Units are subject to this rule. The Elm Road Units' operator has indicated that cost to comply with this rule will not be significant. Columbia's operator has completed a review of their system and has determined that an onsite ash pond will need to be closed by 2023. Columbia's operator will install a dry ash handling system to replace the ash pond. The dry ash handling system installation is planned for 2020-2021. In August 2018, the Court of Appeals for the D.C. Circuit vacated parts of the CCR for not being sufficiently protective of the environment. It is unclear how the EPA will respond to that decision. MGE will continue to monitor potential rule modifications to assess potential impacts on our operations.

Columbia

Based upon current available information, compliance with various environmental requirements and initiatives is expected to result in significant additional operating and capital expenditures at Columbia as noted below.

Columbia Clean Air Act Litigation

Columbia is a coal-fired generating station operated by WPL in which WPL, WPSC, and MGE have ownership interests. In December 2009, the EPA sent a Notice of Violation (NOV) to the co-owners, including MGE. The NOV alleged that WPL and the Columbia co-owners failed to comply with appropriate pre-construction review and permitting requirements and, as a result, violated the Prevention of Significant Deterioration program requirements, Title V Operating Permit requirements of the CAA, and the Wisconsin SIP. In June 2013, the court approved and entered a consent decree entered by the EPA, Sierra Club, and the co-owners of Columbia. One of the requirements of the consent decree requires installation of an SCR system at Columbia Unit 2 by December 31, 2018. Installation of the SCR was approved by the PSCW, which was placed in service in 2018.

Employees

As of December 31, 2018, MGE had 706 employees. MGE employs 223 employees who are covered by a collective bargaining agreement with Local Union 2304 of the International Brotherhood of Electrical Workers and 84 employees who are covered by a collective bargaining agreement with Local Union No. 39 of the Office and Professional Employees International Union. These collective bargaining agreements expire on April 30, 2023 and May 31, 2023, respectively. There are also 5 employees covered by a collective bargaining agreement with Local Union No. 2006, Unit 6 of the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial, and Service Workers International Union. This collective bargaining agreement expires on October 31, 2023.

Financial Information About Segments

See Footnote 21 of the Notes to the Consolidated Financial Statements in this Report for financial information relating to MGE Energy's and MGE's business segments.

Executive Officers of the Registrants

As of December 31, 2018, the executive officers of the registrants were as follows:

Executive	Title	Effective Date	Service Years as an Officer
Jeffrey M. Keebler[a]	Chairman of the Board, President, and Chief Executive Officer	10/01/2018	7
Age: 47	President and Chief Executive Officer	03/01/2017	
	Senior Vice President Energy Supply and Planning	07/23/2015	
	Assistant VP Energy Supply and Customer Service	01/01/2012	
Craig A. Fenrick[b][c]	Executive Vice President Energy Operations	03/01/2017	12
Age: 59	Senior Vice President Energy Operations	07/23/2015	
	Vice President Energy Delivery	02/10/2015	
	Vice President Electric Transmission and Distribution	01/01/2012	
Lynn K. Hobbie[b]	Executive Vice President Marketing and Communications	03/01/2017	24
Age: 60	Senior Vice President Marketing and Communications	02/01/2000	
Jeffrey C. Newman[a]	Executive Vice President, Chief Financial Officer, Secretary, and Treasurer	03/01/2017	21
Age: 56	Senior Vice President, Chief Financial Officer, Secretary, and Treasurer	07/23/2015	
	Vice President, Chief Financial Officer, Secretary, and Treasurer	01/01/2009	
Cari Anne Renlund[b]	Vice President and General Counsel	11/02/2015	
Age: 45	Dewitt Ross & Stevens S.C. (law firm) Partner	06/11 10/15	3

Note: Ages, years of service, and positions as of December 31, 2018.

(a)

Executive officer of MGE Energy and MGE.

(b)

Executive officer of MGE.

(c)

Expected to retire April 30, 2019.

Item 1A. Risk Factors.

MGE Energy and our subsidiaries, including MGE, operate in a market environment that involves significant risks, many of which are beyond our control. The following risk factors may adversely affect our results of operations, cash flows and market price for our publicly traded securities. While MGE Energy and MGE believe we have identified and discussed below the key risk factors affecting our business, additional unknown risks and uncertainties may adversely affect our performance or financial condition in the future.

Regulatory Risk

We are subject to extensive government regulation in our business, which affects our costs and responsiveness to changing events and circumstances.

Our business is subject to regulation at the State and Federal levels. We are subject to regulation as a holding company by the PSCW. The PSCW regulates the following aspects of MGE's business: rates, terms and conditions of service; various business practices and transactions; financing; and transactions between it and its affiliates, including MGE Energy. MGE is also subject to regulation by the FERC, which regulates certain aspects of its business. The regulations adopted by the State and Federal agencies affect how we do business, our ability to undertake specified actions since pre-approval or authorization may be required for projects, the costs of operations, and the rates charged to recover such costs. Our ability to attract capital also depends, in part, upon our ability to obtain a fair return from the PSCW.

Our utility revenues are subject to regulatory proceedings, which can affect our ability to recover, and the timing of recovery of, costs that we incur in our operations.

Our utility customer rates have a material impact on our financial condition, results of operations, and liquidity. Our ability to obtain adjustments to those rates depends upon timely regulatory action under applicable statues and

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regulations. Rate regulation is based on providing an opportunity to recover costs that have been reasonably incurred and the ability to earn a reasonable rate of return on invested capital. However, we have no assurance that our regulators will consider all of our costs to have been reasonably incurred. In addition, our rate proceedings may not always result in rates that fully recover our costs or provide a reasonable return on equity (ROE). Certain costs and revenues are deferred as regulatory assets and liabilities for future recovery or refund to customers, as authorized by our regulators. If recovery of regulatory assets is not approved or is no longer deemed probable, these costs would be recognized as a current period expense and could materially and adversely impact our operations and financial performance.

We could be subject to higher costs and potential penalties resulting from mandatory reliability standards.

MGE must adhere in its electric distribution system to mandatory reliability standards established by NERC. These standards cover areas such as critical infrastructure protection, emergency preparedness, facility design, and transmission operations, among others. The critical infrastructure protection standards focus on physical and access security of cyber assets, as well as incident response and recovery planning. Compliance with these standards affects operating costs and any noncompliance can result in sanctions, including monetary penalties.

We are subject to changing environmental laws and regulations that may affect our costs and business plans.

MGE Energy's subsidiaries are subject to environmental laws and regulations that affect the manner in which they conduct business, including capital expenditures, operating costs, and potential liabilities. Changes and developments in these laws and evolving regulations may alter or limit our business plans, make them more costly, or expose us to liabilities for past, present, or future operations.

Numerous environmental laws and regulations govern many aspects of our present and future operations. These include: air emissions limits and reporting; ambient air quality standards; water quality; water intake and discharges; wetlands; solid and hazardous waste; handling and disposal of hazardous substances; protection of endangered resources, such as threatened and endangered species, protection of cultural resources and archaeological sites; remediation and management of contaminated sites; and control of potential pollution from electric and gas construction sites. These evolving regulations affect us by:

.

Introducing uncertainty into our planning and capital expenditures processes, as changes in requirements may affect the timing and choice of compliance methods and require costly revisions to prior plans and commitments.

.

Imposing or modifying limits on the operations of our facilities in order to meet restrictions on air emissions, water use or water discharges.

.

Requiring capital expenditures and changes in operating procedures and costs as a result of the need to install additional pollution controls or more advanced technology or equipment at new or existing facilities.

.

Mandating increasing purchases of renewable energy, which affects the use of existing generation, and energy efficiency initiatives, which affect revenues.

We may be subject to future laws, regulations, or actions associated with public concern with fossil-fuel generation, greenhouse gases, and the effects of global climate change.

Our subsidiaries operate or co-own electric power plants that burn fossil fuels, deliver natural gas, and deliver electricity to customers. These business activities are subject to evolving public concern regarding greenhouse gases (GHG), and legislative and regulatory action, and possible litigation in response to that public concern. The primary greenhouse gas associated with our subsidiaries' combustion of fossil fuels, and the largest emission in our system overall, is carbon dioxide (CO_2).

Our subsidiaries could incur costs from the regulation of GHG from power plants, natural gas delivery, greenhouse gases used in power distribution, and efficiencies lost during power distribution. While the current State and Federal governments are unlikely to pass comprehensive greenhouse gas legislation or regulations in the immediate future, future legislation is likely. In addition, litigation by environmental nongovernment organizations (NGOs) targeting GHG emissions from the electric power industry is also likely if the federal government fails to act on greenhouse gas initiatives. We may also incur costs associated with actions taken due to investor interest in reducing our subsidiaries' reliance on fossil fuel generation, and coal in particular. Investors may also move away from investing in fossil fuel generated electricity for reputational or perceived risk-related reasons. These matters represent uncertainties in the operation and management of our business.

We face risks associated with the passing of the new tax reform.

On December 22, 2017, President Trump signed the Tax Cuts and Jobs Act (Tax Act) into law. The passing of the law significantly lowers MGE's corporate tax rates and triggers a remeasurement of deferred taxes. We have reflected the impact of the Tax Act in our financial results; however, those estimates could be affected by, and require subsequent adjustment as a result of, clarity and regulatory guidance that develops around the Tax Act. Furthermore, while regulation allows us to incorporate changes in tax law into the rate-setting process, there will most likely be timing delays before realization of the changes.

We face risk for the recovery of fuel and purchased power costs.

MGE has price risk exposure with respect to the price of natural gas, electricity, coal, emission credits, and oil. MGE burns natural gas in several of its peak electric generation facilities. In many cases, the cost of purchased power is tied to the cost of natural gas. In the event of an unexpected interruption in energy supply, whether due to equipment problems, transmission constraints, or otherwise, we may incur additional costs to obtain alternative sources of energy supply, in order to meet our contractual or regulatory obligations to our customers. Under the electric fuel rules, MGE is required to defer electric fuel-related costs that fall outside a symmetrical cost tolerance band that is currently plus or minus 2% around the amount approved in its most recent rate order. Any over/under recovery of the actual costs in a year is determined in the following year and is then reflected in future billings to electric retail customers. Under the electric fuel rules, MGE is required to defer the benefit of lower costs, if its actual fuel costs fall outside the lower end of the range, and is required to defer costs, less any excess revenues, if its actual fuel costs exceed the upper end of the range. Excess revenues are defined as revenues in the year in question that provide MGE with a greater return on common equity than authorized by the PSCW in MGE's latest rate order. MGE assumes the risks and benefits of variances that are within the cost tolerance band.

Operating Risk

We are affected by weather, which affects customer demand and can affect the operation of our facilities.

The demand for electricity and gas is affected by weather. Very warm and very cold temperatures, especially for prolonged periods, can dramatically increase the demand for electricity and gas for cooling and heating, respectively, as opposed to the softening effect of more moderate temperatures. Our electric revenues are sensitive to the summer cooling season and, to a lesser extent, the winter heating season. Similarly, very cold temperatures can dramatically increase the demand for gas for heating. A significant portion of our gas system demand is driven by heating. Extreme summer conditions or storms may stress electric systems, resulting in increased maintenance costs and limiting the ability to meet peak customer demand.

We could be adversely affected by changes in the development, and utilization by our customers, of power generation, storage, and use technologies.

Our revenues and the timing of the recovery of our costs could be adversely affected by improvements in power generation, storage, and use technology.

Advancements in power generation technology, including commercial and residential solar generation installations and commercial micro turbine installations, are improving the cost-effectiveness of customer self-supply of electricity. Improvements in energy storage technology, including batteries and fuel cells, could also better position customers to meet their around-the-clock electricity requirements. Improvements in the energy efficiency of lighting, appliances, and equipment will also affect energy consumption by customers. Such developments could reduce customer purchases of electricity but may not necessarily reduce our investment and operating requirements due to our obligation to serve customers, including those self-supply customers whose equipment has failed for any reason to provide the power they need whether due to inadequate on-site resources, restricted operating hours, or equipment failure. In addition, since a portion of our costs are recovered through charges based upon the volume of power delivered, a reduction in electricity deliveries will affect the timing of our recovery of those costs and may require changes to our rate structures.

Changes in power generation, storage, and use technologies could have significant effects on customer behaviors and their energy consumption. Customers could engage in individual conservation efforts by voluntarily reducing their consumption of electricity through changes in energy use and through the use of more energy efficient lighting, appliances, and equipment. They could also change their consumption of electricity from us through the installation of alternative energy sources, such as rooftop solar panels and micro turbines for self-supply. Customer energy conservation could adversely affect our results of operations by reducing our revenues without necessarily changing our operating costs due to our obligation to serve.

We are affected by economic activity within our service area.

Higher levels of development and business activity generally increase the numbers of customers and their use of electricity and gas. Likewise, recessionary economic conditions generally have an adverse impact on our results of operations.

Our ability to obtain an adequate supply of coal could limit our ability to operate our coal-fired facilities.

The availability of coal and the means to transport coal could:

.

Affect our operating costs due to increased costs associated with lower levels of generation or the need for alternate supply or alternate transportation,

.

Limit our ability to generate electricity if we are unable to arrange adequate deliveries of coal, and

.

Result in potentially higher costs for replacement purchased power as well as potential lost market sales opportunities.

A significant portion of our electric generating capacity is dependent on coal. Demand for coal has been impacted by prevailing prices for natural gas and may affect mine performance. Consequently, we are exposed to the risk that counterparties to these contracts will not be able to fulfill their obligations. Disruption in the delivery of fuel, including disruptions as a result of transportation delays, weather, labor relations, force majeure events, or environmental regulations affecting any of our fuel suppliers, could limit our ability to generate electricity at our facilities at the desired level. Should counterparties fail to perform, or other unplanned disruptions occur, we may be forced to fulfill the underlying obligation at higher prices. We may also be forced to reduce generation at our coal units and replace this generation through additional power purchases from third parties. These factors may also affect the terms under which any of our existing coal supply or transportation agreements are renewed or replaced upon the expiration of their current terms.

Our ability to manage our purchased power costs is influenced by a number of uncontrollable factors.

We are exposed to additional purchased power costs to the extent that our power needs cannot be fully covered by the supplies available from our existing facilities and contractual arrangements. Those needs, and our costs, could be affected by:

.

Increased demand due to, for example, abnormal weather, customer growth, or customer obligations,

.

The inability to transmit our contracted power from its generation source to our customers due to transmission line constraints, outages, or equipment failures,

.

Reductions in the availability of power from our owned or contracted generation sources due to equipment failures, shortages of fuel or environmental limitations on operations, and

.

Failure to perform on the part of any party from which we purchase capacity or energy, whether due to equipment failures, transmission constraints or other causes.

An unexpected change in demand or the availability of generation or transmission facilities can expose us to increased costs of sourcing electricity in the short-term market where pricing may be more volatile.

The equipment and facilities in our operational system are subject to risks which may adversely affect our financial performance.

Weather conditions, accidents, and catastrophic events can result in damage or failures of equipment or facilities and disrupt or limit our ability to generate, transmit, transport, purchase, or distribute electricity and gas. Efforts to repair or replace equipment and facilities may take place over prolonged periods or may be unsuccessful. We may also be unable to make the necessary improvements to our operational system, causing service interruptions. Furthermore, our facilities are interconnected with third-party transmission providers. Damage to or failures of these providers' equipment or facilities is out of MGE's control but could lead to service interruptions. The resulting interruption of services would result in lost revenues and additional costs. We are also exposed to the risk of accidents or other incidents that could result in damage to or destruction of our facilities or damage to persons or property. Such issues could adversely affect revenues or increase costs to repair and maintain our systems.

Our operations and confidential information are subject to the risk of cyber-attacks.

Our operations rely on sophisticated information technology systems and networks. Cyber-attacks targeting our electronic control systems used at our generating facilities and for electric and gas distribution systems, including denial of service and ransomware attacks, could result in a full or partial disruption of our operations. Any disruption of these operations could result in a loss of service to customers and loss of revenue, as well as significant expense to repair system damage and remedy security breaches.

Our business requires the collection and retention of personally identifiable information of our customers, shareholders, and employees, who expect that we will adequately protect such information. A significant theft, loss, or fraudulent use of personally identifiable information may cause our business reputation to be adversely impacted and could lead to potentially large costs to notify and protect the impacted persons. The occurrence of such an event may cause us to become subject to legal claims, fines, or penalties, any of which could adversely impact our results of operations.

The safeguards we have may not always be effective due to the evolving nature of cyber-attacks. We cannot guarantee that such protections will be completely successful in the event of a cyber-attack. If the technology systems were to fail or be breached by a cyber-attack, and not be recovered in a timely fashion, we may be unable to fulfill critical business functions and confidential data could be compromised, adversely impacting our financial condition and results of operations.

We rely on the performance of our information technology systems, the failure of which could have an adverse effect on our business and performance.

We operate in a highly engineered industry that requires the continued operation of sophisticated information technology systems and network infrastructure to manage our finances, to operate our control facilities, to provide electric and gas service to our customers, and to enable compliance with applicable regulatory requirements. Our computer-based systems are vulnerable to interruption or failure due to the age of certain systems, the introduction of viruses, malware, ransomware, security breaches, fire, power loss, system malfunction, network outages and other events which may be beyond our control. System interruptions or failures, whether isolated or more widespread, could impact our ability to provide service to our customers, which could have a material adverse effect on our operations and financial performance.

Acts of terrorism could materially and adversely impact our operations and financial condition.

Facilities for electric generation, transmission, and gas and electric distribution are potential targets of terrorist threats and activities. A terrorist act at our facilities could result in a disruption of our ability to generate, transmit, transport, purchase, or distribute electricity or natural gas. A possible attack would have additional adverse effects, including environmental ramifications, increased security and insurance costs, as well as general economic volatility or uncertainty within our service territories. The inability to maintain operational continuity and any additional costs incurred for repairing our facilities could materially and adversely affect our financial condition and results of operations.

Failure to attract and retain an appropriately qualified workforce could affect our operations.

An aging workforce and the retirement of key employees without appropriate replacements may lead to operating challenges and increased costs. Some of the challenges include lack of resources, loss of knowledge, and time required for replacement employees to develop necessary skills. Failure to identify qualified replacement employees could result in decreased productivity and increased safety costs. If we are unable to attract and retain an appropriately qualified workforce, our operations could be negatively affected.

We face construction risk in connection with the completion of the Saratoga Wind Farm project.

The 66-megawatt (MW) wind farm project is subject to various risks that could cause costs to increase or delays in completion. These risks include shortages of, the inability to obtain, the cost of, and the consistency of, labor, materials and equipment; the inability of the contractors to perform under their contracts; the inability to agree to terms of contracts or disputes in contract terms; work stoppages; adverse weather conditions; the inability to obtain necessary permits in a timely manner; changes in applicable laws or regulations; adverse interpretation or enforcement of permit conditions; governmental actions; legal action; and unforeseen engineering or technology issues. If the project is over budget, we may not be able to recover excess costs. Inability to recover excess costs, or inability to complete the project in a timely manner, could adversely impact our financial condition and results of operations.

Failure to successfully manage the implementation of our Enterprise Forward corporate initiative could adversely affect our operations.

MGE committed to undertake a multi-year project aimed at transforming our foundational customer engagement capabilities and enabling it to be flexible in delivering new products and services as outlined in our energy 2030 framework. These objectives are expected to be accomplished through the implementation of a new customer information system, enterprise resource planning platform, along with other solutions that meet the goals of the initiative. Integrating new systems is complex, costly and time consuming. If the systems and related processes do not operate as intended, it could result in disruptions to our business as well as unrecoverable excess costs. Inability to recover excess costs, or inability to implement the project successfully and in a timely manner, could adversely impact our financial condition and results of operations.

Financial Risk

We are exposed to commodity price risk relating to our purchases of natural gas, electricity, coal, oil, and environmental allowances.

We face commodity price risk exposure with respect to the purchase of natural gas, electricity, coal, oil, and environmental allowances. We also face risk through our use of derivatives such as futures, forwards, and swaps, to manage our commodity price risk. We could experience increased costs as a result of volatility in the market values of those commodities. We could also experience losses on our derivative contracts as a result of that market value volatility or if a counterparty fails to perform under a contract. In the absence of actively quoted market prices and pricing information from external sources, the valuation of these derivative contracts involves our exercise of judgment and use of estimates. As a result, changes in the underlying assumptions or use of alternative valuation methods could affect the reported fair value of these contracts.

Interest rate movements and market performance affects our employee benefit plan costs.

Prevailing interest rates affect our assessment and determination of discount rates and are a key assumption in the determination of the costs and funding of our defined benefit pension plans. Changes in rates may impact the amount of expense and timing of contributions to those plans. The performance of the capital markets affects the values of the assets that are held in trust to satisfy the future obligations under our pension and postretirement benefit plans. We have significant obligations in these areas and hold significant assets in these trusts. A decline in the market value of those assets may increase our current and longer-term funding requirements for these obligations. Changes in the value of trust fund assets may affect the level of required contributions to these trusts to meet benefit obligations. Reduced benefit plan assets could result in increased benefit costs in future years and may increase the amount and accelerate the timing of required future funding contributions.

We are exposed to interest rate risk.

We are exposed to interest rate risk on our variable rate financing. Borrowing levels under commercial paper arrangements vary from period to period depending upon capital investments and other factors. Such interest rate risk means that we are exposed to increased financing costs and associated cash payments as a result of changes in the short-term interest rates.

We are exposed to credit risk primarily through our regulated energy business.

Credit risk is the loss that may result from counterparty nonperformance. We face credit risk primarily through MGE's regulated energy business. Failure of contractual counterparties to perform their obligations under purchase power agreements, commodity supply arrangements, or other agreements may result in increased expenses for MGE as a result of being forced to cover the shortfall in the spot or short-term market, where prices may be more volatile.

As a holding company, we are dependent on upstream cash flows from our subsidiaries for the payment of dividends on our common stock.

As a holding company, we have no operations of our own, and our ability to pay dividends on our common stock is dependent on the earnings and cash flows of our operating subsidiaries and their ability to pay upstream dividends or to repay funds to us. Our subsidiaries have financial obligations that must be satisfied before funding us. These obligations include debt service and obligations to trade creditors, among others. Our subsidiaries are also subject to contractual and regulatory restrictions on the payment of dividends.

Disruptions in the financial markets or changes to our credit ratings may affect our ability to finance at a reasonable cost and in accordance with our planned schedule.

The credit markets have experienced disruption and uncertainty in prior years. To the extent that such issues affect the ability or willingness of credit providers or investors to participate in the credit markets or particular types of investments, or affect their perception of the risk associated with particular types of investments, our cost of borrowing could be affected. We also rely on our strong credit ratings to access the credit markets. If our credit ratings are downgraded for any reason, borrowing costs could increase, potential investors could decrease, or we could be required to provide additional credit assurance, including cash collateral, to contract counterparties.

General economic conditions may affect our operating revenues and our counterparty risks.

Operational

MGE Energy's and MGE's operations are affected by local, national and worldwide economic conditions. The consequences of a prolonged period of reduced economic activity may include lower demand for energy, uncertainty regarding energy prices and the capital and commodity markets, and increased credit risk. A decline in energy consumption may adversely affect our revenues and future growth. Increased credit risk reflects the risk that our retail customers will not pay their bills in a timely manner or at all, which may lead to a reduction in liquidity and an eventual increase in bad debt expense.

Counterparty creditworthiness

Credit risk also includes the risk that trading counterparties that owe us money or product will breach their obligations. MGE's risk management policy is to limit transactions to a group of high-quality counterparties. Should the counterparties to these arrangements fail to perform, we may be forced to enter into alternative arrangements. In that event, our financial results could be adversely affected and we could incur losses.

The stock market can be volatile, and various factors, could cause our stock price to decline.

The stock market has experienced, and may continue to experience, fluctuations that significantly impact the market prices of securities issued by many companies. Many factors affect the volatility and price of our common stock in addition to our operating results and prospects, including economic conditions changes locally and in the broader economy. These conditions include technological change, the level of interest rates and yields on other investments, and the effects of the other risk factors discussed in this report. Our stock price could fluctuate significantly in response to our quarterly or annual results, as well as factors affecting the broader economy that are beyond our control.

Item 1B. Unresolved Staff Comments.

MGE Energy and MGE

None.

Item 2. Properties.

Electric Generation

Net summer rated capacity in service as of December 31, 2018, was as follows:

Plants	Location	Commercial Operation Date	Fuel	Net Summer Rated Capacity (MW)[(a)]	No. of Units
Steam plants:					
Columbia	Portage, WI	1975 & 1978	Low-sulfur coal	219[(b)(c)]	2
Blount	Madison, WI	1957 & 1961	Gas	103[(g)]	2
WCCF	Madison, WI	2005	Gas/oil	126[(d)]	2
Elm Road Units	Oak Creek, WI	2010 & 2011	Coal	106[(b)(e)]	2
Combustion turbines	Madison, WI Marinette, WI	1964-2000	Gas/oil	147[(f)]	6
Portable generators	Madison, WI	1998-2001	Diesel	49[(f)]	54
Wind turbines	Townships of Lincoln and Red River, WI	1999	Wind	1[(f)(g)]	17
	Township of Brookfield, IA	2008	Wind	4[(f)(h)]	18
	Counties of Dodge and Fond du Lac, WI	2008[(i)]	Wind	2[(i)]	86
Total				757	

(a)

Net summer rated capacity is determined by annual testing and may vary from year to year due to, among other things, the operating and physical conditions of the units.

(b)

Baseload generation.

(c)

MGE's share. See "Columbia" below.

(d)

Facility is jointly owned. Based on the terms of the joint plant agreement between MGE and the UW, the UW has the ability to reduce net capability of these units by approximately 17 MW in the summer. The net summer rated capacity shown reflects this decrease. See "WCCF" below.

(e)

MGE's share. See "Elm Road Units" below.

(f)

These facilities are owned by MGE.

(g)

Nameplate capacity rating is 11 MW.

(h)

Nameplate capacity rating is 30 MW.

(i)

Facility is jointly owned with WPL and WPSC. Power from this facility is shared in proportion to each owner's ownership interest. Nameplate capacity rating of the MGE-owned portion is 16.5 MW. Commercial operation date of facility is 2008; MGE purchased its ownership interest in 2018.

Columbia

MGE and two other utilities jointly own Columbia, a coal-fired generating facility consisting of two 556 MW units, which, as of December 31, 2018, accounted for 29% of MGE's net summer rated capacity. Power from this facility is shared in proportion to each owner's ownership interest. As of December 31, 2018, MGE had a 19.4% ownership interest in Columbia. The other owners are WPL, which operates Columbia, and WPSC. The Columbia units burn low-sulfur sub-bituminous coal obtained from the Powder River Basin coal fields located in Wyoming. The coal inventory supply for the Columbia units decreased from approximately 61 days as of December 31, 2017, to approximately 46 days as of December 31, 2018. See "Executive Overview" under Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, for a discussion of the reduction in MGE's ownership share in Columbia commencing January 2017 and continuing through June 2020.

Elm Road Units

MGE Power Elm Road and two other owners own undivided interests in the Elm Road Units, consisting of two 615 MW units, which, as of December 31, 2018, accounted for 14% of MGE's net summer rated capacity. Power from these units is shared in proportion to each owner's ownership interest. MGE Power Elm Road owns an 8.33% ownership interest in the Elm Road Units, and its interest in the Elm Road Units is leased to MGE. The other owners are Wisconsin Energy Corporation, which operates the Units, and WPPI Energy, Inc. The Elm Road Units burn bituminous coal obtained from northern West Virginia and southwestern Pennsylvania, and sub-bituminous coal from the Powder River Basin in Wyoming. MGE's share of the coal inventory supply for the Elm Road Units increased from approximately 48 days as of December 31, 2017, to approximately 56 days as of December 31, 2018.

MGE leases MGE Power Elm Road's ownership interest in the Elm Road Units pursuant to two separate facility leases. The financial terms of each facility lease include a capital structure of 55% equity and 45% long-term debt, return on equity of 12.7%, and a lease term of 30 years. At the end of the respective lease terms, MGE may, at its option, renew the facility lease for an additional term, purchase the leased ownership interest at fair market value, or allow the lease to end. The Unit 1 and Unit 2 leases commenced with the commercial operation of each respective unit.

WCCF

MGE Power West Campus and the UW jointly own undivided interests in a natural gas-fired cogeneration facility on the UW campus. The facility has the capacity to produce 20,000 tons of chilled water, 500,000 pounds per hour of steam, and approximately 150 MW of electricity. The UW owns 45% of the facility, which represents its interest in the chilled-water and steam assets. These assets are used to meet a part of the UW's need for air-conditioning and steam-heat capacity. MGE Power West Campus owns 55% of the facility, which represents its interest in the electric generating assets. These assets are used to provide electricity to MGE's customers. The UW's share of the plant and portion of the earnings from the WCCF are not reflected in the consolidated financial statements of MGE Energy or MGE. MGE Power West Campus' share of the plant is reflected in property, plant, and equipment on MGE Energy's and MGE's consolidated balance sheets.

MGE leases the electric generating assets owned by MGE Power West Campus and is responsible for operating the entire facility. The financial terms of the facility lease include a capital structure of 53% equity and 47% long-term debt, return on equity of 12.1%, and a lease term of 30 years. At the end of the lease term in 2035, MGE may, at its option, renew the facility lease for an additional term, purchase the generating facility at fair market value, or allow the lease contract to end.

Electric and Gas Distribution Facilities

As of December 31, 2018, MGE owned 865 miles of overhead electric distribution line and 1,224 miles of underground electric distribution cable, all of which are located in Wisconsin. These electric distribution facilities are connected by approximately 52 substations, installed with a capacity of 1,202,500 kVA. MGE's gas facilities include 2,900 miles of distribution mains, which are all owned by MGE.

A significant portion of MGE's electric and gas distribution facilities are located above or underneath highways, streets, other public places, or property that others own. MGE believes that it has satisfactory rights to use those places or property in the form of permits, grants, easements, and licenses; however, it has not necessarily undertaken to examine the underlying title to the land upon which the rights rest.

Encumbrances

The principal plants and properties of MGE are subject to the lien of its Indenture of Mortgage and Deed of Trust dated as of January 1, 1946, as amended and supplemented, under which MGE's first mortgage bonds are issued. As of December 31, 2018, there were $1.2 million of first mortgage bonds outstanding. See Footnote 10 of the Notes to Consolidated Financial Statements in this Report for additional information regarding MGE's first mortgage bonds.

MGE Power Elm Road has collaterally assigned its right to lease payments from MGE for the Elm Road Units in order to secure the repayment of $57.3 million of senior secured notes issued by MGE Power Elm Road. See Footnote 10 of the Notes to Consolidated Financial Statements in this Report for additional information regarding these senior notes.

MGE Power West Campus has collaterally assigned its right to lease payments from MGE for the WCCF in order to secure the repayment of $41.6 million of senior secured notes issued by MGE Power West Campus. See Footnote 10 of the Notes to Consolidated Financial Statements in this Report for additional information regarding these senior notes.

Item 3. Legal Proceedings.

MGE Energy and MGE

MGE Energy and its subsidiaries, including MGE, from time to time are involved in various legal proceedings that are handled and defended in the ordinary course of business.

See "Environmental" under Item 1. Business and Footnote 17.c. of the Notes to Consolidated Financial Statements in this Report for a description of several environmental proceedings involving MGE. See Footnote 17.d. of the Notes to Consolidated Financial Statements in this Report for a description of other legal matters.

Item 4. Mine Safety Disclosures.

MGE Energy and MGE

Not applicable.

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PART II.

Item 5. Market for Registrants' Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities.

Market for Common Equity

MGE Energy

MGE Energy common stock is traded on Nasdaq under the symbol MGEE. On January 25, 2019, there were approximately 37,843 shareholders of record. For additional information regarding dividends and dividend restrictions, see Footnote 9 of the Notes to the Consolidated Financial Statements in this Report.

MGE

As of January 25, 2019, there were 17,347,894 outstanding shares of common stock, all of which were held by MGE Energy. There is no market for shares of common stock of MGE.

Issuer Purchases of Equity Securities

MGE Energy

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced	Maximum number (or Approximate Dollar Value) of Shares That May Yet Be

				Plans or Programs[a]	Purchased Under the Plans or Programs[a]
October 1-31, 2018	10,111	$	63.86	-	-
November 1-30, 2018	6,467		62.92	-	-
December 1-31, 2018	44,048		68.12	-	-
Total	60,626	$	66.85	-	-

(a)

Under the MGE Energy, Inc. Direct Stock Purchase and Dividend Reinvestment Plan (Stock Plan), common stock shares deliverable to plan participants may be either newly issued shares or shares purchased on the open market, as determined from time to time by MGE Energy. MGE Energy's transfer agent uses open market purchases to provide shares to meet obligations to participants in the Stock Plan. The shares are purchased on the open market through the transfer agent's securities broker-dealer and then are reissued under the Stock Plan as needed to meet share delivery requirements. The volume and timing of share repurchases in the open market depends upon the level of dividend reinvestment and optional share purchases being made from time to time by plan participants. As a result, there is no specified maximum number of shares to be repurchased and no specified termination date for the repurchases. All shares issued through the Stock Plan, whether newly issued or reissued following open market purchases, are issued and sold pursuant to a registration statement that was filed with the SEC and is currently effective.

MGE

None.

Stock Performance Graph

The performance graph below illustrates a five-year comparison of cumulative total returns based on an initial investment of $1,000 in MGE Energy common stock, as compared with the Russell 2000 and the EEI Index for the period 2013 through 2018. The EEI Index reflects the consolidated performance of Edison Electric Institute investor-owned electric utilities.

Cumulative Five-Year Total Return Comparison

(assumes $1,000 invested on 12/31/2013 with dividends reinvested)

Value of Investment as of December 31,

	2013	2014	2015	2016	2017	2018
MGEE	$ 1,000	$ 1,219	$ 1,275	$ 1,835	$ 1,808	$ 1,756
Russell 2000	1,000	1,049	1,003	1,216	1,394	1,241
EEI Index	1,000	1,289	1,239	1,455	1,625	1,685

Item 6. Selected Financial Data.

MGE Energy, Inc.

(In thousands, except per share amounts)

	For the Years Ended December 31,				
	2018	2017	2016	2015	2014
Summary of Operations					
Operating revenues:					
Electric	$ 402,001	$ 414,274	$ 410,202	$ 420,291	$ 398,132
Gas	157,767	148,825	134,543	143,737	221,720
Total operating revenues	559,768	563,099	544,745	564,028	619,852
Operating expenses[a]	426,151	419,180	400,801	423,159	468,326
Other general taxes	19,410	19,294	20,062	19,879	19,652
Operating income	114,207	124,625	123,882	120,990	131,874
Other income, net[a]	17,055	14,399	14,057	11,878	16,303
Interest expense, net	(19,609)	(19,324)	(19,866)	(20,162)	(19,673)
Income before taxes	111,653	119,700	118,073	112,706	128,504
Income tax provision[b]	(27,434)	(22,094)	(42,513)	(41,363)	(48,185)
Net income	$ 84,219	$ 97,606	$ 75,560	$ 71,343	$ 80,319
Average shares outstanding	34,668	34,668	34,668	34,668	34,668
Basic and diluted earnings per share	$ 2.43	$ 2.82	$ 2.18	$ 2.06	$ 2.32
Dividends declared per share	$ 1.32	$ 1.26	$ 1.21	$ 1.16	$ 1.11
Assets					
Electric	$ 1,193,083	$ 1,058,988	$ 1,038,308	$ 1,004,087	$ 970,464
Gas	377,005	354,875	329,538	318,336	322,556
Nonregulated energy operations	265,301	270,384	271,277	277,858	280,542
Transmission investments[b]	66,366	61,783	74,535	69,470	67,697
All others	465,661	485,548	465,202	434,868	438,898
Eliminations	(378,798)	(376,396)	(377,800)	(378,216)	(390,636)
Total assets	$ 1,988,618	$ 1,855,182	$ 1,801,060	$ 1,726,403	$ 1,689,521

Capitalization including Short-Term Debt

Common shareholders' equity	$ 816,644	$ 778,187	$ 724,088	$ 690,458	$ 659,401
Long-term debt[c]	497,896	422,613	387,124	391,010	394,775
Short-term debt	13,000	4,000	-	-	7,000
Total capitalization and short-term debt	$ 1,327,540	$ 1,204,800	$ 1,111,212	$ 1,081,468	$ 1,061,176

(a)

Reflects retrospective application of new accounting pronouncement related to pension and other postretirement benefits. See Footnote 2 of the Notes to Consolidated Financial Statements in this Report for further information.

(b)

In December 2017, a one-time tax impact, as a result of the Tax Act, decreased income tax provision and transmission investment $21.7 million and $20.4 million, respectively. See Footnote 12 of the Notes to Consolidated Financial Statements in this Report for further information.

(c)

Includes long-term debt due within one year, debt issuance costs, and unamortized discount.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

General

MGE Energy is an investor-owned public utility holding company operating through subsidiaries in five business segments:

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Regulated electric utility operations, conducted through MGE,

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Regulated gas utility operations, conducted through MGE,

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Nonregulated energy operations, conducted through MGE Power and its subsidiaries,

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Transmission investments, representing our equity investment in ATC and ATC Holdco, and

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All other, which includes corporate operations and services.

Our principal subsidiary is MGE, which generates and distributes electric energy, distributes natural gas, and represents a majority portion of our assets, liabilities, revenues, and expenses. MGE generates and distributes electricity to approximately 153,000 customers in Dane County, Wisconsin, including the city of Madison, and purchases and distributes natural gas to approximately 161,000 customers in the Wisconsin counties of Columbia, Crawford, Dane, Iowa, Juneau, Monroe, and Vernon.

Our nonregulated energy operations own interests in electric generating capacity that is leased to MGE. The ownership/leasing structure was adopted under applicable state regulatory guidelines for MGE's participation in these generation facilities, consisting principally of a stable return on the equity investment in the new generation facilities over the term of the related leases. The nonregulated energy operations include an ownership interest in two coal-fired generating units in Oak Creek, Wisconsin and a partial ownership of a cogeneration project on the UW-Madison campus. A third party operates the units in Oak Creek, and MGE operates the cogeneration project. Due to the nature of MGE's participation in these facilities, the results of our nonregulated operations are also consolidated into MGE's consolidated financial position and results of operations under applicable accounting standards.

Executive Overview

Our primary focus today and for the foreseeable future is our core utility customers at MGE as well as creating long-term value for our shareholders. MGE continues to face the challenge of providing its customers with reliable power at competitive prices. MGE meets this challenge by investing in more efficient generation projects, including renewable energy sources. MGE continues to examine and pursue opportunities to reduce the proportion that coal generation represents in its generation mix, including the reduction in its ownership of Columbia and its growing ownership of renewable generation sources. MGE will continue to focus on growing earnings while controlling operating and fuel costs. MGE maintains safe and efficient operations in addition to providing customer value. We believe it is critical to maintain a strong credit standing consistent with financial strength in MGE as well as the parent company in order to accomplish these goals.

We earn our revenue and generate cash from operations by providing electric and natural gas utility services, including electric power generation and electric power and gas distribution. The earnings and cash flows from the utility business are sensitive to various external factors, including:

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Weather, and its impact on customer sales,

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Economic conditions, including current business activity and employment and their impact on customer demand,

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Regulation and regulatory issues, and their impact on the timing and recovery of costs,

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Energy commodity prices, including natural gas prices,

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Equity price risk pertaining to pension related assets,

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Credit market conditions, including interest rates and our debt credit rating,

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Environmental laws and regulations, including adopted and pending environmental rule changes, and

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Other factors listed in Item 1A. Risk Factors.

For the year ended December 31, 2018, MGE Energy's earnings were $84.2 million or $2.43 per share compared to $97.6 million or $2.82 per share for the same period in the prior year. MGE's earnings for the year ended December 31, 2018, were $56.5 million compared to $49.8 million for the same period in the prior year.

MGE Energy's net income was derived from our business segments as follows:

(In millions)	Year Ended December 31,		
Business Segment:	2018	2017	2016
Electric Utility	$ 45.9	$ 41.4	$ 40.6
Gas Utility	12.9	11.1	10.6
Nonregulated Energy	20.2	40.5	19.1
Transmission Investments	6.2	5.9	5.6
All Others	(1.0)	(1.3)	(0.3)
Net Income	$ 84.2	$ 97.6	$ 75.6

Our net income during 2018 compared to 2017 primarily reflects the effects of the following factors:

Electric Utility

For 2018, electric operating income increased primarily as a result of more favorable weather conditions in the current year. Cooling degree days (a measure for determining the impact of weather during the cooling season) increased by 37.2% compared to 2017.

Gas Utility

For 2018, gas operating income increased primarily related to an increase in gas retail sales reflecting higher customer demand resulting from colder weather experienced compared to the same period in the prior year and an increase in retail customers. Heating degree days (a measure for determining the impact of weather during the heating season) increased by 11.2% compared to 2017.

Nonregulated Energy

Nonregulated Energy income decreased due to a $21.6 million one-time tax impact in 2017 as a result of lower federal income tax rates associated with the passage of the Tax Cuts and Jobs Act. See "Tax Reform" below for additional information.

Our net income during 2017 compared to 2016 primarily reflects the effects of the following factors:

Electric and Gas Utility

Electric and gas net income increased primarily related to a $1.5 million (pre-tax) gain on sale of property assets in 2017, customer growth, and cooler weather in the fourth quarter of 2017 compared to 2016.

Nonregulated Energy

Nonregulated Energy income increased due to a $21.6 million one-time tax impact in 2017 as a result of lower federal income tax rates associated with the passage of the Tax Cuts and Jobs Act. See "Tax Reform" below for additional information.

All Others

The decrease in all other income in 2017 primarily results from a $2 million (pre-tax) voluntary contribution to the Madison Gas and Electric Foundation.

During 2018, the following events occurred:

Tax Reform: On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act. The Tax Act made broad and complex changes to the U.S. tax code, including the reduction in the U.S. federal corporate tax rate from 35 percent to 21 percent, effective January 1, 2018.

Customer rates approved for 2018 reflect an income tax rate of 35 percent. In January 2018, the PSCW issued an order directing Wisconsin investor-owned utilities to defer the over-collection of income tax expense as a result of the decrease in tax rate to 21 percent. The PSCW issued an order in May 2018 to return to customers the estimated 2018 over-collection of income tax expense. As of December 31, 2018, MGE returned $8.2 million to customers through bill credits. Any over/under recovery of the actual costs will be subject to the PSCW's review in a future rate case. As of December 31, 2018, MGE has deferred $3.1 million as a regulatory liability and recorded a corresponding reduction in operating revenues for over-collection of income tax expense (net of customer bill credits).

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Saratoga Wind Farm: In December 2017, the PSCW authorized construction of a 66 MW wind farm, consisting of 33 turbines, located near Saratoga, Iowa. MGE received specific approval to recover 100% AFUDC on the project. As of December 31, 2018, MGE has incurred $95.8 million of capital expenditures. After tax, MGE has recognized $2.5 million in AFUDC equity related to this project for the year ended December 31, 2018. Construction of the project is expected to be completed in February 2019 for approximately $112 million.

Forward Wind: In April 2018, MGE, along with two other utilities, purchased the Forward Wind Energy Center, which consists of 86 wind turbines located in Wisconsin with a total capacity of 137.85 MW. The aggregate purchase price was approximately $174 million, of which MGE's proportionate share is 12.8%, or approximately $23 million. The purchase of the Forward Wind Energy Center replaced an existing purchase power agreement, under which MGE purchased 12.8% of the facility's energy output.

Columbia: MGE and WPL have negotiated an amendment to the existing Columbia joint operating agreement, effective January 1, 2017, under which MGE has reduced its obligation to pay certain capital expenditures (other than SCR-related expenditures) at Columbia in exchange for a proportional reduction in MGE's ownership in Columbia. On January 1 of each year from 2017 through 2019 and then on June 1, 2020, the ownership percentage is adjusted through a partial sale based on the amount of capital expenditures foregone. As of December 31, 2018 and 2017, MGE classified $3.1 million and $8.8 million, respectively, of Columbia assets as held-for-sale on the consolidated balance sheets. In January 2018, MGE reduced its ownership interest in Columbia from 20.4% to 19.4% as a result of the partial sale of plant assets to WPL.

Deferred Fuel Costs Subject to Refund: As of December 31, 2018, MGE has deferred $9.5 million of 2018 fuel savings. These costs will be subject to the PSCW's annual review of 2018 fuel costs, expected to be completed in 2019.

Debt Issuance: MGE issued $40 million of long-term unsecured debt in July 2018 and $60 million of long-term unsecured debt in September 2018. The proceeds of these debt financings were used to assist with the financing of additional capital expenditures, such as the Saratoga Wind Farm, and refinanced $20 million of long-term debt which matured in September 2018. The covenants of these debt issues are substantially consistent with MGE's existing unsecured long-term debt.

2017 Annual Fuel Proceeding: In August 2018, the PSCW issued a final decision in the fuel rules proceedings for MGE to refund $4.2 million of additional fuel savings realized during 2017 to its retail electric customers which was returned over a one-month period in October 2018. There was no change to the refund in the fuel rules proceedings from the amount MGE deferred as of December 31, 2017.

During 2019, several items may affect us, including:

2019/2020 Rate Change Settlement: In December 2018, the PSCW approved the settlement agreement between MGE and intervening parties in the rate case. The settlement decreases electric rates by 2.24% or $9.2 million in 2019. MGE will maintain this rate level for 2020, with the exception that MGE will file a 2020 Fuel Cost Plan in 2019 and MGE's electric rates will be adjusted accordingly. The decrease reflects the ongoing tax impacts of the Tax Act and the addition of lower-cost renewable generation capacity. The settlement agreement increases gas rates by 1.06% or $1.7 million in 2019 and 1.46% or $2.4 million in 2020. The increase covers infrastructure costs. It also reflects the impacts of the Tax Act.

Tax Reform: Pursuant to the Tax Act, deferred income tax balances as of December 31, 2017, were remeasured to reflect the decrease in corporate tax rate. A $130.5 million regulatory liability was recorded given that changes in income taxes are generally passed through in customer rates for the regulated utility. The amount and timing of the cash impacts will depend on the period over which certain income tax benefits are provided to customers, which will be determined by the PSCW. A portion of the regulatory liability will be returned to customers using a normalization method of accounting.

Pension and Other Postretirement Benefit Costs: Costs for pension and other postretirement benefits are affected by actual investment returns on the assets held for those benefits and by the discount rate, which is sensitive to interest rates, used to calculate those benefits. Volatility in interest rates and investment returns could affect the value of the pension and postretirement benefit obligations. These changes may affect benefit costs in future years. As a result of lower investment returns in the fourth quarter of 2018, pension and postretirement benefit costs will increase in 2019. In December 2018, MGE filed a deferral request with the PSCW to defer the difference between estimated pension and other postretirement costs included in the 2019 and 2020 rate settlement and actual expense incurred. If approved, MGE expects to defer approximately $5.9 million in 2019 as a regulatory asset. The pension and other postretirement costs for 2020 are currently unknown. Any overcollection or undercollection of actual expense in 2020 will be netted with the amount deferred in 2019. MGE expects that the deferred cost for employee benefit plans will be factored into future rate actions starting in 2021. A PSCW decision is expected in early 2019.

ATC Return on Equity: Several parties have filed complaints with the FERC seeking to reduce the ROE used by MISO transmission owners, including ATC. Any change to ATC's ROE could result in lower equity earnings and distributions from ATC in the future. We derived approximately 7.3% of our net income for the year ended December 31, 2018, from our investment in ATC. See "Other Matters" below for additional information concerning ATC.

Environmental Initiatives: There are proposed legislative rules and initiatives involving matters related to air emissions, water effluent, hazardous materials, and greenhouse gases, all of which affect generation plant capital expenditures and operating costs as well as future operational planning. At present, it is unclear how the changes in the Presidential, Congressional, and EPA administrations may affect existing, pending or new legislative or rulemaking proposals or regulatory initiatives. Such legislation and rulemaking could significantly affect the costs of owning and operating fossil-fueled generating plants, such as Columbia and the Elm Road Units, from which we derive approximately 43% of our electric generating capacity as of December 31, 2018. We would expect to seek and receive recovery of any such costs in rates; however, it is difficult to estimate the amount of such costs due to the uncertainty as to the timing and form of the legislation and rules, and the scope and time of the recovery of costs in rates, which may lag the incurrence of those costs.

EPA's Clean Power Plan: In October 2015, the EPA finalized its Clean Power Plan (CPP) rule with an effective date of December 2015, setting guidelines and approval criteria for states to use in developing plans to control GHG emissions from existing fossil fuel-fired electric generating units and systems. Implementation of the rule is currently stayed by order to the U.S. Supreme Court, however, if implemented, the CPP is expected to have a direct impact on existing coal and natural gas fired generating units, including possible changes in dispatch and additional operating costs. The rule is the subject of pending legal challenges. In August 2018, the EPA proposed the Affordable Clean Energy (ACE) rule which would replace the CPP, if successfully implemented. The proposed ACE as it is currently written has the potential to impact Blount, Columbia, and the Elm Road Units. Given the pending CPP legal proceedings and the proposed ACE rule, the nature and timing of any final requirements to control GHG emissions from existing fossil fuel-fired EGUs is subject to uncertainty. MGE is unable to determine with any certainty the impact of the CPP and proposed ACE rule on our operations. If an ACE rule is implemented substantially in the form of the CPP rule, it is expected to have a material impact on MGE. MGE will continue to monitor developments with the proposed ACE rule, the CPP rule, and related litigation.

Columbia: MGE will reduce its obligation to pay certain capital expenditures (other than SCR-related expenditures) at Columbia in exchange for a proportional reduction in MGE's ownership in Columbia. In January 2019, MGE reduced its ownership interest in Columbia from 19.4% to 19.1% as a result of the partial sale of plant assets to WPL. By

June 2020, MGE's ownership in Columbia is forecasted to be approximately 19%, a decrease of 3% from the 22% ownership interest held by MGE on January 1, 2016.

Future Generation - Riverside: In 2016, MGE entered into an agreement with WPL under which MGE may acquire up to 50 MW of capacity in a gas-fired generating plant to be constructed by WPL at its Riverside Energy Center in Beloit, Wisconsin, during the five-year period following the in-service date of the plant. The plant is expected to be completed by early 2020.

Future Generation - Utility Solar: In May 2018, MGE and WPSC filed a joint application with the PSCW for the approval to acquire 300 MW of solar generating capacity from two separate solar projects in Wisconsin, Badger Hollow Solar Farm and Two Creeks Solar Farm. MGE's combined ownership share of the two projects is expected to be 100 MW. If approved by the PSCW, construction of the projects is expected to begin in 2019. MGE's share of the construction cost is expected to be approximately $130 million.

The following discussion is based on the business segments as discussed in Footnote 21 of the Notes to Consolidated Financial Statements in this Report.

Results of Operations

Results of operations include financial information prepared in accordance with GAAP and electric and gas margins, both which are non-GAAP measures. Electric margin (electric revenues less fuel for electric generation and purchase power costs) and gas margin (gas revenues less cost of gas sold) are non-GAAP measures because they exclude nonregulated operating revenues used in the calculation of the most comparable GAAP measure, operating income;

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other operations and maintenance expense, depreciation and amortization expense, and other general taxes expense and thus are not measures determined in accordance with GAAP.

Management believes that electric and gas margins provide a meaningful basis for evaluating and managing utility operations since fuel for electric generation, purchase power costs, and cost of gas sold are passed through to customers in current rates. As a result, management uses electric and gas margins internally when assessing the operating performance of our segments. The presentation of utility electric and gas margins herein is intended to provide supplemental information for investors regarding operating performance. These electric and gas margins may not be comparable to how other entities calculate utility electric and gas margin or similar measures. Furthermore, these measures are not intended to replace operating income as determined in accordance with GAAP as an indicator of operating performance.

Year Ended December 31, 2018, Versus the Year Ended December 31, 2017

The following table provides a calculation of electric and gas margins (non-GAAP), along with a reconciliation to the most comparable GAAP measure, operating income:

	Year Ended December 31,		
(In millions)	2018	2017	$ Change
Electric revenues	$ 400.9	$ 413.9	$ (13.0)
Fuel for electric generation	56.2	53.0	3.2
Purchased power	50.8	58.7	(7.9)
Total Electric Margins	293.9	302.2	(8.3)
Gas revenues	157.8	148.8	9.0
Cost of gas sold	85.0	76.6	8.4
Total Gas Margins	72.8	72.2	0.6
Other operating revenues	1.1	0.3	0.8
Other operations and maintenance	177.8	177.7	0.1
Depreciation and amortization	56.4	53.1	3.3
Other general taxes	19.4	19.3	0.1

Operating Income	$ 114.2	$ 124.6	$ (10.4)

Electric sales and revenues

The following table compares MGE's electric revenues and electric kWh sales by customer class for each of the years indicated:

	Revenues			Sales (kWh)		
(In thousands, except cooling degree days)	2018	2017	% Change	2018	2017	% Change
Residential	$ 138,566	$ 136,168	1.8 %	860,246	793,337	8.4 %
Commercial	204,683	216,461	(5.4)%	1,867,418	1,825,922	2.3 %
Industrial	13,878	16,176	(14.2)%	180,151	196,629	(8.4)%
Other-retail/municipal	34,023	38,010	(10.5)%	381,610	421,360	(9.4)%
Total retail	391,150	406,815	(3.9)%	3,289,425	3,237,248	1.6 %
Sales to the market	7,438	4,067	82.9 %	181,342	117,039	54.9 %
Other revenues	1,870	2,323	(19.5)%	-	-	-%
Adjustments to revenues	424	721	(41.2)%	-	-	-%
Total	$ 400,882	$ 413,926	(3.2)%	3,470,767	3,354,287	3.5 %
Cooling degree days (normal 677)				796	580	37.2 %

Electric margin, a non-GAAP measure, decreased $8.3 million during 2018 compared to 2017, due to the following:

(In millions)	
Revenue subject to refund, net	$ (22.3)
Other	(1.8)
Increase in volume	8.4
Decreased fuel costs	7.4
Total	$ (8.3)

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Revenue subject to refund. For cost recovery mechanisms, any over-collection of the difference between actual costs incurred and the amount of costs collected from customers is recorded as a reduction of revenue in the period incurred.

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Tax Act. MGE received a PSCW order in January 2018 to defer the over-collection of income tax expense collected in customer rates as a result of the Tax Act reduction in federal income tax rate to 21 percent. During 2018, MGE recorded a $4.4 million reduction in retail electric revenues and recorded a corresponding regulatory liability. During 2018, MGE returned $6.3 million to electric customers through bill credits related to the tax credit.

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Fuel-related costs. MGE's fuel-related costs subject to refund decreased revenue $5.3 million. MGE returned $4.2 million and $6.2 million of electric fuel-related savings in October 2018 and 2017, respectively. As of December 31, 2018 and 2017, MGE has deferred $9.5 million and $4.2 million, respectively, of fuel-related savings. Under fuel rules, MGE is required to defer electric fuel-related costs that fall outside a 2% cost tolerance band around the amount used in the most recent rate proceeding. Beginning in 2018, over-collection of fuel-related costs outside the tolerance band are reflected as a reduction of revenue in the period incurred. Under-collection of costs outside the tolerance band is reflected as a reduction of purchase power expense in the period incurred. Any potential recovery of excess fuel costs will be recorded in the period received. Prior to adoption of the new revenue recognition guidance, effective January 1, 2018, deferred fuel-related costs were reflected in purchased power expense, with potential refunds associated with fuel savings increasing that expense and potential recovery of excess fuel costs decreasing that expense.

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Transmission. MGE's transmission costs subject to refund decreased revenue $2.2 million primarily related to a one-time refund received in June 2018.

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Operating Costs. MGE's electric plant operating costs subject to refund decreased revenue $4.1 million primarily related to lower leased generation costs due to the reduction in tax rate.

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Other. During 2018, other items affecting electric operating revenues decreased $1.8 million primarily attributable to a decrease in demand charges as a result of a large industrial customer relocating its operations out of state.

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Volume. During 2018, there was an 8.4% increase in residential electric sales volumes compared to the same period in the prior year driven by favorable weather conditions. During 2018, there was a 8.4% decrease in industrial retail electric sales volumes compared to the same period in the prior year as a result of a large industrial customer relocating its operations out of state.

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Fuel Costs. Fuel costs decreased during 2018, primarily as a result of a reduction in purchased power. The purchase of the Forward Wind Energy Center in April 2018 replaced an existing purchase power agreement that was previously recorded as purchased power expense in fuel costs.

Gas deliveries and revenues

The following table compares MGE's gas revenues and gas therms delivered by customer class during each of the years indicated:

(In thousands, except HDD and average rate per therm of retail customer)	Revenues			Therms Delivered		
	2018	2017	% Change	2018	2017	% Change
Residential	$ 94,017	$ 88,695	6.0 %	106,899	94,631	13.0 %
Commercial/Industrial	59,060	55,151	7.1 %	101,028	91,411	10.5 %
Total retail	153,077	143,846	6.4 %	207,927	186,042	11.8 %
Gas transportation	4,283	4,561	(6.1)%	74,773	70,234	6.5 %
Other revenues	407	418	(2.6)%	-	-	-%
Total	$ 157,767	$ 148,825	6.0 %	282,700	256,276	10.3 %
Heating degree days (normal 6,913)				7,306	6,569	11.2 %
Average rate per therm of retail customer	$ 0.736	$ 0.773	(4.8)%			

Gas margin, a non-GAAP measure, increased $0.6 million during 2018 compared to 2017, due to the following:

(In millions)	
Increase in volume	$ 3.8
Other	0.2
Revenue subject to refund/tax credit	(3.4)
Total	$ 0.6

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Volume. For 2018, retail gas deliveries increased 11.8% compared to the same period in the prior year primarily related to customer growth and more favorable weather conditions in the current year.

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Revenue subject to refund/tax credit. MGE received a PSCW order in January 2018 to defer the over-collection of income tax expense collected in customer rates as a result of the Tax Act reduction in federal income tax rate to 21 percent. Any over-collection of the difference between actual costs incurred and the amount of costs collected from customers is recorded as a reduction of revenue in the period incurred. For 2018, MGE recorded a $1.5 million reduction in retail gas revenues and recorded a corresponding regulatory liability. During 2018, MGE returned $1.9 million to gas customers through bill credits related to the tax credit.

Consolidated operations and maintenance expenses

For 2018, operations and maintenance expenses increased $0.1 million, compared to the same period in the prior year. The following contributed to the net change:

(In millions)	
Increased customer accounts costs	$ 0.9
Increased gas distribution costs	0.5
Increased electric distribution costs	0.4
Increased other costs	0.4
Decreased electric transmission costs	(2.1)
Total	$ 0.1

For 2018, decreased electric transmission costs are primarily related to a decrease in transmission rates as a result of a one-time refund received in June 2018. The lower transmission rate is reflected in customer revenue as revenue subject to refund.

Consolidated depreciation expense

Electric depreciation expense increased $2.3 million and gas depreciation expense increased $1.0 million for 2018, compared to the same period in the prior year primarily related to an increase in depreciable assets and change in estimated useful lives of capitalized software assets affected by the technology corporate initiative.

Nonregulated Energy Operations - MGE Energy and MGE

The nonregulated energy operations are conducted through MGE Energy's subsidiaries: MGE Power Elm Road (the Elm Road Units) and MGE Power West Campus (WCCF), which have been formed to own and lease electric generating capacity to assist MGE. For 2018 and 2017, net income at the nonregulated energy operations segment was $20.2 million and $40.5 million, respectively. The decrease in net income is attributable to a $21.6 million one-time tax impact in 2017 as a result of the Tax Act. The Tax Act reduced the federal tax rate from 35% to 21%. The decrease in tax rate lowered lease revenues and income tax expense in 2018. Income tax expense is a factor used in the formula to calculate lease rates. See Footnote 12 of the Notes to Consolidated Financial Statements in this Report.

Transmission Investment Operations - MGE Energy and MGE

For 2018 and 2017, other income at the transmission investment segment was $8.6 million and $9.8 million, respectively. The decrease in tax rate from 35% to 21%, effective January 1, 2018, lowered earnings from ATC and income tax expense for 2018. Income tax expense is a factor used in the calculation of ATC's transmission rates. The transmission investment segment holds our interest in ATC and ATC Holdco, and its income reflects our equity in the earnings of the investments. ATC Holdco was formed in December 2016. In the near term, it is expected that ATC Holdco will be pursuing transmission development opportunities that typically have long development and investment lead times before becoming operational. See Footnote 6 of the Notes to Consolidated Financial Statements in this Report and "Other Matters" below for additional information concerning ATC and summarized financial information regarding ATC.

Consolidated Income Taxes - MGE Energy and MGE

Although effective tax rates have been lowered as a result of the Tax Act, regulated revenues have been affected as tax expense is a factor in the determination of rates for electric and gas service, and rates relating to our investment in transmission. See Footnote 12 of the Notes to Consolidated Financial Statements in this Report for details of effective income tax rates for continuing operations.

Noncontrolling Interest, Net of Tax - MGE

The noncontrolling interest, net of tax, reflects the accounting required for MGE Energy's interest in MGE Power Elm Road (the Elm Road Units) and MGE Power West Campus (WCCF). MGE Energy owns 100% of MGE Power Elm Road and MGE Power West Campus; however, due to the contractual agreements for these projects with MGE, the entities are considered VIEs with respect to MGE and their results are consolidated with those of MGE, the primary beneficiary of the VIEs. The following table shows MGE Energy's noncontrolling interest, net of tax, reflected on MGE's consolidated statement of income:

	Year Ended December 31,	
(In millions)	2018	2017
MGE Power Elm Road[a]	$ 15.4	$ 29.3
MGE Power West Campus[a]	$ 7.2	$ 13.9

(a)

In 2017, there was a $21.6 million one-time tax impact as a result of the Tax Act. The Tax Act reduced the federal tax rate from 35% to 21%. See Footnote 12 of the Notes to Consolidated Financial Statements in this Report for additional information.

Results of Operations

Year Ended December 31, 2017, Versus the Year Ended December 31, 2016

Electric Utility Operations - MGE Energy and MGE

Electric sales and revenues

The following table compares MGE's electric revenues and electric kWh sales by customer class for each of the years indicated:

	Revenues			Sales (kWh)		
(In thousands, except cooling degree days)	2017	2016	% Change	2017	2016	% Change
Residential	$ 136,168	$ 136,792	(0.5)%	793,337	828,887	(4.3)%
Commercial	216,461	213,101	1.6 %	1,825,922	1,866,035	(2.1)%
Industrial	16,176	17,589	(8.0)%	196,629	232,854	(15.6)%
Other-retail/municipal	38,010	35,559	6.9 %	421,360	395,662	6.5 %
Total retail	406,815	403,041	0.9 %	3,237,248	3,323,438	(2.6)%
Sales to the market	4,067	6,135	(33.7)%	117,039	183,195	(36.1)%
Return of fuel savings	-	(423)	(100.0)%	-	-	-%
Other revenues	2,323	1,906	21.9 %	-	-	-%
Adjustments to revenues	721	(1,653)	n.m.%	-	-	-%
Total	$ 413,926	$ 409,006	1.2 %	3,354,287	3,506,633	(4.3)%
Cooling degree days (normal 659)				580	780	(25.6)%

n.m.: not meaningful

Electric operating revenues increased $4.9 million or 1.2% during 2017, due to the following:

(In millions)	
Deferral of fuel savings/fuel credit	$ 17.9
Adjustments to revenues	2.4
Other	0.3
Volume	(9.6)
Rate changes	(4.0)
Sales to the market	(2.1)
Total	$ 4.9

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Deferral of fuel savings/fuel credit. During 2017, customers received a fuel credit on their bill related to accumulated fuel savings of $6.2 million, which decreased electric revenues. During 2016, customers received a fuel credit on their bill related to the fuel savings of $23.7 million, which decreased electric revenues in the prior year. In January 2016, the PSCW lowered MGE's 2016 fuel rules monitored costs as a result of continued lower projected fuel costs in 2016.

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Adjustments to Revenue. MGE leases electric generating capacity from MGE Power Elm Road. MGE collects in rates the lease payments associated with the electric generating capacity as authorized by the PSCW. Any differential between estimated lease payments collected in rates and actual lease payments paid to MGE Power Elm Road are included in adjustments to revenues.

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Volume. During 2017, there was a 15.6% decrease in industrial retail sales volumes compared to the same period in 2016 as a result of a large industrial customer relocating its operations out of state. During 2017, there was a 4.3% decrease in residential sales volumes compared to the same period in 2016 driven by decreased customer demand due, at least in part, to less favorable weather conditions, as evidenced by the lower number of cooling degree days.

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Rate Changes. In December 2016, the PSCW authorized MGE to decrease 2017 rates for retail electric customers by 0.8% or $3.3 million on an annual basis.

Rates charged to retail customers for 2017, were 2.2% or $4.0 million lower than those charged during the same period in 2016.

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Sales to the Market. Sales to the market represent wholesale sales made to third parties who are not ultimate users of the electricity. These sales may include spot market transactions on the markets operated by MISO and PJM. These sales may also include bilateral sales to other utilities or power marketers. Generating units are dispatched by MISO based on cost considerations as well as reliability of the system. Sales to the market typically occur when MGE has more generation and purchases online than are needed for its own system demand. The excess electricity is then sold to others in the market. For 2017, market volumes decreased compared to the same period in 2016, reflecting decreased opportunities for sales, and those sales were made at lower market prices. The revenue generated from these sales is included in fuel rules monitored costs. See fuel rules discussion in Footnote 8.b. of the Notes to Consolidated Financial Statements in this Report.

Electric fuel and purchased power

Electric fuel and purchased power costs reflect a decrease in internal generation volumes partially offset by an increase in the volume of purchased power when compared to 2016. Adjustments related to the regulatory recovery for fuel costs, known as fuel rules, increased purchased power expense. These items are explained below.

Fuel for electric generation

The expense for fuel for internal electric generation decreased $7.7 million during 2017 compared to 2016 due to the following:

(In millions)	
Decrease in volume	$ (4.7)
Decrease in per-unit cost	(3.0)
Total	$ (7.7)

This decrease in expense reflects an 8.1% decrease in internal generation volume delivered to the system primarily as a result of decreased generation at WCCF based on market prices and a 5.0% decrease in per-unit cost of internal electric generation.

Purchased power

Purchased power expense increased $2.4 million during 2017 compared to 2016 due to the following:

(In millions)	
Increase in volume	$ 2.9
Decrease in per-unit cost	(2.2)
Change in fuel rule adjustments, net of recoveries	1.7
Total	$ 2.4

The increase in expense (before fuel rules adjustments) reflects a 4.9% increase in the volume of power purchased from third parties, partially offset by a 3.5% decrease in the per-unit cost of purchased power.

Under fuel rules, MGE is required to defer electric fuel-related costs that fall outside a 2% cost tolerance band around the amount used in the most recent rate proceeding. Any fuel rules adjustments are reflected in purchased power expense, with potential refunds associated with fuel savings increasing that expense and potential recovery of excess fuel costs decreasing that expense.

Electric operating and maintenance expenses

Electric operating and maintenance expenses increased $3.9 million during 2017 compared to 2016. The following changes contributed to the net change:

(In millions)	
Increased transmission costs	$ 5.2
Increased customer accounts costs	1.7
Increased other costs	0.1
Decreased production costs	(2.3)
Decreased administrative and general costs	(0.8)
Total	$ 3.9

For 2017, increased transmission costs are primarily due to an increase in transmission reliability enhancements and increased customer accounts costs are primarily related to technology improvements, partially offset by decreased production costs at Columbia and the Elm Road Units.

Electric depreciation expense

Electric depreciation expense increased $7.5 million during 2017 compared to 2016 as a result of new depreciation rates for Columbia, as approved by the PSCW.

Other electric income

Other electric income increased $1.0 million during 2017 compared to 2016 primarily due to the gain on sale of property assets.

Gas Utility Operations - MGE Energy and MGE

Gas deliveries and revenues

The following table compares MGE's gas revenues and gas therms delivered by customer class during each of the years indicated:

(In thousands, except HDD and average rate per therm of retail customer)	Revenues 2017	Revenues 2016	Revenues % Change	Therms Delivered 2017	Therms Delivered 2016	Therms Delivered % Change
Residential	$ 88,695	$ 81,014	9.5 %	94,631	91,791	3.1 %
Commercial/Industrial	55,151	48,497	13.7 %	91,411	86,641	5.5 %
Total retail	143,846	129,511	11.1 %	186,042	178,432	4.3 %
Gas transportation	4,561	4,635	(1.6)%	70,234	72,922	(3.7)%

Other revenues	418	397	5.3 %	-	-	-%
Total	$ 148,825	$ 134,543	10.6 %	256,276	251,354	2.0 %
Heating degree days (normal 6,916)				6,569	6,417	2.4 %
Average rate per therm of retail customer	$ 0.773	$ 0.726	6.5 %			

Gas revenues increased $14.3 million or 10.6% during 2017. These changes are related to the following factors:

(In millions)	
Rate/PGA changes	$ 10.1
Volume	4.2
Total	$ 14.3

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Rate/PGA changes. In December 2016, the PSCW authorized MGE to increase 2017 rates for retail gas customers by 1.9% or $3.1 million on an annual basis.

MGE recovers the cost of natural gas in its gas segment through the purchased gas adjustment clause (PGA). Under the PGA, MGE is able to pass through to its gas customers the cost of gas. Changes in PGA recoveries affect revenues but do not impact net income.

The average retail rate per therm for 2017 increased 6.5% compared to 2016, reflecting a $6.5 million increase in natural gas commodity costs (recovered through the PGA). Additionally, there was an increase in fixed rate charges.

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Volume. For 2017, retail gas deliveries increased 4.3% compared to 2016. The increase in volume is primarily related to customer growth and cooler weather in the fourth quarter of 2017 compared to 2016.

Cost of gas sold

For 2017, cost of gas sold increased by $9.9 million, compared to 2016. The cost per therm of natural gas increased

9.2%, which resulted in $6.5 million of increased expense. The volume of gas purchased increased 5.1%, which resulted in $3.4 million of increased expense.

Gas operating and maintenance expenses

Gas operating and maintenance expenses increased $1.6 million for 2017 compared to 2016. The following changes contributed to the net change:

(In millions)	
Increased customer accounts costs	$ 1.6
Increased customer service costs	0.9
Increased other costs	0.2
Decreased administrative and general costs	(1.1)
Total	$ 1.6

For 2017, increased customer accounts costs are primarily related to technology improvements. Increased customer service costs are due to higher Focus on Energy payments. Focus on Energy is Wisconsin's statewide energy efficiency and renewable resource program to promote energy efficiency on customer's premises. Decreased administrative and general costs are primarily related to a decrease in payroll expense.

Nonregulated Energy Operations - MGE Energy and MGE

The nonregulated energy operations are conducted through MGE Energy's subsidiaries: MGE Power Elm Road (the Elm Road Units) and MGE Power West Campus (WCCF), which have been formed to own and lease electric generating capacity to assist MGE. For 2017 and 2016, net income at the nonregulated energy operations segment was $40.5 million and $19.1 million, respectively. The increase in net income is attributable to a $21.6 million one-time tax impact as a result of the Tax Act. The Tax Act reduced the federal tax rate from 35% to 21%. See Footnote 12 of the Notes to Consolidated Financial Statements in this Report.

Transmission Investment Operations - MGE Energy and MGE

For 2017 and 2016, other income at the transmission investment segment was $9.8 million and $8.4 million, respectively. The transmission investment segment holds our interest in ATC and ATC Holdco, and its income reflects our equity in the earnings of the investments. ATC Holdco was formed in December 2016. In the near term, it is expected that ATC Holdco will be pursuing transmission development opportunities that typically have long development and investment lead times before becoming operational. See Footnote 6 of the Notes to Consolidated Financial Statements in this Report and "Other Matters" below for additional information concerning ATC and summarized financial information regarding ATC.

All Other Operations - MGE Energy and MGE

Other income

The decrease in all other income primarily results from a $2 million (pre-tax) voluntary contribution to the Madison Gas and Electric Foundation.

Consolidated Income Taxes - MGE Energy and MGE

MGE Energy's effective income tax rate for 2017 and 2016 was 18.5% and 36.0%, respectively. MGE's effective income tax rate for 2017 and 2016 was 17.0% and 35.9%, respectively. The decrease in the effective tax rate for both MGE Energy and MGE in 2017 was primarily related to the Tax Act, which was signed into law on December 22, 2017. Pursuant to the Tax Act, deferred income tax balances as of December 31, 2017, were remeasured to reflect the decrease in the corporate income tax rate from 35 percent to 21 percent beginning January 1, 2018. See Footnote 12 of the Notes to Consolidated Financial Statements in this Report for details of effective income tax rates for continuing operations.

Noncontrolling Interest, Net of Tax - MGE

The noncontrolling interest, net of tax, reflects the accounting required for MGE Energy's interest in MGE Power Elm Road (the Elm Road Units) and MGE Power West Campus (WCCF). MGE Energy owns 100% of MGE Power Elm Road and MGE Power West Campus; however, due to the contractual agreements for these projects with MGE, the entities are considered VIEs with respect to MGE and their results are consolidated with those of MGE, the primary beneficiary of the VIEs. Also included in noncontrolling interest, net of tax, for 2016 is MGE Energy's interest in MGE Transco, which holds our investment in ATC.

The following table shows MGE Energy's noncontrolling interest, net of tax, reflected on MGE's consolidated statement of income:

	Year Ended December 31,	
(In millions)	2017	2016
MGE Power Elm Road[(a)]	$ 29.3	$ 14.8
MGE Power West Campus[(a)]	$ 13.9	$ 7.2
MGE Transco[(b)]	$ -	$ 1.4

(a)

In 2017, there was a $21.6 million one-time tax impact as a result of the Tax Act. The Tax Act reduced the federal tax rate from 35% to 21%. See Footnote 12 of the Notes to Consolidated Financial Statements in this Report for additional information.

(b)

MGE Transco holds an ownership interest in ATC. In July 2016, MGE's ownership interest in MGE Transco declined below a majority, resulting in MGE Energy's investment in MGE Transco being deconsolidated from MGE's consolidated financial statements. See Footnote 20 of the Notes to Consolidated Financial Statements in this Report for further discussion of noncontrolling interest. In December 2016, MGE's ownership interest in MGE Transco was transferred to MGE Energy. See Footnote 6 of the Notes to Consolidated Financial Statements in this Report for additional information.

Liquidity and Capital Resources

MGE Energy and MGE have adequate liquidity to fund operations and capital expenditures over the next twelve months. Available resources include cash and cash equivalents, operating cash flows, liquid assets, borrowing capacity under revolving credit facilities, and access to equity and debt capital markets.

Cash Flows

The following summarizes cash flows for MGE Energy and MGE during 2018, 2017, and 2016:

	MGE Energy			MGE		
(In thousands)	2018	2017	2016	2018	2017	2016
Cash provided by/(used for):						
Operating activities	$ 153,040	$ 131,373	$ 147,864	$ 147,994	$ 124,120	$ 146,852
Investing activities	(218,328)	(116,275)	(86,813)	(213,302)	(106,572)	(85,635)
Financing activities	38,123	(4,637)	(46,112)	61,885	(23,897)	(76,845)

Cash Provided by Operating Activities

MGE Energy

MGE Energy's consolidated net cash provided by operating activities is derived mainly from the electric and gas operations of its principal subsidiary, MGE.

2018 vs. 2017

Cash provided by operating activities for 2018 was $153.0 million, an increase of $21.7 million when compared to the prior year.

MGE Energy's net income decreased $13.4 million for 2018 when compared to the prior year primarily related to a $21.6 million one-time 2017 noncash tax impact of the Tax Act from the nonregulated energy segment.

MGE Energy's federal and state taxes paid decreased $14.6 million during 2018, when compared to the prior year, reflecting the reduction in tax rates effected by the Tax Act.

Working capital accounts (excluding prepaid and accrued taxes) resulted in $10.5 million in cash provided by operating activities for 2018, primarily due to increased current liabilities, decreased unbilled revenues, and decreased inventories, partially offset by decreased accounts payable and increased receivables.

Working capital accounts (excluding prepaid and accrued taxes) resulted in $12.7 million in cash used for operating activities for 2017, primarily due to decreased accounts payable, increased receivables, increased inventories, and increased unbilled revenues, partially offset by increased current liabilities.

A decrease in pension contribution resulted in an additional $5.7 million in cash provided by operating activities for 2018, when compared to the prior year. Pension contributions reflect amounts required by law and discretionary amounts.

2017 vs. 2016

Cash provided by operating activities for 2017 was $131.4 million, a decrease of $16.5 million when compared to 2016.

MGE Energy's net income increased $22.0 million for 2017 when compared to 2016 primarily related to a $21.6 million one-time 2017 noncash tax impact of the Tax Act from the nonregulated energy segment.

In 2016, MGE received a $10.0 million refund from the IRS for the 2015 tax year. Excluding the 2016 refund, MGE Energy's federal and state taxes paid increased $5.3 million during 2017, when compared to 2016.

Working capital accounts (excluding prepaid and accrued taxes) resulted in $12.7 million in cash used for operating activities for 2017, primarily due to decreased accounts payable, increased receivables, increased inventories, and increased unbilled revenues, partially offset by increased current liabilities.

Working capital accounts (excluding prepaid and accrued taxes) resulted in $7.7 million in cash provided by operating activities for 2016, primarily due to increased accounts payable, decreased inventories, and decreased receivable margin, partially offset by increased unbilled revenues, increased receivables, and decreased current liabilities. The decrease in current liabilities includes a fuel credit, approved in August 2015, of $8.3 million that customers received on their bill throughout 2016 and a one-time fuel credit, approved in July 2016, of $15.5 million that customers received on their bill in September 2016.

A decrease in pension contribution resulted in an additional $3.2 million in cash provided by operating activities for 2017, when compared to 2016. Pension contributions reflect amounts required by law and discretionary amounts.

MGE

2018 vs. 2017

Cash provided by operating activities for 2018 was $148.0 million, an increase of $23.9 million when compared to the prior year.

Net income decreased $14.0 million for 2018, when compared to the prior year primarily related to a $21.6 million one-time 2017 noncash tax impact of the Tax Act from the nonregulated energy segment.

MGE's federal and state taxes paid decreased $14.7 million during 2018, when compared to the prior year, reflecting the reduction in tax rates effected by the Tax Act.

Working capital accounts (excluding prepaid and accrued taxes) resulted in $10.1 million in cash provided by operating activities for 2018, primarily due to increased current liabilities, decreased unbilled revenues, and decreased inventories, partially offset by decreased accounts payable and increased accounts receivable.

Working capital accounts (excluding prepaid and accrued taxes) resulted in $14.2 million in cash used for operating activities for 2018, primarily due to decreased accounts payable, increased receivables, increased inventories, and increased unbilled revenues, partially offset by increased current liabilities.

A decrease in pension contribution resulted in an additional $5.7 million in cash provided by operating activities for 2018, when compared to the prior year. Pension contributions reflect amounts required by law and discretionary amounts.

2017 vs. 2016

Cash provided by operating activities for 2017 was $124.1 million, a decrease of $22.7 million when compared to 2016.

Net income increased $18.5 million for 2017, when compared to 2016 primarily related to a $21.6 million one-time 2017 noncash tax impact of the Tax Act from the nonregulated energy segment.

In 2016, MGE received a $10.0 million refund from the IRS for the 2015 tax year. Excluding the 2016 refund, MGE's federal and state taxes paid to MGE Energy increased $5.2 million during 2017, when compared to 2016.

Working capital accounts (excluding prepaid and accrued taxes) resulted in $14.2 million in cash used for operating activities for 2017, primarily due to decreased accounts payable, increased receivables, increased inventories, and increased unbilled revenues, partially offset by increased current liabilities.

Working capital accounts (excluding prepaid and accrued taxes) resulted in $7.8 million in cash provided by operating activities for 2016, primarily due to increased accounts payable, decreased inventories, and decreased receivable margin, partially offset by increased receivables, increased unbilled revenues, and decreased current liabilities. The decrease in current liabilities includes a fuel credit, approved in August 2015, of $8.3 million that customers received on their bill throughout 2016 and a one-time fuel credit, approved in July 2016, of $15.5 million that customers received on their bill in September 2016.

A decrease in pension contribution resulted in an additional $3.2 million in cash provided by operating activities for 2017, when compared to 2016. Pension contributions reflect amounts required by law and discretionary amounts.

In 2016, MGE received dividends of $5.0 million from ATC. In December 2016, MGE's ownership interest in MGE Transco was transferred to MGE Energy.

Capital Requirements and Investing Activities

MGE Energy

2018 vs. 2017

MGE Energy's cash used for investing activities increased $102.1 million for 2018 when compared to the prior year.

Capital expenditures for 2018 were $212.2 million. This amount represents an increase of $104.1 million from the expenditures made in the prior year. This increase primarily reflects increased expenditures on the construction of the Saratoga wind project and the purchase of Forward Wind.

Capital contributions in ATC and other investments decreased $5.2 million for 2018 when compared to the prior year.

MGE Energy received $2.8 million in proceeds from the sales of property in 2017.

2017 vs. 2016

MGE Energy's cash used for investing activities increased $29.5 million for 2017 when compared to 2016.

Capital expenditures for 2017 were $108.1 million. This amount represents an increase of $24.5 million from the expenditures made in 2016. This increase primarily reflects increased expenditures on electric assets.

Capital contributions in ATC and other investments increased $8.1 million for 2017 when compared to 2016.

MGE Energy received $2.8 million in proceeds from the sales of property in 2017.

MGE

2018 vs. 2017

MGE's cash used for investing activities increased $106.7 million for 2018 when compared to the prior year.

Capital expenditures for 2018 were $212.2 million. This amount represents an increase of $104.1 million from the expenditures made in the prior year. This increase primarily reflects increased expenditures on the construction of the Saratoga wind project and the purchase of Forward Wind.

MGE received $1.7 million in proceeds from the sales of property in 2017.

2017 vs. 2016

MGE's cash used for investing activities increased $20.9 million for 2017 when compared to 2016.

Capital expenditures for 2017 were $108.1 million. This amount represents an increase of $24.5 million from the expenditures made in 2016. This increase primarily reflects increased expenditures on electric assets.

Capital contributions in ATC and other investments decreased $1.6 million in 2017, when compared to 2016. In December 2016, MGE transferred its ownership interest in ATC to MGE Energy. See Footnote 6 of the Notes to Consolidated Financial Statements in this Report for further details.

MGE received $1.7 million in proceeds from the sales of property in 2017.

Capital expenditures

The following table shows MGE Energy's actual capital expenditures for both 2018 and 2017, forecasted capital expenditures for 2019, and annual average forecasted capital expenditures for the years 2020 through 2022:

	Actual		Forecasted	
(In thousands)				(Annual Average)
For the years ended December 31,	2017	2018	2019	2020-2022
Electric	$ 77,353	$ 176,399	$ 100,696	$ 90,118
Gas	26,847	30,497	38,620	43,092
Utility plant total	104,200	206,896	139,316	133,210
Nonregulated	3,931	5,301	5,517	3,066
MGE Energy total	$ 108,131	$ 212,197	$ 144,833	$ 136,276

The Saratoga Wind Farm began construction in 2018. This project accounts for $95.8 million of the capital expenditures for 2018.

MGE Energy used funds received as dividend payments from MGE Power West Campus and MGE Power Elm Road, internally generated cash, and long-term and short-term external financing to meet its 2018 capital requirements and cash obligations, including dividend payments. External financing included short-term financing under existing lines of credit.

The forecasted capital expenditures are based upon management's assumptions with respect to future events, including the timing and amount of expenditures associated with compliance with environmental compliance initiatives, load growth, and the timing and adequacy of rate recovery. Actual events may differ materially from those assumptions and result in material changes to those forecasted amounts.

In May 2018, MGE and WPSC filed a joint application with the PSCW for the approval to acquire 300 MW of solar generating capacity from two separate solar projects in Wisconsin, Badger Hollow Solar Farm and Two Creeks Solar Farm. MGE's combined ownership share of the two projects is expected to be 100 MW. If approved by the PSCW, construction of the projects is expected to begin in 2019. MGE's share of the construction cost is expected to be approximately $130 million. The application is pending approval by the PSCW and is excluded from the forecasted capital expenditures noted above.

Financing Activities

MGE Energy

2018 vs. 2017

Cash provided by MGE Energy's financing activities was $38.1 million for 2018, compared to $4.6 million of cash used for 2017.

For 2018, cash dividends paid were $45.8 million compared to $43.7 million in the prior year. This increase was a result of a higher dividend per share ($1.32 vs. $1.26).

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During 2018, MGE issued $100.0 million of senior unsecured notes, which was used to refinance $20.0 million of maturing long-term notes and assist with financing additional capital expenditures. The increase in long-term debt primarily reflects expenditures on the construction of the Saratoga wind project. During 2017, MGE issued $70.0 million of senior unsecured notes, which was used to refinance $30.0 million of medium-term notes and assist with financing additional capital expenditures.

For 2018, net short-term debt borrowings were $9.0 million compared to $4.0 million in the prior year.

2017 vs. 2016

Cash used for MGE Energy's financing activities was $4.6 million for 2017, compared to $46.1 million of cash used for 2016.

For 2017, cash dividends paid were $43.7 million compared to $41.8 million in 2016. This increase was a result of a higher dividend per share $1.26 vs. $1.21).

During 2017, MGE issued $70.0 million of senior unsecured notes, which was used to refinance $30.0 million of medium-term notes and assist with financing additional capital expenditures.

For 2017, short-term debt borrowings were $4.0 million. There were no short-term borrowings for 2016.

MGE

2018 vs. 2017

During 2018, cash provided by MGE's financing activities was $61.9 million, compared to $23.9 million of cash used for MGE's financing activities in the prior year.

Cash dividends paid from MGE to MGE Energy were $45.0 million in the prior year. There were no cash dividends paid from MGE to MGE Energy for 2018.

Distributions to parent (MGE Energy) from noncontrolling interest, which represent distributions from MGE Power Elm Road and MGE Power West Campus, were $22.0 million for 2018, compared to $18.0 million in the prior year.

During 2018, MGE issued $100.0 million of senior unsecured notes, which was used to refinance $20.0 million of maturing long-term notes and assist with financing additional capital expenditures. The increase in long-term debt primarily reflects expenditures on the construction of the Saratoga wind project. During 2017, MGE issued $70.0 million of senior unsecured notes, which was used to refinance $30.0 million of medium-term notes and assist with financing additional capital expenditures.

For 2018, net short-term debt borrowings were $9.0 million compared to $4.0 million in the prior year.

2017 vs. 2016

During 2017, cash used for MGE's financing activities was $23.9 million, compared to $76.8 million of cash used for MGE's financing activities in 2016.

Cash dividends paid from MGE to MGE Energy were $45.0 million for 2017, compared to $50.0 million in 2016.

Distributions to parent (MGE Energy) from noncontrolling interest, which represent distributions from MGE Power Elm Road and MGE Power West Campus, were $18.0 million for 2017, compared to $24.1 million in 2016.

For 2016, equity contributions received from noncontrolling interest, which represent contributions by MGE Energy to MGE Transco, were $1.6 million. There were no equity contributions received from noncontrolling interest, which represent contributions to MGE Transco for 2017, as MGE Transco was a wholly-owned subsidiary of MGE Energy during 2017.

During 2017, MGE issued $70.0 million of senior unsecured notes, which was used to refinance $30.0 million of medium-term notes and assist with financing additional capital expenditures.

For 2017, short-term borrowings were $4.0 million. There were no short-term borrowings for 2016.

Dividend Restrictions

Dividend payments by MGE to MGE Energy are subject to restrictions arising under a PSCW rate order and, to a lesser degree, MGE's first mortgage bonds. The PSCW order restricts any dividends, above the PSCW authorized amount of $70.8 million, that MGE may pay MGE Energy if its common equity ratio, calculated in the manner used in the rate proceeding, is less than 55%. MGE's thirteen month rolling average common equity ratio as of December 31, 2018, is 56.3%, as determined under the calculation used in the rate proceeding. This restriction did not impact MGE's payment of dividends in 2018. Cash dividends of $45.0 million were paid by MGE to MGE Energy in 2017. No cash dividends were paid by MGE to MGE Energy in 2018. The rate proceeding calculation includes as indebtedness imputed amounts for MGE's outstanding purchase power capacity payments and other PSCW adjustments but does not include the indebtedness associated with MGE Power Elm Road and MGE Power West Campus, which are consolidated into MGE's financial statements but are not direct obligations of MGE.

MGE has covenanted with the holders of its first mortgage bonds not to declare or pay any dividend or make any other distribution on or purchase any shares of its common stock unless, after giving effect thereto, the aggregate amount of all such dividends and distributions and all amounts applied to such purchases, after December 31, 1945, shall not exceed the earned surplus (retained earnings) accumulated subsequent to December 31, 1945. As of December 31, 2018, approximately $400.0 million was available for the payment of dividends under this covenant.

Credit Facilities

As of December 31, 2018, MGE Energy and MGE had the following aggregate bank commitments and available capacity under their credit agreements:

Borrower		Aggregate Bank Commitments		Outstanding Commercial Paper		Outstanding Borrowings		Available Capacity	Expiration Date[(a)]
				(Dollars in millions)					
MGE Energy	$	50.0	$	-	$	-	$	50.0	June 1, 2020
MGE	$	100.0	$	13.0	$	-	$	87.0	June 1, 2020

(a)

On February 7, 2019, MGE Energy and MGE amended and restated the credit agreements to extend the initial term expiration date to February 7, 2024.

Borrowings under the Credit Agreements may bear interest at a rate based upon either a "floating rate" or a "Eurodollar Rate" adjusted for statutory reserve requirements, plus an adder based upon the credit ratings assigned to MGE's senior unsecured long-term debt securities. The "floating rate" is calculated on a daily basis as the highest of a prime rate, a Federal Funds effective rate plus 0.5% per annum, or a Eurodollar Rate for a one-month interest period plus 1%. The "floating rate" adder ranges from zero to 0.125%. The "Eurodollar Rate" is calculated as provided in the Credit Agreements. The "Eurodollar Rate" adder ranges from 0.625% to 1.125%.

The credit agreements require the borrower to maintain a ratio of consolidated debt to consolidated total capitalization not to exceed a maximum of 65%. The ratio calculation excludes assets, liabilities, revenues, and expenses included in MGE's financial statements as a result of the consolidation of VIEs, such as MGE Power Elm Road and MGE Power West Campus. As of December 31, 2018, the ratio of consolidated debt to consolidated total capitalization for each of MGE Energy and MGE, as calculated under the credit agreements' covenant, were 38.5% and 43.0%, respectively. See Footnote 11 of the Notes to Consolidated Financial Statements in this Report for additional information regarding the credit facilities.

Capitalization Ratios

MGE Energy's capitalization ratios were as follows:

	MGE Energy	
	2018	2017
Common shareholders' equity	61.5 %	64.6 %
Long-term debt[(a)]	37.5 %	35.1 %
Short-term debt	1.0 %	0.3 %

(a)

Includes the current portion of long-term debt.

Credit Ratings

MGE Energy's and MGE's access to the capital markets, including, in the case of MGE, the commercial paper market, and their respective financing costs in those markets, may depend on the credit ratings of the entity that is accessing the capital markets.

None of MGE Energy's or MGE's borrowing is subject to default or prepayment as a result of a downgrading of credit ratings, although a downgrading of MGE's credit ratings could increase fees and interest charges under both MGE Energy's and MGE's credit agreements.

Contractual Obligations and Commercial Commitments for MGE Energy and MGE

MGE Energy's and MGE's contractual obligations as of December 31, 2018, representing cash obligations that are considered to be firm commitments, are as follows:

		Payment Due Within:			Due After
(In thousands)	Total	1 Year	2-3 Years	4-5 Years	5 Years
MGE Energy					
Long-term debt[(a)]	$ 502,431	$ 4,553	$ 24,430	$ 39,903	$ 433,545
Short-term debt[(b)]	13,000	13,000	-	-	-
Repurchase-to-maturity transactions - loans[(c)]	2,181	396	799	864	122
Interest expense[(d)]	419,617	22,689	44,137	42,373	310,418
Operating leases[(e)]	28,783	1,646	2,466	1,964	22,707
Purchase obligations[(f)]	352,688	95,479	113,491	68,599	75,119
Other obligations[(g)]	30,815	22,696	2,454	1,968	3,697
Total MGE Energy contractual obligations	$ 1,349,515	$ 160,459	$ 187,777	$ 155,671	$ 845,608
MGE					
Long-term debt[(a)]	$ 502,431	$ 4,553	$ 24,430	$ 39,903	$ 433,545
Short-term debt[(b)]	13,000	13,000	-	-	-
Repurchase-to-maturity transactions - loans[(c)]	2,181	396	799	864	122
Interest expense[(d)]	419,617	22,689	44,137	42,373	310,418

Operating leases[e]	28,783	1,646	2,466	1,964	22,707
Purchase obligations[f]	352,688	95,479	113,491	68,599	75,119
Other obligations[g]	18,888	10,769	2,454	1,968	3,697
Total MGE contractual obligations	$ 1,337,588	$ 148,532	$ 187,777	$ 155,671	$ 845,608

(a)

Long-term debt consisting of secured first mortgage bonds, unsecured medium-term notes, and Industrial Development Revenue Bonds issued by MGE, and private placement debt issued by MGE, MGE Power Elm Road, and MGE Power West Campus.

(b)

Short-term debt consisting of commercial paper for MGE. See Footnote 11 of the Notes to Consolidated Financial Statements in this Report.

(c)

Chattel paper agreements. See Footnote 1.g. of the Notes to Consolidated Financial Statements in this Report.

(d)

Amount represents interest expense on long-term debt. See Footnote 10 of the Notes to Consolidated Financial Statements in this Report for further discussion of the long-term debt outstanding as of December 31, 2018.

(e)

Operating leases. See Footnote 17.b. of the Notes to Consolidated Financial Statements in this Report.

(f)

Purchase obligations for MGE Energy and MGE consist primarily of the purchase of electricity and natural gas, electric transmission, natural gas storage capacity, natural gas pipeline transportation, and the purchase and transport of coal. See Footnote 17.a. of the Notes to Consolidated Financial Statements in this Report.

(g)

Other obligations are primarily related to investment commitments, easements, environmental projects, fuel credit, and uncertain tax positions.

The above amounts do not include any contributions for MGE's pension and postretirement plans. MGE does not expect to need to make any required contributions to the qualified plans for 2019 or 2020. The contributions for years after 2020 are not yet currently estimated. Due to uncertainties in the future economic performance of plan assets, discount rates, and other key assumptions, estimated contributions are subject to change. MGE may also elect to make additional discretionary contributions to the plans.

The above amounts do not include future capital calls by ATC and ATC Holdco. In January 2019, MGE Transco made a $0.2 million capital contribution to ATC, and MGEE Transco made a $0.1 million capital contribution to ATC Holdco. The amount and timing of future capital calls to these entities is uncertain and primarily dependent on the operations and expansion of ATC and ATC Holdco.

MGE Energy's and MGE's commercial commitments as of December 31, 2018, representing commitments triggered by future events and including financing arrangements to secure obligations of MGE Energy and MGE, are as follows:

		Expiration Within:			Due After
(In thousands)	Total	1 Year	2-3 Years	4-5 Years	5 Years
MGE Energy					
Available lines of credit[(a)(c)]	$ 150,000	$ -	$ 150,000	$ -	$ -
MGE					
Available lines of credit[(b)(c)]	$ 100,000	$ -	$ 100,000	$ -	$ -

(a)

Amount includes the facilities discussed in (b) plus an additional line of credit. MGE Energy has available at any time a $50 million committed revolving credit agreement, expiring in June 2020. As of December 31, 2018, MGE Energy had no borrowings outstanding under this credit facility.

(b)

Amount includes two committed revolving credit agreements totaling $100 million expiring in June 2020. These credit facilities are used to support commercial paper issuances. As of December 31, 2018, MGE had no borrowings outstanding under these facilities. On that date, MGE had $13.0 million of commercial paper outstanding.

(c)

On February 7, 2019, MGE Energy and MGE amended and restated the credit agreements to extend the initial term expiration date to February 7, 2024.

Other Matters

ATC

In 2013, several parties filed a complaint with the FERC seeking to reduce the base return on equity (ROE) used by MISO transmission owners, including ATC, "due to changes in the capital markets." The complaint alleged that the MISO ROE should not exceed 9.15%, the equity components of hypothetical capital structures should be restricted to 50%, and the relevant incentive ROE adders should be discontinued. At the time, MISO's base ROE was 12.38% and ATC's base ROE was 12.2%. In February 2015, a second complaint was filed for the period February 2015 through May 2015 with the FERC requesting a reduction in the base ROE used by MISO transmission owners, including ATC, to 8.67%, with a refund effective date retroactive to the filing date of the complaint. In June 2016, an administrative law judge issued an initial decision for the second complaint that would reduce the transmission owner's base ROE to 9.7%. The initial decision will be reviewed by FERC. It is anticipated FERC will issue an order on this issue in 2019. On September 28, 2016, FERC issued an order on the first complaint, for the period November 2013 through February 2015, reducing the base ROE to 10.32%. This base ROE also became effective September 28, 2016, and will apply to future periods until FERC rules in the second complaint, at which time the base ROE ordered by FERC in the second complaint will prospectively become the authorized base ROE. Any change to ATC's ROE could result in lower equity earnings and distributions from ATC in the future.

In January 2015, FERC accepted the transmission owner's request for a 50 basis-point incentive ROE adder for participating in MISO. The adder became effective January 6, 2015.

Our share of ATC's earnings reflects a pre-tax adjustment of $0.5 million and $1.9 million for 2017 and 2016, respectively, recorded by ATC for these matters representing its estimate of its refund liability. There was not a pre-tax expense for 2018. We derived approximately 7.3%, 6.2%, and 6.8% of our net income for 2018, 2017, and 2016, respectively, from our investment in ATC.

Critical Accounting Estimates - MGE Energy and MGE

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, we evaluate our estimates, including those related to unbilled revenues, allowance for doubtful accounts, pension obligations, income taxes, derivatives, and regulatory assets and liabilities. We base our estimates on historical experience and on various assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Those values may differ from these estimates under different assumptions or conditions. We believe the following critical accounting estimates affect our more significant judgments used in the preparation of our consolidated financial statements.

Unbilled Revenues

Revenues from the sale of electricity and gas to customers are recorded when electricity/gas is delivered to those customers. The quantity of those sales is measured by customers' meters. Due to the large volume of those meters, it is impractical to read all of them at month end. Meters are read on a systematic basis throughout the month based on established meter-reading schedules. Consequently, at the end of any month, there exists a quantity of electricity and gas that has been delivered to customers but has not been captured by the meter readings. As a result, management must estimate revenue related to electricity and gas delivered to customers between their meter-read dates and the end of the period. These estimates include:

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The amount of electricity expected to be lost in the process of its transmission and distribution to customers (line loss) and the amount of electricity actually delivered to customers.

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The amount of gas expected to be lost in the process of its distribution to customers and the amount of gas actually delivered to customers.

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The mix of sales between customer rate classes, which is based upon historical utilization assumptions.

MGE monitors the reasonableness of the unbilled revenue estimate through the review of ratios such as unbilled electric consumption compared to billed electric sales. In the case of unbilled gas, the estimated unbilled consumption is compared to various other statistics, including percent of gas available for sale, change in unbilled month to month and change in unbilled compared to the prior year in order to confirm its reasonableness.

Allowance for Doubtful Accounts

MGE maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. It determines the allowance based on historical write-off experience, regional economic data, and review of the accounts receivable aging. MGE reviews its allowance for doubtful accounts monthly. Although management believes that the allowance for doubtful accounts is MGE's best estimate of the amount of probable credit losses, if the financial condition of MGE's customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required.

Pension and Other Postretirement Benefit Plans

MGE provides employees with certain retirement (pension) and postretirement (health care and life insurance) benefits. In order to measure the expense and obligations associated with these benefits, management must make a variety of estimates, including discount rates used to value certain liabilities, the expected return on plan assets set aside to fund these costs, the rate of compensation increase, employee turnover rates, retirement rates, health care trends, mortality rates, and other factors. These accounting estimates bear the risk of change due to the uncertainty attached to the estimate as well as the fact that these estimates are difficult to measure. Different estimates used by us could result in recognizing different amounts of expense over different periods of time. Recovery in rates is expected.

MGE uses third-party specialists to assist us in evaluating our assumptions as well as appropriately measure the costs and obligations associated with these retirement benefits. The discount rate and expected return on plan assets are based primarily on available investment yields and the historical performance of our plan assets. They are critical accounting estimates because they are subject to management's judgment and can materially affect net income.

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Assumed return on assets. This assumption represents the rate of return on plan assets reflecting the average rate of earnings expected on the funds invested (or to be invested) to provide for the benefits included in the projected benefit obligation. For 2018, MGE used an assumed return on assets of 7.40% for pension and 6.94% for other postretirement benefits. In 2019, the pension asset assumption will decrease to 7.20% and the postretirement benefit assumption will decrease to 6.72%. The annual expected rate of return is based on projected long-term equity and bond returns, maturities and asset allocations. Holding other assumptions constant, for every 1% reduction in the expected rate of return on plan assets, annual pension and other postretirement cost would increase by approximately $4.0 million, before taxes.

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Discount rate. The discount rate represents the rate at which pension obligations could effectively be settled on a present-value basis. MGE uses high-grade bond yields as a benchmark for determining the appropriate discount rate. MGE uses individual spot rates, instead of a weighted average of the yield curve spot rates, for measuring the service cost and interest cost components for net periodic benefit cost. Holding other assumptions constant, a 0.5%

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reduction in the discount rate on the obligation balance as of December 31, 2018, would increase annual pension and other postretirement cost by approximately $2.6 million, before taxes.

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Medical trend assumptions. The health care cost trend rate is the assumed rate of increase in per-capita health care charges.

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Mortality rate assumption. Expected mortality rates are used in the valuation to determine the expected duration of future benefit payments to the plan participants. MGE utilizes mortality tables and projection scales developed by a third-party actuary that were updated in 2018.

See Footnote 13 of the Notes to Consolidated Financial Statements in this Report for additional discussion of these plans.

Income Tax Provision

MGE Energy's and MGE's income tax provisions, including both current and deferred components, are based on estimates, assumptions, calculations, and interpretation of tax statutes for the current and future years. Determination of current-year federal and state income tax will not be settled for years.

Management regularly makes assessments of tax return outcomes relative to financial statement tax provisions and adjusts the tax provisions in the period when facts become final.

Additionally, in determining our current income tax provision, we assess temporary differences resulting from differing treatments of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are recorded in our balance sheets. When we maintain deferred tax assets, we assess the likelihood that these assets will be recovered through adjustments to future taxable income. Future tax benefits are recognized to the extent that realization of such benefits is more likely than not. A valuation allowance is recorded for those benefits that do not meet this criterion. We record an allowance reducing the asset to a value we believe will be recoverable based on our expectation of future taxable income. We believe the accounting estimate related to the valuation allowance is a critical accounting estimate because it is highly susceptible to change from period to period as it requires management to make assumptions about our future income over the lives of the deferred tax assets, and the impact of increasing or decreasing the valuation allowance is potentially material to our results of operations.

On December 22, 2017, President Trump signed the Tax Act into law. The passing of the law significantly lowers MGE's corporate tax rates and triggered a remeasurement of deferred taxes. We reflected estimates of the impact of the Tax Act in our year-end 2017 financial results. In accordance with Staff Accounting Bulletin 118, any subsequent adjustment to these amounts would be recorded in 2018 when the analysis is complete. No material adjustments have been recorded during 2018. Furthermore, while regulation allows us to incorporate changes in tax law into the rate-setting process, there will likely be timing delays before realization of the changes.

Accounting for uncertainty in income taxes applies to all tax positions and requires a recognition threshold and measurement standard for the financial statement recognition and measurement of a tax position taken, or expected to be taken, in an income tax return. The threshold is defined for recognizing tax return positions in the financial statements as "more likely than not" that the position is sustainable, based on its merits. Subsequent recognition, derecognition, and measurement is based on management's best judgment given the facts, circumstances and information available at the reporting date.

Accounting for Derivative Instruments

MGE accounts for derivative financial instruments, except those qualifying for the normal purchase normal sale exception, at their fair value on the balance sheet. Fair value is determined using current quoted market prices, except for the PPA, which is valued utilizing an internally-developed pricing model. This model includes observable and unobservable inputs.

MGE received approval from the PSCW to establish a regulatory asset or liability for the deferral of the effects of mark-to-market accounting on contracts related to commodity hedging in MGE's regulated operations.

Regulatory Assets/Liabilities

Regulatory assets represent costs that have been deferred to future periods when it is probable that the regulator will allow future recovery of those costs through rates. MGE bases its assessment of recovery on precedents established by the regulatory body. Regulatory liabilities represent previous collections from customers that are expected to be refunded to customers in future periods. Regulatory assets and regulatory liabilities typically include deferral of energy costs, the normalization of income taxes, the deferral of certain operating expenses, and non-ARO removal costs. The accounting for these regulatory assets and liabilities is in accordance with regulatory accounting standards.

MGE continually assesses whether the regulatory assets and liabilities meet the criteria for probability of future recovery or deferral. This assessment considers factors such as changes in the regulatory environment, recent rate orders to other regulated entities under the same jurisdiction, and the status of any pending or potential deregulation legislation. If future recovery of costs becomes no longer probable, the assets and liabilities would be recognized as current-period revenues or expenses.

Amortization of regulatory assets and liabilities is provided over the recovery or deferral period as allowed in the related regulatory agreement.

Adoption of Accounting Principles and Recently Issued Accounting Pronouncements - MGE Energy and MGE

See Footnote 2 of the Notes to Consolidated Financial Statements in this Report for discussion of new accounting pronouncements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

MGE Energy and MGE are potentially exposed to market risk associated with interest rates, commodity prices, and equity returns. MGE currently has no exposure to foreign currency risk. MGE manages some risk exposure through risk management policies and the use of derivative instruments. MGE's risk management policy prohibits speculative trading transactions.

Commodity Price Risk

MGE has commodity price risk exposure with respect to the price of natural gas, electricity, coal, emission credits, and oil. MGE's electric operations burn natural gas in several of its peaking power plants and, in many cases, the cost of purchased power is tied to the cost of natural gas. MGE employs established policies and procedures to reduce the market risks associated with changing commodity prices. MGE's commodity risks are somewhat mitigated by the current ratemaking process in place for recovering electric fuel cost, purchased energy costs, and the cost of natural gas.

MGE's electric fuel costs are subject to fuel rules established by the PSCW. The fuel rules require the PSCW and Wisconsin utilities to defer electric fuel-related costs that fall outside a symmetrical cost tolerance band. Any over/under recovery of the actual costs in a year outside of the symmetrical cost tolerance band is determined in the following year and is then reflected in future billings to electric retail customers. Under the electric fuel rules, MGE is required to defer the benefit of lower costs if the actual electric fuel costs fall outside the lower end of the range and is required to defer costs, less any excess revenues, if the actual electric fuel costs exceed the upper end of the range. Excess revenues are defined as revenues in the year in question that provide MGE with a greater return on common equity than authorized by the PSCW in MGE's latest rate order. The range is defined by the PSCW and has been modified throughout the years based on market conditions and other relevant factors. Currently, MGE is subject to a plus or minus 2% range. MGE assumes the risks and benefits of variances that are within the cost tolerance band. For 2019, fuel and purchased power costs included in MGE's fuel monitoring level rates are $77.3 million. See Footnote 8 of the Notes to Consolidated Financial Statements in this Report for additional information.

MGE recovers the cost of natural gas in its gas utility segment through the purchased gas adjustment clause (PGA). Under the PGA, MGE is able to pass through to its gas customers the cost of gas.

MGE also reduces price risk caused by market fluctuations via physical contracts and financial derivative contracts, including futures, swaps, options, forwards, and other contractual commitments. The maximum length of time over which cash flows related to energy commodities can be hedged under applicable PSCW approvals is four years.

MGE has financial gas and electric commodity contracts to hedge commodity price risk in the gas and electric utility segments. These contracts are primarily comprised of exchange-traded option and future contracts. MGE also holds

financial transmission rights (FTRs), which are used to hedge the risk of increased transmission congestion charges. As of December 31, 2018, the fair value of these instruments exceeded their cost basis by $0.7 million. Under the PGA clause and electric fuel rules, MGE may include the costs and benefits of the aforementioned fuel price risk management tools in the costs of fuel (natural gas or power). Because these costs/benefits are recoverable, the related unrealized loss/gain has been deferred on the consolidated balance sheets as a regulatory asset/liability.

MGE has also entered into a purchased power agreement that provides MGE with firm capacity and energy that began on June 1, 2012, and ends on May 31, 2022 (the "base term"). The agreement also allows MGE an option to extend the contract after the base term. The agreement is considered a derivative contract and is recognized at its fair value on the consolidated balance sheets. However, the derivative qualifies for regulatory deferral and is recognized with a corresponding regulatory asset or liability depending on whether the fair value is in a loss or gain position. The fair value of the contract as of December 31, 2018, reflects a loss position of $32.5 million.

Interest Rate Risk

Both MGE Energy and MGE may have short term borrowings at varying interest rates. MGE issues commercial paper for its short-term borrowings, while MGE Energy draws from its current credit facility to meet its short-term borrowing needs. Borrowing levels vary from period to period depending upon capital investments and other factors. Future short-term interest expense and payments will reflect both future short-term interest rates and borrowing levels. MGE Energy and MGE manage interest rate risk by limiting their variable rate exposure and continually monitoring the effects of market changes on interest rates. MGE is not exposed to changes in interest rates on a substantial portion of its long-term debt until that debt matures and is refinanced at market rates. Assuming the current level of variable rate borrowings and assuming a 1% change in the 2018 average interest rate under those borrowings, it is estimated that our 2018 interest expense and net income would have changed $0.1 million for both MGE Energy and MGE.

Equity Price Risk - Pension-Related Assets

MGE currently funds its liabilities related to employee benefits through trust funds. These funds, which include investments in debt and equity securities, are managed by various investment managers. Changes in market value of these investments can have an impact on the future expenses related to these liabilities. Holding other assumptions constant, for every 1% reduction in the expected rate of return on plan assets, annual pension and other postretirement cost would increase by approximately $4.0 million, before taxes. MGE's risk of expense and annuity payments, as a result of changes in the market value of the trust funds, is mitigated in part through future rate actions by the PSCW. The value of employee benefit plans trusts' assets have decreased in value by approximately 7.01% and increased in value by approximately 18.36% during the years ended December 31, 2018 and 2017, respectively.

Credit Risk - Counterparty

Credit risk is the loss that may result from counterparty nonperformance. MGE is exposed to credit risk primarily through its merchant energy business. MGE uses credit policies to manage its credit risk, which include utilizing an established credit approval process, monitoring counterparty limits, employing credit mitigation measures such as collateral or prepayment arrangements, and using netting agreements.

Due to the possibility of extreme volatility in the prices of energy commodities and derivatives, the market value of contractual positions with individual counterparties could exceed established credit limits or collateral provided by those counterparties. If such a counterparty were then to fail to perform its obligations under its contract (for example, fail to deliver the electricity MGE originally contracted for), MGE could sustain a loss that could have a material impact on its financial results.

Additionally, if a counterparty were to default and MGE were to liquidate all contracts with that entity, MGE's credit loss would include the loss in value of mark-to-market contracts; the amount owed for settled transactions; and additional payments, if any, to settle unrealized losses. As of December 31, 2018, no counterparties have defaulted.

MGE is obligated to provide service to all electric and gas customers within its respective franchised territories. MGE's franchised electric territory includes a 264 square-mile area in Dane County, Wisconsin, and MGE's franchised gas territory includes a service area covering 1,684 square miles in Wisconsin. Based on results for the year ended December 31, 2018, no one customer constituted more than 10% of total operating revenues for MGE Energy and MGE. Credit risk for electric and gas is managed by MGE's credit and collection policies, which are consistent with state regulatory requirements.

Cash, cash equivalents, and customer accounts receivable are the financial instruments that potentially subject MGE Energy and MGE to concentrations of credit risk. MGE Energy and MGE place their cash and cash equivalents with high credit-quality financial institutions. MGE has limited concentrations of credit risk from customer accounts receivable because of the large number of customers and relatively strong economy in its service territory.

Item 8. Financial Statements and Supplementary Data.

MGE Energy

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an assessment of the effectiveness of our internal control over financial reporting based on the framework in the Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our assessment under the framework in the Internal Control - Integrated Framework (2013), our management concluded that our internal control over financial reporting was effective as of December 31, 2018.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The effectiveness of MGE Energy's internal control over financial reporting as of December 31, 2018, has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears herein.

February 22, 2019

MGE

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an assessment of the effectiveness of our internal control over financial reporting based on the framework in the Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our assessment under the framework in the Internal Control - Integrated Framework (2013), our management concluded that our internal control over financial reporting was effective as of December 31, 2018.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

February 22, 2019

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of MGE Energy, Inc.:

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of MGE Energy, Inc. and its subsidiaries (the "Company") as of December 31, 2018 and 2017, and the related consolidated statements of income, comprehensive income, cash flows and common equity for each of the three years in the period ended December 31, 2018, including the related notes and financial statement schedules listed in the index appearing under Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP

Chicago, Illinois

February 22, 2019

We have served as the Company's auditor since 1993.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholder of Madison Gas and Electric Company:

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Madison Gas and Electric Company and its subsidiaries (the "Company") as of December 31, 2018 and 2017, and the related consolidated statements of income, comprehensive income, cash flows and equity for each of the three years in the period ended December 31, 2018, including the related notes and financial statement schedule listed in the index appearing under Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2018 in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these consolidated financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Chicago, Illinois

February 22, 2019

We have served as the Company's auditor since 1993.

MGE Energy, Inc.
Consolidated Statements of Income
(In thousands, except per share amounts)

	For the Years Ended December 31,		
	2018	**2017**	**2016**
Operating Revenues:			
Electric revenues	$ 402,001	$ 414,274	$ 410,202
Gas revenues	157,767	148,825	134,543
Total Operating Revenues	559,768	563,099	544,745
Operating Expenses:			
Fuel for electric generation	56,141	53,029	60,736
Purchased power	50,807	58,690	56,313
Cost of gas sold	84,968	76,644	66,771
Other operations and maintenance	177,823	177,740	172,335
Depreciation and amortization	56,412	53,077	44,646
Other general taxes	19,410	19,294	20,062
Total Operating Expenses	445,561	438,474	420,863
Operating Income	114,207	124,625	123,882
Other income, net	17,055	14,399	14,057
Interest expense, net	(19,609)	(19,324)	(19,866)
Income before income taxes	111,653	119,700	118,073
Income tax provision	(27,434)	(22,094)	(42,513)
Net Income	$ 84,219	$ 97,606	$ 75,560
Earnings Per Share of Common Stock			
(basic and diluted)	$ 2.43	$ 2.82	$ 2.18
Dividends per share of common stock	$ 1.32	$ 1.26	$ 1.21
Weighted Average Shares Outstanding			
(basic and diluted)	34,668	34,668	34,668

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

MGE Energy, Inc.
Consolidated Statements of Comprehensive Income
(In thousands)

	For the Years Ended December 31,		
	2018	**2017**	**2016**
Net Income	$ 84,219	$ 97,606	$ 75,560
Other comprehensive income, net of tax:			
Unrealized gain (loss) on available-for-sale securities, net of tax ($-, $(117), and $104)	-	175	(155)
Comprehensive Income	$ 84,219	$ 97,781	$ 75,405

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

MGE Energy, Inc.
Consolidated Statements of Cash Flows
(In thousands)

	For the Years Ended December 31,		
	2018	2017	2016
Operating Activities:			
Net income	$ 84,219	$ 97,606	$ 75,560
Items not affecting cash:			
Depreciation and amortization	56,412	53,077	44,646
Deferred income taxes	3,749	(4,082)	22,421
Provision for doubtful receivables	1,366	1,016	1,196
Employee benefit plan (credit) cost	(2,002)	831	295
Equity earnings in ATC	(8,821)	(10,125)	(8,428)
Gain on sale of property	-	(1,547)	-
Other items	(814)	641	2,462
Changes in working capital items:			
Trade and other receivables	(2,235)	(4,502)	(3,594)
Inventories	2,724	(2,568)	7,273
Unbilled revenues	3,157	(1,554)	(4,838)
Prepaid taxes	10,320	101	8,616
Other current assets	251	(2,786)	15
Accounts payable	(4,855)	(5,290)	9,881
Other current liabilities	11,957	3,948	(1,738)
Dividends from ATC	6,958	8,803	5,854
Cash contributions to pension and other postretirement plans	(5,584)	(11,304)	(14,452)
Other noncurrent items, net	(3,762)	9,108	2,695
Cash Provided by Operating Activities	153,040	131,373	147,864
Investing Activities:			
Capital expenditures	(212,197)	(108,131)	(83,659)
Capital contributions to investments	(5,926)	(11,081)	(2,958)
Proceeds from sale of property	-	2,819	-
Other	(205)	118	(196)
Cash Used for Investing Activities	(218,328)	(116,275)	(86,813)
Financing Activities:			

Cash dividends paid on common stock		(45,762)		(43,682)		(41,775)
Repayment of long-term debt		(24,453)		(34,358)		(4,267)
Issuance of long-term debt		100,000		70,000		-
Proceeds from short-term debt		9,000		4,000		-
Other		(662)		(597)		(70)
Cash Provided by (Used for) Financing Activities		38,123		(4,637)		(46,112)
Change in cash, cash equivalents, and restricted cash		(27,165)		10,461		14,939
Cash, cash equivalents, and restricted cash at beginning of period		112,094		101,633		86,694
Cash, cash equivalents, and restricted cash at end of period	$	84,929	$	112,094	$	101,633
Supplemental Disclosures of Cash Flow Information:						
Interest paid	$	20,018	$	19,176	$	19,415
Income taxes paid	$	12,597	$	27,149	$	21,831
Income taxes received	$	(59)	$	-	$	(10,000)
Significant noncash investing activities:						
Accrued capital expenditures	$	11,129	$	16,602	$	16,376

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

MGE Energy, Inc.
Consolidated Balance Sheets
(In thousands)

	As of December 31,	
ASSETS	**2018**	**2017**
Current Assets:		
Cash and cash equivalents	$ 83,102	$ 107,952
Accounts receivable, less reserves of $2,614 and $2,840, respectively	43,593	42,299
Other accounts receivable, less reserves of $540 and $335, respectively	6,262	9,440
Unbilled revenues	28,243	31,400
Materials and supplies, at average cost	24,093	22,614
Fuel for electric generation, at average cost	6,599	8,256
Stored natural gas, at average cost	11,303	12,923
Prepaid taxes	16,215	26,535
Regulatory assets - current	9,477	7,888
Assets held for sale	3,080	8,817
Other current assets	8,593	12,507
Total Current Assets	240,560	290,631
Other long-term receivables	2,709	4,788
Regulatory assets	145,424	142,567
Pension and other postretirement benefit asset	-	7,336
Other deferred assets and other	12,488	731
Property, Plant, and Equipment:		
Property, plant, and equipment, net	1,369,766	1,283,313
Construction work in progress	139,671	58,044
Total Property, Plant, and Equipment	1,509,437	1,341,357
Investments	78,000	67,772
Total Assets	$ 1,988,618	$ 1,855,182
LIABILITIES AND CAPITALIZATION		
Current Liabilities:		
Long-term debt due within one year	$ 4,553	$ 24,452
Short-term debt	13,000	4,000
Accounts payable	46,158	47,645
Accrued interest and taxes	7,384	5,602

Accrued payroll related items	13,044	12,244
Regulatory liabilities - current	13,826	5,633
Derivative liabilities	8,550	8,180
Other current liabilities	14,113	18,758
Total Current Liabilities	120,628	126,514
Other Credits:		
Deferred income taxes	231,952	225,130
Investment tax credit - deferred	818	918
Regulatory liabilities	165,638	154,153
Accrued pension and other postretirement benefits	67,483	69,088
Derivative liabilities	23,980	33,990
Other deferred liabilities and other	68,132	69,041
Total Other Credits	558,003	552,320
Capitalization:		
Common shareholders' equity:		
Common Stock - $1 par value - 75,000 shares authorized;		
34,668 shares issued and outstanding	34,668	34,668
Additional paid-in capital	316,268	316,268
Retained earnings	465,708	426,874
Accumulated other comprehensive income, net of tax	-	377
Total Common Shareholders' Equity	816,644	778,187
Long-term debt	493,343	398,161
Total Capitalization	1,309,987	1,176,348
Commitments and contingencies (see Footnote 17)		
Total Liabilities and Capitalization	$ 1,988,618	$ 1,855,182

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

MGE Energy, Inc.
Consolidated Statements of Common Equity
(In thousands, except per share amounts)

	Common Stock Shares	Common Stock Value	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income/(Loss)	Total
2016						
Beginning balance - December 31, 2015	34,668	$ 34,668	$ 316,268	$ 339,165	$ 357	$ 690,458
Net income				75,560		75,560
Other comprehensive loss					(155)	(155)
Common stock dividends declared ($1.21 per share)				(41,775)		(41,775)
Ending balance - December 31, 2016	34,668	$ 34,668	$ 316,268	$ 372,950	$ 202	$ 724,088
2017						
Net income				97,606		97,606
Other comprehensive income					175	175
Common stock dividends declared ($1.26 per share)				(43,682)		(43,682)
Ending balance - December 31, 2017	34,668	$ 34,668	$ 316,268	$ 426,874	$ 377	$ 778,187
2018						
Cumulative effect of new accounting principle				377	(377)	-
Beginning balance - Adjusted				427,251	-	778,187
Net income				84,219		84,219
Common stock dividends declared ($1.32 per share)				(45,762)		(45,762)
Ending balance - December 31, 2018	34,668	$ 34,668	$ 316,268	$ 465,708	$ -	$ 816,644

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

Madison Gas and Electric Company
Consolidated Statements of Income
(In thousands)

	For the Years Ended December 31,		
	2018	**2017**	**2016**
Operating Revenues:			
Electric revenues	$ 402,001	$ 414,277	$ 410,226
Gas revenues	157,767	148,834	134,572
Total Operating Revenues	559,768	563,111	544,798
Operating Expenses:			
Fuel for electric generation	56,141	53,031	60,745
Purchased power	50,807	58,692	56,327
Cost of gas sold	84,968	76,652	66,800
Other operations and maintenance	176,762	176,729	171,423
Depreciation and amortization	56,412	53,077	44,622
Other general taxes	19,410	19,294	20,062
Income tax provision	25,098	18,280	39,616
Total Operating Expenses	469,598	455,755	459,595
Operating Income	90,170	107,356	85,203
Other Income and Deductions:			
AFUDC - equity funds	3,284	1,222	1,207
Equity earnings in MGE Transco	-	-	6,366
Income tax provision	(363)	(710)	(2,175)
Other income, net	7,142	5,228	4,129
Total Other Income and Deductions	10,063	5,740	9,527
Income before interest expense	100,233	113,096	94,730
Interest Expense:			
Interest on long-term debt	21,967	20,273	20,351
Other interest, net	338	163	182
AFUDC - borrowed funds	(1,108)	(412)	(395)

Net Interest Expense	21,197	20,024	20,138
Net Income	$ 79,036	$ 93,072	$ 74,592
Less Net Income Attributable to Noncontrolling Interest, net of tax	(22,552)	(43,237)	(23,358)
Net Income Attributable to MGE	$ 56,484	$ 49,835	$ 51,234

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

Madison Gas and Electric Company
Consolidated Statements of Comprehensive Income
(In thousands)

	For the Years Ended December 31,		
	2018	**2017**	**2016**
Net Income	$ 79,036	$ 93,072	$ 74,592
Other comprehensive income, net of tax:			
Unrealized loss on available-for-sale securities, net of tax ($-, $31, and $2)	-	(47)	(4)
Comprehensive Income	$ 79,036	$ 93,025	$ 74,588
Less: Comprehensive Income Attributable to Noncontrolling Interest, net of tax	(22,552)	(43,237)	(23,358)
Comprehensive Income Attributable to MGE	$ 56,484	$ 49,788	$ 51,230

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

Madison Gas and Electric Company
Consolidated Statements of Cash Flows
(In thousands)

	For the Years Ended December 31,		
	2018	**2017**	**2016**
Operating Activities:			
Net income	$ 79,036	$ 93,072	$ 74,592
Items not affecting cash:			
Depreciation and amortization	56,412	53,077	44,622
Deferred income taxes	(69)	(7,760)	20,876
Provision for doubtful receivables	1,366	1,016	1,196
Employee benefit plan (credit) cost	(2,002)	831	295
Equity earnings in MGE Transco	-	-	(6,366)
Gain on sale of property	-	(1,547)	-
Other items	(107)	1,408	2,990
Changes in working capital items:			
Trade and other receivables	(2,160)	(4,113)	(3,583)
Inventories	2,724	(2,568)	7,273
Unbilled revenues	3,157	(1,554)	(4,838)
Prepaid taxes	9,283	725	8,481
Other current assets	255	(2,788)	14
Accounts payable	(4,817)	(5,312)	9,941
Accrued interest and taxes	4,761	118	419
Other current liabilities	9,685	1,941	(2,137)
Dividends from MGE Transco	-	-	5,032
Cash contributions to pension and other postretirement plans	(5,584)	(11,304)	(14,452)
Other noncurrent items, net	(3,946)	8,878	2,497
Cash Provided by Operating Activities	147,994	124,120	146,852
Investing Activities:			
Capital expenditures	(212,197)	(108,131)	(83,659)
Capital contributions to investments	-	-	(1,598)
Proceeds from sale of property	-	1,721	-
Other	(1,105)	(162)	(378)
Cash Used for Investing Activities	(213,302)	(106,572)	(85,635)

Financing Activities:			
Cash dividends paid to parent by MGE	-	(45,000)	(50,000)
Distributions to parent from noncontrolling interest	(22,000)	(18,000)	(24,113)
Equity contribution received by noncontrolling interest	-	-	1,598
Repayment of long-term debt	(24,453)	(34,358)	(4,267)
Issuance of long-term debt	100,000	70,000	-
Proceeds from short-term debt	9,000	4,000	-
Other	(662)	(539)	(63)
Cash Provided by (Used for) Financing Activities	61,885	(23,897)	(76,845)
Change in cash, cash equivalents, and restricted cash	(3,423)	(6,349)	(15,628)
Cash, cash equivalents, and restricted cash at beginning of period	10,093	16,442	32,070
Cash, cash equivalents, and restricted cash at end of period	$ 6,670	$ 10,093	$ 16,442
Supplemental disclosures of cash flow information:			
Interest paid	$ 20,018	$ 19,176	$ 19,415
Income taxes paid	$ -	$ 1	$ 29
Income taxes received	$ (59)	$ -	$ -
Significant noncash investing activities:			
Accrued capital expenditures	$ 11,129	$ 16,602	$ 16,376
Dividend in kind to parent	$ -	$ -	$ 15,822

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

Madison Gas and Electric Company
Consolidated Balance Sheets
(In thousands)

	As of December 31,	
ASSETS	**2018**	**2017**
Current Assets:		
Cash and cash equivalents	$ 4,843	$ 5,951
Accounts receivable, less reserves of $2,614 and $2,840, respectively	43,593	42,299
Affiliate receivables	621	668
Other accounts receivable, less reserves of $540 and $335, respectively	6,111	6,984
Unbilled revenues	28,243	31,400
Materials and supplies, at average cost	24,093	22,614
Fuel for electric generation, at average cost	6,599	8,256
Stored natural gas, at average cost	11,303	12,923
Prepaid taxes	15,790	25,073
Regulatory assets - current	9,477	7,888
Assets held for sale	3,080	8,817
Other current assets	8,541	12,484
Total Current Assets	162,294	185,357
Affiliate receivable long-term	3,177	3,707
Regulatory assets	145,424	142,567
Pension and other postretirement benefit asset	-	7,336
Other deferred assets and other	14,142	3,280
Property, Plant, and Equipment:		
Property, plant, and equipment, net	1,369,795	1,283,341
Construction work in progress	139,671	58,044
Total Property, Plant, and Equipment	1,509,466	1,341,385
Investments	388	409
Total Assets	$ 1,834,891	$ 1,684,041

LIABILITIES AND CAPITALIZATION		
Current Liabilities:		
Long-term debt due within one year	$ 4,553	$ 24,452
Short-term debt	13,000	4,000
Accounts payable	46,165	47,614

Accrued interest and taxes	10,319	5,558
Accrued payroll related items	13,044	12,244
Regulatory liabilities - current	13,826	5,633
Derivative liabilities	8,550	8,180
Other current liabilities	11,614	16,749
Total Current Liabilities	121,071	124,430
Other Credits:		
Deferred income taxes	204,616	201,486
Investment tax credit - deferred	818	918
Regulatory liabilities	165,638	154,153
Accrued pension and other postretirement benefits	67,483	69,088
Derivative liabilities	23,980	33,990
Other deferred liabilities and other	68,132	69,041
Total Other Credits	530,667	528,676
Capitalization:		
Common shareholder's equity:		
Common Stock - $1 par value - 50,000 shares authorized; 17,348 shares outstanding	17,348	17,348
Additional paid-in capital	192,417	192,417
Retained earnings	338,591	282,135
Accumulated other comprehensive loss, net of tax	-	(28)
Total Common Shareholder's Equity	548,356	491,872
Noncontrolling interest	141,454	140,902
Total Equity	689,810	632,774
Long-term debt	493,343	398,161
Total Capitalization	1,183,153	1,030,935
Commitments and contingencies (see Footnote 17)		
Total Liabilities and Capitalization	$ 1,834,891	$ 1,684,041

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

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Madison Gas and Electric Company
Consolidated Statements of Equity
(In thousands)

	Common Stock Shares	Common Stock Value	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income/(Loss)	Non-Controlling Interest	Total
2016							
Beginning balance - December 31, 2015	17,348	$ 17,348	$ 192,417	$ 291,888	$ 23	$ 140,308	$ 641,984
Net income				51,234		23,358	74,592
Other comprehensive loss					(4)		(4)
Cash dividends paid to parent by MGE				(50,000)			(50,000)
Dividend in kind to parent				(15,822)			(15,822)
Equity contribution received by noncontrolling interest						1,598	1,598
Distributions to parent from noncontrolling interest						(24,113)	(24,113)
Deconsolidation of noncontrolling interest						(25,486)	(25,486)
Ending balance - December 31, 2016	17,348	$ 17,348	$ 192,417	$ 277,300	$ 19	$ 115,665	$ 602,749
2017							
Net income				49,835		43,237	93,072
Other comprehensive loss					(47)		(47)
Cash dividends paid to parent by MGE				(45,000)			(45,000)
Distributions to parent from noncontrolling interest						(18,000)	(18,000)
Ending balance - December 31, 2017	17,348	$ 17,348	$ 192,417	$ 282,135	$ (28)	$ 140,902	$ 632,774
2018							

Cumulative effect of new accounting principle				(28)	28		-
Beginning balance - adjusted				282,107	-		632,774
Net income				56,484		22,552	79,036
Distributions to parent from noncontrolling interest						(22,000)	(22,000)
Ending balance - December 31, 2018	17,348	$ 17,348	$ 192,417	$ 338,591	$ -	$ 141,454	$ 689,810

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

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Notes to Consolidated Financial Statements

December 31, 2018, 2017, and 2016

This report is a combined report of MGE Energy and MGE. The notes to the consolidated financial statements that follow include consolidated MGE Energy footnotes and certain footnotes related to MGE as signified below.

1.

Summary of Significant Accounting Policies.

a.

Basis of Presentation - MGE Energy and MGE.

The consolidated financial statements are prepared in conformity with accounting principles generally accepted in the United States of America (GAAP), which give recognition to the rate making accounting policies for regulated operations prescribed by the regulatory authorities having jurisdiction, principally the PSCW and FERC. MGE's accounting records conform to the FERC uniform system of accounts.

b.

Principles of Consolidation - MGE Energy and MGE.

MGE, a wholly owned subsidiary of MGE Energy, is a regulated electric and gas utility headquartered in Madison, Wisconsin. MGE Energy and MGE consolidate all majority owned subsidiaries in which they have a controlling influence.

Additional wholly owned subsidiaries of MGE Energy include CWDC, MAGAEL, MGE Power, MGE State Energy Services, MGE Services, MGE Transco, and MGEE Transco. CWDC owns 100% of North Mendota, a subsidiary created to serve as a development entity for property. MGE Power owns 100% of MGE Power Elm Road and MGE Power West Campus. MGE Power and its subsidiaries are part of MGE Energy's nonregulated energy operations, which were formed to own and lease electric generation projects to assist MGE. MGE Transco and MGEE Transco are nonregulated entities formed to manage the investments in ATC and ATC Holdco, respectively. On December 1, 2016, MGE's ownership interest in MGE Transco was transferred to MGE Energy. See Footnote 6 for further discussion of the transfer of MGE's investment in MGE Transco.

MGE Energy and MGE consolidate variable interest entities (VIEs) for which it is the primary beneficiary. Variable interest entities are legal entities that possess any of the following characteristics: equity investors who have an insufficient amount of equity at risk to finance their activities, equity owners who do not have the power to direct the significant activities of the entity (or have voting rights that are disproportionate to their ownership interest), or equity holders who do not receive expected losses or returns significant to the VIE. If MGE Energy or MGE is not the primary beneficiary and an ownership interest is held, the VIE is accounted for under the equity method of accounting. When assessing the determination of the primary beneficiary, all relevant facts and circumstances are considered, including: the power, through voting or similar rights, to direct the activities of the VIE that most significantly impact the VIE's economic performance and the obligation to absorb the expected losses and/or the right to receive the expected returns of the VIE. Ongoing reassessments of all VIEs are performed to determine if the primary beneficiary status has changed. MGE has consolidated MGE Power Elm Road and MGE Power West Campus. Both entities are VIEs. MGE is considered the primary beneficiary of these entities as a result of contractual agreements. See Footnote 3 for more discussion of these entities.

Prior to December 1, 2016, MGE Transco was jointly owned by MGE Energy and MGE. MGE's ownership interest in MGE Transco declined below a majority in July 2016. As a result of the change in majority ownership, MGE deconsolidated MGE Energy's proportionate share of the equity in MGE Transco. See Footnote 20 for further discussion regarding the deconsolidation of noncontrolling interest.

The consolidated financial statements reflect the application of certain accounting policies described in this note. All intercompany accounts and transactions have been eliminated in consolidation.

c.

Use of Estimates - MGE Energy and MGE.

In order to prepare consolidated financial statements in conformity with GAAP, management must make estimates and assumptions. These estimates could affect reported amounts of assets, liabilities, and disclosures at the date of the financial statements, as well as the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from management's estimates.

d.

Cash, Cash Equivalents, and Restricted Cash   MGE Energy and MGE.

The following table presents the components of total cash, cash equivalents, and restricted cash on the consolidated balance sheets.

(In thousands)	MGE Energy		MGE	
As of December 31,	2018	2017	2018	2017
Cash and cash equivalents	$ 83,102	$ 107,952	$ 4,843	$ 5,951
Restricted cash	634	1,635	634	1,635
Receivable - margin account	1,193	2,507	1,193	2,507
Cash, cash equivalents, and restricted cash	$ 84,929	$ 112,094	$ 6,670	$ 10,093

Cash Equivalents

MGE Energy and MGE consider all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents.

Restricted Cash

MGE has certain cash accounts that are restricted to uses other than current operations and designated for a specific purpose. MGE's restricted cash accounts include cash held by trustees for certain employee benefits and cash deposits held by third parties. These are included in "Other current assets" on the consolidated balance sheets.

Receivable   Margin Account

Cash amounts held by counterparties as margin collateral for certain financial transactions are recorded as Receivable margin account in "Other current assets" on the consolidated balance sheets. The costs being hedged are fuel for electric generation, purchased power, and cost of gas sold.

Retrospective adjustments to cash flow amounts on MGE Energy's and MGE's consolidated statements of cash flows in accordance with the adoption of *ASU 2016-18, Restricted Cash* for the years ended December 31, were as follows:

(In thousands)	2017	2016
Cash provided by operating activities	$ (1,618)	$ 351
Cash used for investing activities	86	13
Change in cash, cash equivalents, and restricted cash	(1,532)	364
Cash, cash equivalents, and restricted cash at beginning of period	5,674	5,310
Cash, cash equivalents, and restricted cash at end of period	$ 4,142	$ 5,674

e.

Trade Receivables, Allowance for Doubtful Accounts, and Concentration Risk - MGE Energy and MGE.

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. However, a 1% late payment charge is recorded on all receivables unpaid after the due date. The allowance for doubtful accounts associated with these receivables represents our best estimate of the amount of probable credit losses in our existing accounts receivable. We determine our allowance for doubtful accounts based on historical write-off experience, regional economic data, and review of the accounts receivable aging. MGE manages this concentration and the related credit risk through its credit and collection policies, which are consistent with state regulatory requirements.

f.

Inventories - MGE Energy and MGE.

Inventories consist of natural gas in storage, fuel for electric generation, materials and supplies, and renewable energy credits (RECs). MGE values natural gas in storage, fuel for electric generation, and materials and supplies using average cost.

REC allowances are included in "Materials and supplies" on the consolidated balance sheets and are recorded based on specific identification. These allowances are charged to purchase power expense as they are used in operations. MGE's REC allowance balance as of December 31, 2018 and 2017, was $0.7 million and $0.5 million, respectively.

g.

Chattel Paper Agreements - MGE Energy and MGE.

MGE makes available to qualifying customers a financing program for the purchase and installation of energy-related equipment that will provide more efficient use of utility service at the customer's property. The energy-related equipment installed at the customer sites is used to secure the customer loans. MGE is a party to a chattel paper purchase agreement with a financial institution under which MGE can sell, transfer, and assign to the financial institution an undivided interest with recourse, in up to $10.0 million of the financing program receivables, until July 31, 2019. The length of the MGE guarantee to the financial institution varies from one to ten years depending on the term of the underlying customer loan. The loan balances outstanding as of December 31, 2018, approximates the fair value of the energy-related equipment acting as collateral. MGE accounts for these agreements as secured borrowings.

As of December 31, 2018, the remaining contractual maturities of the chattel paper agreements were as follows:

(In thousands)	2019	2020	2021	2022	2023	Thereafter
Repurchase-to-Maturity Transactions:						
Loans	$ 396	$ 407	$ 392	$ 354	$ 510	$ 122

h.

Regulatory Assets and Liabilities - MGE Energy and MGE.

Regulatory assets and regulatory liabilities are recorded consistent with regulatory treatment. Regulatory assets represent costs which are deferred due to the probable future recovery from customers through regulated rates. Regulatory liabilities represent the excess recovery of costs or accrued credits which were deferred because MGE believes it is probable such amounts will be returned to customers through future regulated rates. Regulatory assets and liabilities are amortized in the consolidated statements of income consistent with the recovery or refund included in customer rates. MGE believes that it is probable that its recorded regulatory assets and liabilities will be recovered and refunded, respectively, in future rates. See Footnote 7 for further information.

i.

Debt Issuance Costs - MGE Energy and MGE.

Premiums, discounts, and expenses incurred with the issuance of outstanding long-term debt are amortized over the life of the debt issue. Any call premiums or unamortized expenses associated with refinancing higher-cost debt obligations used to finance utility-regulated assets and operations are amortized consistent with regulatory treatment of those items. These costs are included as a direct reduction to the related debt liability on the consolidated balance sheets.

j.

Property, Plant, and Equipment - MGE Energy and MGE.

Property, plant, and equipment is recorded at original cost. Cost includes indirect costs consisting of payroll taxes, pensions, postretirement benefits, other fringe benefits, and administrative and general costs. Also, included in the cost is AFUDC for utility property and capitalized interest for nonregulated property. Additions for significant replacements of property are charged to property, plant, and equipment at cost; and minor items are charged to maintenance expense. Depreciation rates on utility property are approved by the PSCW, based on the estimated economic lives of property, and include estimates for salvage value and removal costs. Removal costs of utility property, less any salvage value, are adjusted through regulatory liabilities. Depreciation rates on nonregulated property are based on the estimated economic lives of the property. See Footnote 4 for further information.

Provisions at composite straight-line depreciation rates approximate the following percentages for the cost of depreciable property:

	2018	2017	2016
Electric[(a)(b)]	2.9 %	3.0 %	2.5 %
Gas[(a)]	2.1 %	2.1 %	2.1 %
Nonregulated	2.3 %	2.3 %	2.3 %

(a)

In December 2015, the PSCW approved new depreciation rates, which were implemented and became effective as of January 1, 2016.

(b)

In September 2016, the PSCW approved new depreciation rates for Columbia effective January 1, 2017.

k.

Asset Retirement Obligations - MGE Energy and MGE.

A liability is recorded for the fair value of an asset retirement obligation (ARO) to be recognized in the period in which it is incurred if it can be reasonably estimated. The offsetting associated asset retirement costs are capitalized as a long-lived asset and depreciated over the asset's useful life. The expected present value technique used to calculate the fair value of ARO liabilities includes assumptions about costs, probabilities, settlement dates, interest accretion, and inflation. Revisions to the assumptions, including the timing or amount of expected asset retirement costs, could result in increases or decreases to the AROs. All asset retirement obligations are recorded as "Other long-term liabilities" on the consolidated balance sheets. MGE has regulatory treatment and recognizes regulatory assets or liabilities for the timing differences between when it recovers legal AROs in rates and when it would recognize these costs. See Footnote 18 for further information.

l.

Repairs and Maintenance Expense - MGE Energy and MGE.

MGE utilizes the direct expensing method for planned major maintenance projects. Under this method, MGE expenses all costs associated with major planned maintenance activities as incurred.

m.

Purchased Gas Adjustment Clause - MGE Energy and MGE.

MGE's natural gas rates are subject to a fuel adjustment clause designed to recover or refund the difference between the actual cost of purchased gas and the amount included in rates. Differences between the amounts billed to customers and the actual costs recoverable are deferred and recovered or refunded in future periods by means of prospective monthly adjustments to rates. As of December 31, 2018 and 2017, MGE had over collected $1.2 million and $1.4 million, respectively. These amounts are included in "Regulatory liabilities current" on the consolidated balance sheets.

n.

Revenue Recognition - MGE Energy and MGE.

Operating revenues are recorded as service is rendered or energy is delivered to customers. Meters are read on a systematic basis throughout the month based on established meter-reading schedules. At the end of the month, MGE accrues an estimate for the unbilled amount of energy delivered to customers. The unbilled revenue estimate is based on daily system demand volumes, weather factors, estimated line losses, estimated customer usage by class, and applicable customer rates. See Footnote 19 for further information.

o.

Utility Cost Recovery - MGE Energy and MGE.

MGE's tariff rates include a provision for fuel cost recovery. The PSCW allows Wisconsin utilities to defer electric fuel-related costs, less excess revenues, that fall outside a symmetrical cost tolerance band. Any over/under recovery of the actual costs in a given year is determined in the following year and is then reflected in future billings to electric retail customers. Over-collection of fuel-related costs that are outside the approved range will be recognized as a reduction of revenue. Prior to adoption of the new revenue recognition guidance, effective January 1, 2018, over-collected fuel-related costs were reflected in "Purchased power" expense. Under-collection of these costs will continue to be recognized in "Purchased power" expense in the consolidated statements of income of MGE Energy and MGE. The cumulative effects of these deferred amounts will be recorded in "Regulatory assets" or "Regulatory liabilities" on the consolidated balance sheets of MGE Energy and MGE until they are reflected in future billings to customers. See Footnote 8.b. for further information.

p.

Regional Transmission Organizations - MGE Energy and MGE.

MGE reports on a net basis transactions on the MISO markets in which it buys and sells power within the same hour to meet electric energy delivery requirements. This treatment resulted in a $90.3 million, a $87.9 million, and a $77.2 million reduction to sales to the market and purchase power expense for MISO markets for the years ended December 31, 2018, 2017, and 2016, respectively.

q.

Allowance for Funds Used During Construction - MGE Energy and MGE.

Allowance for funds used during construction is included in utility plant accounts and represents the cost of borrowed funds used during plant construction and a return on shareholder's capital used for construction purposes. In the consolidated income statements, the cost of borrowed funds (AFUDC-debt) is presented as

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an offset to "Interest expense" and the return on shareholder's capital (AFUDC-equity funds) is shown as an item within "Other income." For both 2018 and 2017, as approved by the PSCW, MGE capitalized AFUDC-debt and equity on 50% of applicable average construction work in progress at 7.87%. For 2016, as approved by the PSCW, MGE capitalized AFUDC-debt and equity on 50% of applicable average construction work in progress at 7.93%. For 2018, 2017, and 2016, MGE received specific approval to recover 100% AFUDC on certain environmental costs for Columbia. For 2018 and 2017, MGE received specific approval to recover 100% AFUDC on certain costs for the Saratoga Wind Farm project. These amounts are recovered under the ratemaking process over the service lives of the related properties.

r.

Investments - MGE Energy and MGE.

Investments in limited liability companies that have specific ownership accounts in which MGE Energy or MGE's ownership interest is more than minor and are considered to have significant influence are accounted for using the equity method. All other investments are carried at fair value, with changes in fair value recognized through net income. See Footnote 6 for further information.

s.

Capitalized Software Costs - MGE Energy and MGE.

Property, plant, and equipment includes the net book value of capitalized costs of internal use software totaling $15.1 million and $11.1 million as of December 31, 2018 and 2017, respectively. During 2018, 2017, and 2016, MGE recorded $4.7 million, $3.3 million, and $3.0 million, respectively, of amortization expense related to these costs. These costs are amortized on a straight-line basis over the estimated useful lives of the assets. For internal use software, the useful lives range from five to fifteen years.

t.

Capitalized Software Assets   Hosting Arrangements   MGE Energy and MGE.

The FASB issued authoritative guidance of accounting for software in a hosted arrangement. MGE Energy and MGE adopted the authoritative guidance as of September 30, 2018. See Footnote 2 for further information.

The net book value of capitalized costs of internal use software incurred in a hosting arrangement was $9.2 million and $0.5 million as of December 31, 2018 and 2017, respectively. During 2018, MGE implemented an enterprise resource planning platform which was placed in service as of January 1, 2019. As of December 31, 2018, accumulated amortization expense was $0.1 million. There was no accumulated amortization expense as of December 31, 2017. Capitalized software assets for hosted arrangements and the related accumulated amortization expense are recorded in "Other deferred assets and other" on the consolidated balance sheets.

During 2018, MGE recorded $0.1 million of amortization expense related to software assets for hosted arrangements. During 2017 and 2016, no amortization expense was recorded. These costs are recognized in "Other operations and maintenance" expense in the consolidated statements of income and are amortized on a straight-line basis over the estimated useful lives of the assets. Software assets for hosted arrangements have useful lives ranging from five to ten years.

u.

Impairment of Long-Lived Assets - MGE Energy and MGE.

MGE reviews plant and equipment and other property for impairment when events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. MGE's policy for determining when long-lived assets are impaired is to recognize an impairment loss if the sum of the expected future cash flows (undiscounted and without interest charges) from an asset are less than the carrying amount of that asset. If an impairment loss is recognized, the amount that will be recorded will be measured as the amount by which the carrying amount of the asset exceeds the fair value of the asset. There was no impairment of long-lived assets as of December 31, 2018, 2017, and 2016.

v.

Income Taxes and Excise Taxes - MGE Energy and MGE.

Income taxes

Under the liability method, income taxes are deferred for all temporary differences between pretax financial and taxable income and between the book and tax basis of assets and liabilities using the tax rates scheduled by law to be in effect when the temporary differences reverse. Future tax benefits are recognized to the extent that realization of such benefits is more likely than not. A valuation allowance is recorded for those benefits that do not meet this criterion.

Accounting for uncertainty in income taxes applies to all tax positions and requires a recognition threshold and measurement standard for the financial statement recognition and measurement of a tax position taken, or expected to be taken, in an income tax return. The threshold is defined for recognizing tax return positions in the financial statements as "more likely than not" that the position is sustainable, based on its merits. Subsequent recognition, derecognition, and measurement is based on management's best judgment given the facts, circumstances, and information available at the reporting date.

Regulatory and accounting principles have resulted in a regulatory liability related to income taxes. Excess deferred income taxes result from past taxes provided at rates higher than current rates. The income tax regulatory liability and deferred investment tax credit reflect the revenue requirement associated with the return of these tax benefits to customers.

Investment tax credits from regulated operations are amortized over related property service lives.

Excise taxes

MGE Energy, through its utility operations, pays a state license fee tax in lieu of property taxes on property used in utility operations. License fee tax is calculated as a percentage of adjusted operating revenues of the prior year. The electric tax rate is 3.19% for retail sales and 1.59% for sales of electricity for resale by the purchaser. The tax rate on sales of natural gas is 0.97%. The tax is required to be estimated and prepaid in the year prior to its computation and expensing. License fee tax expense, included in "Other general taxes," was $14.4 million, $14.1 million, and $14.5 million for the years ended December 31, 2018, 2017, and 2016, respectively.

Operating income taxes, including tax credits and license fee tax, are included in rates for utility related items.

w.

Share-Based Compensation - MGE Energy and MGE.

Under two separate incentive plans, eligible participants, including employees and non-employee directors, may receive performance units that entitle the holder to receive a cash payment equal to the value of a designated number of shares of MGE Energy's common stock, plus dividend equivalent payments thereon, at the end of the set performance period set in the award. Under the plans, these awards are subject to a prescribed vesting schedule and must be settled in cash. Accordingly, no new shares of common stock are issued in connection with the plans.

On the grant, date the cost of the employee or director services received in exchange for a performance unit award is measured based on the current market value of MGE Energy common stock. The fair value of the awards is re-measured quarterly through the settlement date. Changes in fair value as well as the original grant are recognized as compensation cost.

See Footnote 16 for additional information regarding the plans.

x.

Derivative and Hedging Instruments - MGE Energy and MGE.

As part of regular operations, MGE enters into contracts, including options, swaps, futures, forwards, and other contractual commitments, to manage its exposure to commodity prices. MGE recognizes all derivatives in the consolidated balance sheets at fair value, with changes in the fair value of derivative instruments to be recorded in current earnings or deferred in accumulated other comprehensive income (loss), depending on whether a derivative is designated as, and is effective as, a hedge and on the type of hedge transaction. Derivative activities are in accordance with the company's risk management policy.

If the derivative qualifies for regulatory deferral, the derivatives are marked to fair value and are offset with a corresponding regulatory asset or liability. Cash flows from such derivative instruments are classified on a basis consistent with the nature of the underlying hedged item.

2.

New Accounting Standards - MGE Energy and MGE.

a.

Recently Adopted

Revenue from Contracts with Customers.

The FASB issued authoritative guidance within the codification's Revenue Recognition topic that provides guidance on the recognition, measurement, and disclosure of revenue from contracts with customers. The new standard establishes a five-step model for recognizing and measuring revenue from contracts with customers and replaces existing guidance on revenue recognition. The underlying principle is that an entity will recognize revenue to present the transfer of goods or services to customers at an amount that the entity expects to be entitled to in exchange for those goods or services.

This authoritative guidance became effective January 1, 2018, and MGE Energy and MGE adopted the standard upon the effective date. Adoption of this standard was permitted under one of two methods: the full retrospective method or the modified retrospective method. MGE Energy and MGE implemented the standard using the modified retrospective method. The cumulative impact of this guidance on our financial statements is not material, except for additional footnote disclosures. See Footnote 19 for further information.

Financial Instruments.

In January 2016, the FASB issued authoritative guidance within the codification's Financial Instruments topic that provides guidance on the recognition and measurement of financial instruments. This authoritative guidance became effective January 1, 2018, and required equity investments to be measured at fair value with changes in fair value recognized in net income rather than in other comprehensive income. As a result of this guidance, MGE Energy and MGE will no longer have other comprehensive income related to equity investments. This standard was applied using a modified retrospective approach, with a cumulative effect adjustment recorded to opening retained earnings as of the beginning of the fiscal year of adoption. As of January 1, 2018, MGE Energy recorded a $0.4 million increase in retained earnings and a corresponding decrease in accumulated other comprehensive income related to equity investments within the scope of this standard. As of January 1, 2018, MGE recorded less than a $0.1 million decrease in retained earnings and a corresponding increase in accumulated other comprehensive income related to equity investments within the scope of this standard.

Restricted Cash.

In November 2016, the FASB issued authoritative guidance within the codification's Statement of Cash Flows topic that provides guidance on the classification and presentation of changes in restricted cash within the statement of cash flows. Under the new guidance, reporting entities are required to explain the changes in the total of restricted and unrestricted cash and cash equivalents when reconciling the beginning and ending balances on the statement of cash flows. Prior to the authoritative guidance, changes in restricted cash were presented as either cash flows from operating, investing, or financing activities within the statement of cash flows based on the nature of the restriction. Reporting entities are now also required to provide a reconciliation from the balance sheet to the statement of cash flows and disclose the nature of the restrictions of cash. This authoritative guidance became effective January 1, 2018. Upon the effective date, MGE Energy and MGE changed the presentation of restricted cash on the consolidated statements of cash flows to reflect the new accounting guidance retrospectively for all periods presented. See Footnote 1.d. for further information.

Pension and Other Postretirement Benefits.

In March 2017, the FASB issued authoritative guidance within the codification's Compensation Retirement Benefits topic that provides guidance on the presentation of net periodic pension cost and net periodic postretirement benefit cost (together, net benefit cost). This authoritative guidance became effective January 1, 2018. Under the new guidance, the service cost component of net benefit cost is required to be recorded in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. The other components of net benefit cost are required to be presented in the income statement separately from the service cost component and outside of income from operations. A practical expedient within the standard permits an employer to use the amounts disclosed in its pension and other postretirement benefit plan footnote for prior comparative periods as the estimation basis for applying the retrospective presentation requirements. MGE Energy and MGE have elected to apply the practical expedient. Upon the effective date, MGE Energy and MGE changed the presentation of net benefit cost on the consolidated statements of income to reflect the new accounting guidance retrospectively to all periods presented. For both MGE Energy and MGE, "Other operations and maintenance expense" increased and "Other income, net" increased $4.1 million and $4.3 million for the years ended December 31, 2017 and 2016, respectively. The standard also only allows the service cost component to be eligible for capitalization prospectively from the effective date of the pronouncement (whereas under previous GAAP all components of net benefit cost were eligible for capitalization). See Footnote 13 for further information.

Internal-Use Software Hosting Arrangements.

In August 2018, the FASB issued amended authoritative guidance within the codification's Intangibles Goodwill and Other Internal-Use Software topic. The amended authoritative guidance aligns the requirements for capitalizing implementation costs incurred in a cloud computing arrangement (hosting arrangement) that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangement that include an internal-use software license). Costs for implementation activities in the development stage are capitalized depending on the nature of the costs and presented in the same line item on the balance sheet as amounts prepaid for the hosted service. Costs incurred during the preliminary and postimplementation stages are expensed as the activities are performed. The costs capitalized as part of implementation stage should be expensed over the term of the hosting contract, which includes any renewable option periods, and presented in the same line on the income statement as the fees for the associated hosted service.

This amended authoritative guidance will become effective January 1, 2020. Early adoption of the amendment is permitted, including adoption in any interim period. Entities can choose to adopt the new guidance either prospectively, for eligible costs incurred on or after the date this guidance is first applied, or retrospectively. MGE Energy and MGE early adopted these amendments retrospectively as of September 30, 2018. The cumulative impact of this guidance on our financial statement was not material, except for additional footnote disclosures. See Footnote 1.t. for disclosures required under this standard.

b.

Recently Issued

Leases.

In February 2016, the FASB issued authoritative guidance within the codification's Leases topic that provides guidance on the classification, recognition, measurement, and disclosure of leases. The new leasing standard establishes that a lease conveys the right to control the use of identified property, plant, or equipment for a period of time in exchange for consideration. Under the new guidance, lessees will be required to recognize all leases with terms greater than one year, including operating leases, on the balance sheet by recording a right-of-use asset and lease liability. Prior to the authoritative guidance, only capital leases were recognized on the balance sheet by lessees. The new accounting guidance, as applied by lessors, is materially consistent with current GAAP. In January 2018, the FASB issued authoritative guidance which provided an optional practical expedient to grandfather the accounting for existing and expired land easements not accounted for as a lease under the new authoritative guidance. MGE Energy and MGE adopted this practical expedient.

Management has completed a bottoms-up approach to analyze the impact of the standard on our lease portfolio. MGE Energy and MGE have reviewed current accounting policies and procedures to identify potential differences in accounting treatment that would result from applying the requirements of the new standard to our existing lease portfolio. In addition, we identified appropriate changes to our business processes, systems, and controls to support recognition and disclosure requirements under the new standard. This authoritative guidance became effective January 1, 2019. MGE Energy and MGE adopted the standard upon the effective date. In compliance with authorized transition guidance, MGE Energy and MGE began applying the new standard on January 1, 2019, but will continue to present periods prior to that date according to the previous authoritative standard. MGE Energy and MGE expect to recognize approximately $15-$17 million additional lease assets and liabilities under the new standard. We do not expect that it will have a material impact on our consolidated net income or cash flows.

3.

Variable Interest Entities - MGE Energy and MGE.

a.

Consolidated Variable Interest Entities.

MGE Power Elm Road and MGE Power West Campus are not subsidiaries of MGE; but, they have been consolidated in the financial statements of MGE. MGE Power Elm Road and MGE Power West Campus were created for the purpose of owning new generating assets. Power Elm Road's sole principal asset is an undivided ownership interest in two coal-fired generating plants (the Elm Road Units) located in Oak Creek, Wisconsin, which it leases to MGE pursuant to long-term leases. Power West Campus's sole principal asset is the WCCF, which it leases to MGE pursuant to a long-term lease. Based on the nature and terms of the contractual agreements, MGE is expected to absorb a majority of the expected losses or residual value associated with its ownership of MGE Power Elm Road and Power West Campus and therefore holds a variable interest despite the absence of an equity interest.

In accordance with applicable accounting guidance, MGE Energy and MGE consolidate VIEs of which they are the primary beneficiary. MGE has the power to direct the activities that most significantly impact both the Elm Road Units' and the WCCF's economic performance and is also the party most closely associated with MGE Power Elm Road and MGE Power West Campus. As a result, MGE is the primary beneficiary. As of December 31, MGE has included the following significant accounts on its consolidated balance sheets related to its interest in these VIEs:

	MGE Power Elm Road		MGE Power West Campus	
(In thousands)	2018	2017	2018	2017
Property, plant, and equipment, net	$ 173,464	$ 176,002	$ 81,273	$ 80,282
Construction work in progress	530	1,225	478	610
Affiliate receivables	-	-	3,707	4,236
Deferred income taxes	30,595	29,256	14,222	13,795
Long-term debt[(a)]	56,806	59,416	41,496	43,262
Noncontrolling interest	97,519	97,635	43,935	43,267

(a)

MGE Power Elm Road's long-term debt includes debt issuance costs of $0.5 million and $0.6 million as of December 31, 2018 and 2017, respectively. The debt is secured by a collateral assignment of lease payments that MGE makes to MGE Power Elm Road for use of the Elm Road Units pursuant to the related long-term leases. MGE Power West Campus's long-term debt includes debt issuance costs of $0.1 million as of December 31, 2018 and 2017. The debt is secured by a collateral assignment of lease payments that MGE makes to MGE Power West Campus for use of the cogeneration facility pursuant to the long-term lease. See Footnote 10 for further information on the long-term debt securities.

MGE has been and will continue to recover lease payments made to MGE Power Elm Road and MGE Power West Campus in rates.

b.

Other Variable Interest Entities.

MGE has a variable interest in entities through purchase power agreements relating to purchased energy from the facilities covered by the agreements. As of December 31, 2018 and 2017, MGE had 11 megawatts and 61 megawatts, respectively, of capacity available under these agreements. MGE evaluated the variable interest entities for possible consolidation. The interest holder is considered the primary beneficiary of the entity and is required to consolidate the entity if the interest holder has the power to direct the activities that most significantly impact the economics of the variable interest entity. MGE examined qualitative factors such as the length of the remaining term of the contracts compared with the remaining lives of the plants, who has the power to direct the operations and maintenance of the facilities, and other factors, and determined MGE is not the primary beneficiary of the variable interest entities. There is not a significant potential exposure to loss as a result of involvement with these variable interest entities.

4.

Property, Plant, and Equipment - MGE Energy and MGE.

Property, plant, and equipment consisted of the following as of December 31:

	MGE Energy		MGE	
(In thousands)	2018	2017	2018	2017
Utility:				
Electric[(a)(b)]	$ 1,310,421	$ 1,209,336	$ 1,310,438	$ 1,209,353
Gas	442,581	415,542	442,593	415,553
Total utility plant	1,753,002	1,624,878	1,753,031	1,624,906
Less: Accumulated depreciation and amortization[(a)(b)]	639,486	599,469	639,486	599,469
In-service utility plant, net	1,113,516	1,025,409	1,113,545	1,025,437
Nonregulated:				
Nonregulated	322,855	319,611	322,855	319,611
Less: Accumulated depreciation and amortization	66,605	61,707	66,605	61,707
In-service nonregulated plant, net	256,250	257,904	256,250	257,904
Construction work in progress:				
Utility construction work in progress[(a)(c)]	138,663	56,208	138,663	56,208
Nonregulated construction work in progress	1,008	1,836	1,008	1,836
Total property, plant, and equipment	$ 1,509,437	$ 1,341,357	$ 1,509,466	$ 1,341,385

(a)

As of December 31, 2018 and 2017, MGE has classified $3.1 million and $8.8 million, respectively, of Columbia assets as held-for-sale on the consolidated balance sheets related to the partial sale of plant assets to WPL. See Footnote 5.a. for further discussion.

(b)

In April 2018, MGE, along with two other utilities, purchased the Forward Wind Energy Center (Forward Wind), which consists of 86 wind turbines located in Wisconsin. The aggregate purchase price was approximately $174 million, of which MGE's proportionate share is 12.8%, or approximately $23 million.

(c)

In December 2017, the PSCW authorized construction of a 66 MW wind farm, consisting of 33 turbines, located near Saratoga, Iowa. MGE received specific approval to recover 100% AFUDC on the project. As of December 31, 2018, MGE has incurred $95.8 million of capital expenditures. After tax, MGE has recognized $2.5 million in AFUDC equity related to this project for the year ended December 31, 2018. Construction of the project is expected to be completed in February 2019.

MGE's utility plant is subject to the lien of its Indenture of Mortgage and Deed of Trust. As of December 31, 2018 and 2017, there was $1.2 million of bonds outstanding under that indenture. See Footnote 10 for further discussion of the mortgage indenture.

5.

Joint Plant Ownership - MGE Energy and MGE.

a.

Columbia.

MGE and two other utilities jointly own Columbia, a coal-fired generating facility located in Portage, Wisconsin, which, as of December 31, 2018, accounts for 29% (219 MW) of MGE's net summer rated capacity. Power from this facility is shared in proportion to each company's ownership interest. As of December 31, 2018, MGE had a 19.4% ownership interest in Columbia. The other owners are WPL, which operates Columbia, and WPSC. MGE's share of fuel, operating, and maintenance expenses for Columbia was $36.5 million, $36.2 million, and $39.5 million for the years ended December 31, 2018, 2017, and 2016, respectively.

Each owner provides its own financing and reflects its respective portion of facilities and operating costs in its financial statements. MGE's interest in Columbia's gross utility plant in service, and the related accumulated depreciation reserves as of December 31 were as follows:

(In thousands)	2018	2017
Utility plant	$ 292,157	$ 274,450
Accumulated depreciation	(94,766)	(87,144)
Property, plant, and equipment, net	197,391	187,306
Construction work in progress	2,021	20,382
Total property, plant, and equipment	$ 199,412	$ 207,688

In 2016, MGE and WPL negotiated an amendment to the existing Columbia joint operating agreement that has been approved by the PSCW. Under the terms of the amendments, MGE has reduced its obligation to pay certain capital expenditures (other than SCR-related expenditures) at Columbia in exchange for a proportional reduction in MGE's ownership in Columbia. On January 1 of each year from 2017 through 2019 and then on June 1, 2020, the ownership percentage is adjusted through a partial sale based on the amount of capital expenditures foregone. In June 2017, the FERC approved the ownership transfer in Columbia, effective January 1, 2017.

During 2018 and 2017, MGE accrued $3.1 million and $8.8 million, respectively, of foregone capital expenditures as part of the ownership transfer agreement with WPL. As of December 31, 2018 and 2017, MGE classified $3.1 million and $8.8 million, respectively, of Columbia assets as held-for-sale on the consolidated balance sheets. In January 2018, MGE reduced its ownership interest in Columbia from 20.4% to 19.4% and in January 2019, MGE further reduced its ownership to 19.1% through the partial sale of plant assets to WPL.

b.

Elm Road.

MGE Power Elm Road owns an 8.33% ownership interest in each of two 615 MW coal-fired generating units in Oak Creek, Wisconsin, which, as of December 31, 2018, accounts for 14% (106 MW) of MGE's net summer rated capacity. Unit 1 entered commercial operation on February 2, 2010. Unit 2 entered commercial operation on January 12, 2011. MGE Power Elm Road's sole principal asset is that ownership interest in those generating units. MGE Power Elm Road's interest in the Elm Road Units is leased to MGE pursuant to long-term leases.

The remainder of the ownership interest in the Elm Road Units is held by two other entities, one of which is also responsible for the Units' operation. Each owner provides its own financing and reflects its respective portion of the facility and costs in its financial statements. MGE's share of fuel, operating, and maintenance expenses for the Elm Road Units was $17.6 million, $17.3 million, and $21.2 million for the years ended December 31, 2018, 2017, and 2016, respectively.

MGE Power Elm Road's interest in the portion of the Elm Road Units in-service and the related accumulated depreciation reserves as of December 31 were as follows:

(In thousands)	2018	2017
Nonregulated plant	$ 207,361	$ 206,063

Accumulated depreciation	(33,897)	(30,061)
Property, plant, and equipment, net	173,464	176,002
Construction work in progress	530	1,225
Total property, plant, and equipment	$ 173,994	$ 177,227

c.

Forward Wind.

In April 2018, MGE, along with two other utilities, purchased the Forward Wind Energy Center (Forward Wind), which consists of 86 wind turbines located in Wisconsin. The aggregate purchase price was approximately $174 million, of which MGE's proportionate share is 12.8%, or approximately $23 million. The purchase of Forward Wind replaced an existing purchase power agreement, under which MGE purchased 12.8% of the facility's energy output. MGE's proportionate share of Forward Wind's total capacity is 18 MW.

Each owner provides its own financing and reflects its respective portion of facilities and operating costs in its financial statements. MGE's share of operating and maintenance expenses for Forward Wind was $0.5 million for the year ended December 31, 2018, which was deferred in a regulatory asset account and will be recovered in future rates. MGE's interest in the portion of Forward Wind's utility plant in service and the related accumulated depreciation reserves as of December 31 were as follows:

(In thousands)	2018
Nonregulated plant	$ 33,929
Accumulated depreciation	(12,530)
Property, plant, and equipment, net	21,399
Construction work in progress	67
Total property, plant, and equipment	$ 21,466

d.

WCCF.

MGE Power West Campus and the UW jointly own the West Campus Cogeneration Facility (WCCF) located on the UW campus in Madison, Wisconsin. MGE Power West Campus owns 55% of the facility and the UW owns 45% of the facility. The UW owns a controlling interest in the chilled-water and steam plants, which are used to meet the growing needs for air-conditioning and steam-heat capacity for the UW campus. MGE Power West Campus owns a controlling interest in the electric generation plant, which is leased and operated by MGE.

Each owner provides its own financing and reflects its respective portion of the facility and operating costs in its financial statements. MGE Power West Campus' interest in WCCF and the related accumulated depreciation reserves as of December 31 were as follows:

(In thousands)	2018	2017
Nonregulated plant	$ 113,328	$ 111,386
Accumulated depreciation	(32,055)	(31,104)
Property, plant, and equipment, net	81,273	80,282
Construction work in progress	478	610
Total property, plant, and equipment	$ 81,751	$ 80,892

Operating charges are allocated to the UW based on formulas contained in the operating agreement. Under the provisions of this arrangement, the UW is required to reimburse MGE for their allocated portion of fuel and operating expenses. For the years ended December 31, 2018, 2017, and 2016, the UW allocated share of fuel and operating costs was $6.3 million, $5.3 million, and $5.5 million, respectively.

6.

Investments - MGE Energy and MGE.

a.

Equity Securities, Equity Method Investments, and Other Investments.

	MGE Energy		MGE	
(In thousands)	2018	2017	2018	2017
Equity securities[(a)]	$ 9,363	$ 7,291	$ 388	$ 409
Equity method investments:				
ATC and ATC Holdco[(b)]	66,313	59,298	-	-
Other	26	1,128	-	-
Total equity method investments	66,339	60,426	-	-
Other investments	2,298	55	-	-
Total	$ 78,000	$ 67,772	$ 388	$ 409

(a)

Reflects modified retrospective application of new authoritative guidance related to Financial Instruments as described in Footnote 2. Prior to January 1, 2018, investments were considered available for sale securities. As of December 31, 2017, MGE Energy had available for sale securities with a cost basis of $6.7 million, gross unrealized gains of $0.7 million, and gross unrealized losses of less than $0.1 million. As of December 31, 2017, MGE had available for sale securities with a cost basis of $0.5 million and gross unrealized losses of less than $0.1 million.

(b)

In December 2017, there was a $20.4 million one-time tax impact related to ATC as a result of the Tax Act. See Footnote 12 for further information.

MGE Energy's and MGE's equity securities represent publicly traded securities and private equity investments in common stock of companies in various industries.

During the years ended December 31, 2018, 2017, and 2016, certain investments were liquidated. As a result of these liquidations, MGE Energy and MGE received the following:

	MGE Energy			MGE		
(In thousands)	2018	2017	2016	2018	2017	2016
Cash proceeds	$ 960	$ 677	$ 408	$ 3	$ -	$ 16
Gain (loss) on sale	476	522	121	3	-	(8)

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b.

ATC and ATC Holdco.

ATC owns and operates electric transmission facilities primarily in Wisconsin. MGE received an interest in ATC when it, like other Wisconsin electric utilities, contributed its electric transmission facilities to ATC as required by Wisconsin law. That interest is presently held by MGE Transco, which, since December 1, 2016, is owned by MGE Energy. ATC Holdco was formed by several members of ATC, including MGE Energy, to pursue electric transmission development and investments outside of Wisconsin. The ownership interest in ATC Holdco is held by MGEE Transco, a wholly-owned subsidiary of MGE Energy.

MGE Transco and MGEE Transco have accounted for their investment in ATC and ATC Holdco, respectively, under the equity method of accounting. For the years ended December 31, 2018, 2017, and 2016, MGE Transco recorded the following:

(In thousands)	2018	2017	2016
Equity earnings from investment in ATC	$ 8,821	$ 10,125	$ 8,670
Dividends received from ATC[(a)]	4,611	9,078	7,926
Capital contributions to ATC	2,841	3,551	2,486

(a)

MGE Transco recorded a $2.3 million and a $2.1 million dividend receivable from ATC as of December 31, 2017 and 2016, respectively. A cash dividend was received in January of each of the proceeding years.

ATC Holdco was formed in December 2016. In the near term, it is expected that ATC Holdco will be pursuing transmission development opportunities that typically have long development and investment lead times before becoming operational. In 2018 and 2017, MGEE Transco recorded capital contributions of $0.3 million and $2.9 million, respectively, to ATC Holdco.

As of December 31, 2018 and 2017, MGE Transco held a 3.6% ownership interest in ATC. As of December 31, 2018 and 2017, MGEE Transco held a 4.4% ownership interest in ATC Holdco.

In June 2016, the PSCW required MGE to transfer its interest in ATC to MGE Energy, which was to be completed by December 31, 2022. The requirement arose in the context of requests for regulatory approvals by several owners of ATC in connection with a reorganization of ATC. MGE's ownership interest in ATC, held through MGE Transco, was transferred net of deferred tax liabilities to MGE Energy by way of a dividend in kind of $15.8 million as of December 1, 2016. As a result of the transfer, MGE's ownership interest in MGE Transco was completely eliminated in favor of MGE Energy. The change had no effect on MGE Energy's consolidated financial statements.

ATC's summarized financial data is as follows:

(In thousands)

Income statement data for the year ended December 31,	2018	2017	2016
Operating revenues	$ 690,510	$ 721,672	$ 650,806
Operating expenses	(358,703)	(346,308)	(323,947)
Other income	2,405	7,402	5,361
Interest expense, net	(110,725)	(110,138)	(99,464)
Earnings before members' income taxes	$ 223,487	$ 272,628	$ 232,756

Balance sheet data as of December 31,	2018	2017
Current assets	$ 87,250	$ 87,730
Noncurrent assets	4,928,793	4,598,919
Total assets	$ 5,016,043	$ 4,686,649
Current liabilities	$ 640,040	$ 767,248
Long-term debt	2,013,997	1,790,590
Other noncurrent liabilities	295,281	240,286
Members' equity	2,066,725	1,888,525
Total members' equity and liabilities	$ 5,016,043	$ 4,686,649

During 2018, 2017, and 2016, MGE recorded $29.0 million, $29.2 million, and $29.1 million, respectively, for transmission services received from ATC. MGE also provides a variety of operational, maintenance, and project management work for ATC, which is reimbursed by ATC. As of December 31, 2018 and 2017, MGE had a receivable due from ATC of $0.1 million and $0.2 million, respectively.

7.

Regulatory Assets and Liabilities - MGE Energy and MGE.

The following regulatory assets and liabilities are reflected in MGE's consolidated balance sheets as of December 31:

(In thousands)	2018	2017
Regulatory Assets		
Asset retirement obligation	$ 9,199	$ 8,328
Conservation costs	81	222
Debt related costs	9,288	9,749
Derivatives	31,830	41,958
Tax recovery related to AFUDC equity	6,482	5,497
Unfunded pension and other postretirement liability	96,030	84,342
Other	1,991	359
Total Regulatory Assets	$ 154,901	$ 150,455
Regulatory Liabilities		
Deferred fuel savings	$ 9,504	$ 4,229
Elm Road	2,515	931
Income taxes	135,449	131,689
Non-ARO removal costs	19,891	18,536
Pension and other postretirement service costs	3,669	-
Purchased gas adjustment	1,186	1,404
Renewable energy credits	700	454
Transmission	5,476	1,967
Other	1,074	576
Total Regulatory Liabilities	$ 179,464	$ 159,786

MGE expects to recover its regulatory assets and return its regulatory liabilities through rates charged to customers based on PSCW decisions made during the ratemaking process or based on PSCW long-standing policies and guidelines. The adjustments to rates for these regulatory assets and liabilities will occur over the periods either specified by the PSCW or over the corresponding period related to the asset or liability. Management believes it is probable that MGE will continue to recover from customers the regulatory assets described above based on prior and current ratemaking treatment for such costs. All regulatory assets for which a cash outflow had been made are earning a return.

Asset Retirement Obligation

See Footnote 18 for further discussion.

Conservation Costs

MGE has received regulatory treatment for certain conservation expenditures. The expenditures are used for Focus on Energy programs, which is Wisconsin's statewide energy efficiency and renewable resource program, to promote energy efficiency on the customer's premises. Costs for Focus on Energy programs are estimated in MGE's rates utilizing escrow accounting. The escrow accounting allows the utility to true-up its actual costs incurred and reflect the amount of the true-up in its next rate case filing.

Debt Related Costs

This balance includes debt issuance costs of extinguished debt and other debt related expenses, including make-whole premiums. The PSCW has allowed rate recovery on unamortized issuance costs for extinguished debt facilities. When the facility replacing the old facility is deemed by the PSCW to be more favorable for the ratepayers, the PSCW will allow rate recovery of any unamortized issuance costs related to the old facility. These amounts are recovered over the term of the new facility.

Derivatives

MGE has physical and financial contracts that are accounted for as derivatives. The amounts recorded for the net mark-to-market value of the commodity based contracts is offset with a corresponding regulatory asset or liability because these transactions are part of the PGA or fuel rules clause authorized by the PSCW. A significant portion of the recorded amount is related to a purchased power agreement that provides MGE with firm capacity and energy during a base term that began on June 1, 2012, and ends on May 31, 2022. See Footnote 14 for further discussion.

Tax Recovery Related to AFUDC Equity

AFUDC equity represents the after-tax equity cost associated with utility plant construction and results in a temporary difference between the book and tax basis of such plant. It is probable under PSCW regulation that MGE will recover in future rates the future increase in taxes payable represented by the deferred income tax liability. The amounts will be recovered in rates over the depreciable life of the asset for which AFUDC was applied. Tax recovery related to AFUDC equity represents the revenue requirement related to recovery of these future taxes payable, calculated at current statutory tax rates.

Unfunded Pension and Other Postretirement Liability

MGE is required to recognize the unfunded status of defined benefit pension and other postretirement pension plans as a net liability or asset on the balance sheet with an offset to a regulatory asset or liability. The unfunded status represents future expenses that are expected to be recovered in rates. See Footnote 13 for further discussion.

Deferred Fuel Savings

The fuel rules require the PSCW and Wisconsin utilities to defer electric fuel-related costs that fall outside a symmetrical cost tolerance band. Any over/under recovery of the actual costs is determined on an annual basis and is adjusted in future billings to electric retail customers. See Footnote 8.b. for further discussion.

Elm Road

Costs associated with Elm Road are estimated in MGE's rates utilizing escrow accounting and include costs for lease payments, management fees, community impact mitigation, and operating costs. Costs are collected in rates over a one to two year period.

Income Taxes

Excess deferred income taxes result from past taxes provided at rates higher than current rates. The regulatory liability and deferred investment tax credit reflects the revenue requirement associated with the return of these tax benefits to customers.

Changes in income taxes are generally passed through in customer rates for the regulated utility. The one-time 2017 impact on timing differences related to income taxes passed through to customer rates of the Tax Act was recorded as a regulatory liability. The amount and timing of the cash impacts will depend on the period over which certain income tax benefits are provided to customers, which will be subject to review by the PSCW. A portion of the regulatory liability will be returned to customers based on a mandated timeframe dictated by applicable tax laws. See Footnote 12 for further information.

Non-ARO Removal Costs

In connection with accounting for asset retirement obligations, companies are required to reclassify cumulative collections for non-ARO removal costs as a regulatory liability, with an offsetting entry to accumulated depreciation. Under the current rate structure, these removal costs are being recovered as a component of depreciation expense.

Pension and Other Postretirement Service Costs

The FASB issued authoritative guidance within the codification's Compensation-Retirement Benefits topic that, beginning January 1, 2018, only allows the service cost component of net periodic benefit cost to be eligible for capitalization within the consolidated balance sheets. Under the current rate structure, non-service cost components of net periodic benefit cost are being recovered as a component of depreciation expense. MGE has regulatory treatment and recognizes regulatory assets or liabilities for timing differences between when net periodic benefit costs are recovered and when costs are recognized. See Footnote 13 for further discussion.

Purchased Gas Adjustment

MGE's natural gas rates are subject to a fuel adjustment clause designed to recover or refund the difference between the actual cost of purchased gas and the amount included in rates. Differences between the amounts billed to customers and the actual costs recoverable are deferred and recovered or refunded in future periods by means of prospective monthly adjustments to rates.

Renewable Energy Credits

MGE receives renewable energy credits from certain purchase power agreements. The value of the credits are recorded as inventory and expensed when the credit is redeemed or expired. A regulatory liability has been established for the value of the renewable energy credits included in inventory. In Wisconsin, renewable energy credits expire four years after the year of acquisition.

Transmission Costs

The current accounting treatment for transmission costs allows MGE to reflect any differential between transmission costs reflected in rates and actual costs incurred in its next rate filing.

8.

Rate Matters - MGE Energy and MGE.

a.

Rate Proceedings.

In December 2018, the PSCW approved the settlement agreement between MGE and intervening parties in the rate case. The settlement decreases electric rates by 2.24% or $9.2 million in 2019. MGE will maintain this rate level for 2020, with the exception that MGE will file a 2020 Fuel Cost Plan in 2019 and MGE's electric rates will be adjusted accordingly. The decrease reflects the ongoing tax impacts of the Tax Act and the addition of lower-cost renewable generation capacity. The settlement agreement increases gas rates by 1.06% or $1.7 million in 2019 and 1.46% or $2.4 million in 2020. The gas increase covers infrastructure costs. It also reflects the impacts of the Tax Act. The return on common stock equity for 2019 and 2020 is 9.8% based on a capital structure consisting of 56.6% common equity in 2019 and 56.1% common equity in 2020.

In December 2016, the PSCW authorized MGE, effective January 1, 2017, to decrease 2017 rates for retail electric customers by 0.8% or $3.3 million on an annual basis and to increase rates for retail gas customers by 1.9% or $3.1 million on an annual basis. The decrease in retail electric rates was attributable to declining fuel and purchased power costs. The increase in retail gas rates covered costs associated with MGE's natural gas system infrastructure improvements. The authorized return on common stock equity for 2017 was 9.8% based on a capital structure consisting of 57.2% common equity.

MGE did not file a base rate case for 2018 and 2016.

b.

Fuel Rules.

Fuel rules require the PSCW and Wisconsin utilities to defer electric fuel-related costs that fall outside a symmetrical cost tolerance band around the amount approved for a utility in its annual fuel proceedings. Any over/under recovery of the actual costs is determined in the following year and is then reflected in future billings to electric retail customers. The fuel rules bandwidth is currently set at plus or minus 2%. Under fuel rules, MGE would defer costs, less any excess revenues, if its actual electric fuel costs exceeded 102% of the electric fuel costs allowed in its latest rate order. Excess revenues are defined as revenues in the year in question that provide MGE with a greater return on common equity than authorized by the PSCW in MGE's latest rate order. Conversely, MGE is required to defer the benefit of lower costs if actual electric fuel costs were less than 98% of the electric fuel costs allowed in that order. These costs will be subject to the PSCW's annual review of fuel costs completed in the year following the deferral.

In August 2015, the PSCW approved a $0.00256/kWh fuel credit that began on September 1, 2015, and continued throughout 2016. MGE returned $8.3 million of electric fuel-related savings during the year ended December 31, 2016.

The PSCW issued final decisions in the fuel rules proceedings for MGE to refund additional fuel savings incurred to its retail electric customers over a one-month period. MGE returned $4.2 million, $6.2 million, and $15.5 million of electric fuel-related savings in October 2018, October 2017, and September 2016, respectively. There was no change to the refund in the fuel rules proceedings from the amount MGE deferred in the previous respective years.

In December 2017, the PSCW approved a surcharge for 2018 electric fuel-related costs. The surcharge increased electric retail revenue in 2018 by $0.5 million or 0.13%.

As of December 31, 2018, MGE has deferred $9.5 million of 2018 fuel-related savings. These costs will be subject to the PSCW's annual review of 2018 fuel costs, expected to be completed in 2019.

9.

Common Equity.

a.

Common Stock - MGE Energy and MGE.

MGE Energy sells shares of its common stock through its Stock Plan. Those shares may be newly issued shares or shares that MGE Energy has purchased in the open market for resale to participants in the Stock Plan. All sales under the Stock Plan are covered by a shelf registration statement that MGE Energy filed with the SEC. For the years ended December 31, 2018 and 2017, MGE Energy did not issue any new shares of common stock under the Stock Plan.

MGE Energy's transfer agent purchases shares on the open market to provide shares to meet obligations to participants in the Stock Plan. The shares are purchased on the open market through their securities broker-dealer and then are reissued under the Stock Plan as needed to meet share delivery requirements. The volume and timing of share repurchases in the open market depends upon the level of dividend reinvestment and optional share purchases being made from time to time by plan participants. As a result, there is no specific maximum number of shares to be repurchased and no specified termination date for the repurchases.

During the years ended December 31, 2018 and 2017, MGE Energy paid $45.8 million (or $1.32 per share) and $43.7 million (or $1.26 per share), respectively, in cash dividends on its common stock. Dividend payments by MGE to MGE Energy are subject to restrictions arising under a PSCW rate order and, to a lesser degree, MGE's first mortgage bonds. The PSCW order restricts any dividends, above the PSCW authorized amount that MGE may pay MGE Energy if its common equity ratio, calculated in the manner used in the rate proceeding, is less than 55%. This restriction did not impact MGE's payment of dividends in 2018. See Footnote 10 for further discussion of the mortgage indenture covenants. During the year ended December 31, 2017, MGE paid $45.0 million in cash dividends to MGE Energy. MGE paid no dividends to MGE Energy during the year ended December 31, 2018.

b.

Dilutive Shares Calculation - MGE Energy.

MGE Energy has not issued any dilutive securities.

10.

Long-Term Debt - MGE Energy and MGE.

a.

Long-Term Debt.

		December 31,	
(In thousands)		2018	2017
First Mortgage Bonds:[a]			
7.70%, 2028 Series	$	1,200	$ 1,200
Tax Exempt Debt:			
3.45%, 2027 Series,			
Industrial Development Revenue Bonds		19,300	19,300
Medium-Term Notes:[b]			
6.12%, due 2028		20,000	20,000
7.12%, due 2032		25,000	25,000
6.247%, due 2037		25,000	25,000
Total Medium-Term Notes		70,000	70,000
Other Long-Term Debt:[d]			
5.59%, due 2018[c][e]		-	20,000
3.38%, due 2020[e]		15,000	15,000
3.09%, due 2023[e]		30,000	30,000
3.29%, due 2026[e]		15,000	15,000
3.11%, due 2027[e]		30,000	30,000
5.68%, due 2033[f]		25,064	26,121
5.19%, due 2033[f]		16,561	17,290
5.26%, due 2040[e]		15,000	15,000
5.04%, due 2040[g]		35,139	36,806
4.74%, due 2041[g]		22,167	23,166
4.38%, due 2042[e]		28,000	28,000
4.42%, due 2043[e]		20,000	20,000
4.47%, due 2048[e]		20,000	20,000
3.76%, due 2052[e]		40,000	40,000

4.19%, due 2048[c][e]	60,000	-
4.24%, due 2053[c][e]	20,000	-
4.34%, due 2058[c][e]	20,000	-
Total Other Long-Term Debt	411,931	336,383
Long-term debt due within one year	(4,553)	(24,452)
Unamortized discount and debt issuance costs	(4,535)	(4,270)
Total Long-Term Debt	$ 493,343	$ 398,161

(a)

MGE's utility plant is subject to the lien of its Indenture of Mortgage and Deed of Trust, under which its first mortgage bonds are issued. The Mortgage Indenture provides that dividends or any other distribution or purchase of shares may not be made if the aggregate amount thereof since December 31, 1945, would exceed the earned surplus (retained earnings) accumulated subsequent to December 31, 1945. As of December 31, 2018, approximately $400.0 million was available for the payment of dividends under this covenant.

(b)

The indenture under which MGE's Medium-Term notes are issued provides that those notes will be entitled to be equally and ratably secured in the event that MGE issues any additional first mortgage bonds.

(c)

In July 2018, MGE issued a total of $40 million of new long-term unsecured debt. In September 2018, MGE issued $60 million of new long-term unsecured debt. MGE used the net proceeds from these debt financings to assist with financing capital expenditures, such as the Saratoga Wind Farm, and to refinance $20 million of long-term debt which matured in September 2018.

(d)

Unsecured notes issued pursuant to various Note Purchase Agreements with one or more purchasers. The notes are not issued under, or governed by, MGE's Indenture dated as of September 1, 1998, which governs MGE's Medium-Term Notes.

(e)

Issued by MGE. Under that Note Purchase Agreement: (i) note holders have the right to require MGE to repurchase their notes at par in the event of an acquisition of beneficial ownership of 30% or more of the outstanding voting stock of MGE Energy, (ii) MGE must maintain a ratio of its consolidated indebtedness to consolidated total capitalization not to exceed a maximum of 65%, and (iii) MGE cannot issue "Priority Debt" in an amount exceeding 20% of its consolidated assets. Priority Debt is defined as any indebtedness of MGE secured by liens other than specified liens permitted by the Note Purchase Agreement and certain unsecured indebtedness of certain subsidiaries. As of December 31, 2018, MGE was in compliance with the covenant requirements.

(f)

Issued by MGE Power West Campus. The Note Purchase Agreements require it to maintain a projected debt service coverage ratio of not less than 1.25 to 1.00, and debt to total capitalization ratio of not more than 0.65 to 1.00. The notes are secured by a collateral assignment of lease payments that MGE is making to MGE Power West Campus for use of its ownership interest in the WCCF pursuant to a long-term lease. As of December 31, 2018, MGE Power West Campus was in compliance with the covenant requirements.

(g)

Issued by MGE Power Elm Road. The Note Purchase Agreement requires MGE Power Elm Road to maintain a projected and actual debt service coverage ratio at the end of any calendar quarter of not less than 1.25 to 1.00 for the trailing 12-month period. The notes are secured by a collateral assignment of lease payments that MGE is making to MGE Power Elm Road for use of its ownership interest in the Elm Road Units pursuant to long-term leases. As of December 31, 2018, MGE Power Elm Road was in compliance with the covenant requirements.

b.

Long-Term Debt Maturities.

Below is MGE Energy's and MGE's aggregate maturities for all long-term debt for years following December 31, 2018.

(In thousands)	2019	2020	2021	2022	2023	Thereafter
Long-term debt maturities	$ 4,553	$ 19,659	$ 4,771	$ 4,889	$ 35,014	$ 433,545

MGE includes long-term debt held by MGE Power Elm Road and MGE Power West Campus in the consolidated financial statements (see Footnote 3 for further information).

11.

Notes Payable to Banks, Commercial Paper, and Lines of Credit.

a.

MGE Energy.

As of December 31, 2018, MGE Energy had an unsecured, committed revolving line of credit of $50 million expiring June 1, 2020. As of December 31, 2018, no borrowings were outstanding under this facility. On February 7, 2019, MGE Energy amended and restated the credit agreement to extend the initial term expiration date to February 7, 2024.

The agreement requires MGE Energy to maintain a ratio of its consolidated indebtedness to consolidated total capitalization not to exceed a maximum of 65%. A change in control constitutes a default under the agreement. Change in control events are defined as (i) a failure by MGE Energy to hold 100% of the outstanding voting equity interest in MGE or (ii) the acquisition of beneficial ownership of 30% or more of the outstanding voting stock of MGE Energy by one person or two or more persons acting in concert. As of December 31, 2018, MGE Energy was in compliance with the covenant requirements.

b.

MGE.

For short-term borrowings, MGE generally issues commercial paper (issued at the prevailing discount rate at the time of issuance), which is supported by unused committed bank lines of credit. As of December 31, 2018, MGE had two unsecured, committed revolving lines of credit for a total of $100 million expiring June 1, 2020. As of December 31, 2018, no borrowings were outstanding under these facilities; however there was $13.0 million in commercial paper outstanding. On February 7, 2019, MGE amended and restated the credit agreements to extend the initial term expiration date to February 7, 2024.

The agreements require MGE to maintain a ratio of consolidated debt to consolidated total capitalization not to exceed a maximum of 65%. The ratio calculation excludes assets, liabilities, revenues, and expenses included in MGE's financial statements as the result of the consolidation of VIEs, such as MGE Power West Campus and MGE Power Elm Road. A change in control constitutes a default under the agreements. Change in control events are defined as (i) a failure by MGE Energy to hold 100% of the outstanding voting equity interest in MGE or (ii) the acquisition of beneficial ownership of 30% or more of the outstanding voting stock of MGE Energy by one person or two or more persons acting in concert. As of December 31, 2018, MGE was in compliance with the covenant requirements.

c.

Short-Term Borrowings - MGE Energy and MGE.

Information concerning short-term borrowings is shown below:

(In thousands)	**MGE Energy[(a)]**		**MGE**	
As of December 31,	2018	2017	2018	2017
Available lines of credit	$ 150,000	$ 150,000	$ 100,000	$ 100,000
Short-term debt outstanding	$ 13,000	$ 4,000	$ 13,000	$ 4,000
Weighted-average interest rate	2.55%	1.55%	2.55%	1.55%
Year Ended December 31,				
Maximum short-term borrowings	$ 31,500	$ 7,500	$ 31,500	$ 7,500
Average short-term borrowings	$ 9,211	$ 304	$ 9,211	$ 304
Weighted-average interest rate	1.92%	1.18%	1.92%	1.18%

(a)

MGE Energy short-term borrowings include MGE Energy and MGE lines of credit and MGE commercial paper.

12.

Income Taxes.

a.

MGE Energy and MGE Income Taxes.

MGE Energy files a consolidated federal income tax return that includes the operations of all subsidiary companies. The subsidiaries calculate their respective federal income tax provisions as if they were separate taxable entities.

On a consolidated and separate company basis, the income tax provision consists of the following provision (benefit) components for the years ended December 31:

	MGE Energy			MGE		
(In thousands)	2018	2017	2016	2018	2017	2016
Current payable:						
Federal	$ 18,622	$ 21,125	$ 16,908	$ 19,926	$ 21,512	$ 17,521
State	5,163	5,129	3,287	5,704	5,316	3,497
Net-deferred:						
Federal	120	(8,346)	17,571	(2,563)	(11,195)	16,391
State	3,629	4,264	4,850	2,494	3,435	4,485
Amortized investment tax credits	(100)	(78)	(103)	(100)	(78)	(103)
Total income tax provision	$ 27,434	$ 22,094	$ 42,513	$ 25,461	$ 18,990	$ 41,791

The consolidated income tax provision differs from the amount computed by applying the statutory federal income tax rate to income before income taxes, as follows:

	MGE Energy			MGE		
	2018	2017	2016	2018	2017	2016
Statutory federal income tax rate	21.0%	35.0%	35.0%	21.0%	35.0%	35.0%
State income taxes, net of federal benefit	6.3%	5.1%	5.1%	6.2%	5.1%	5.1%
Amortized investment tax credits	(0.1)%	-%	(0.1)%	(0.1)%	-%	(0.1)%
Credit for electricity from wind energy	(0.3)%	(1.6)%	(1.6)%	(0.4)%	(1.7)%	(1.7)%
Domestic manufacturing deduction	-%	(1.4)%	(1.3)%	-%	(1.5)%	(1.3)%
AFUDC equity, net	(0.6)%	(0.2)%	(0.2)%	(0.5)%	(0.2)%	(0.2)%
Federal income tax rate reduction	-%	(18.1)%	-%	-%	(19.3)%	-%
Amortization of utility excess deferred tax[(a)]	(1.8)%	-%	-%	(2.0)%	-%	-%
Other, net, individually insignificant	0.1 %	(0.3)%	(0.9)%	0.2 %	(0.4)%	(0.9)%
Effective income tax rate	24.6 %	18.5 %	36.0 %	24.4 %	17.0 %	35.9 %

(a)

Included are impacts of the Tax Act for the regulated utility for excess deferred taxes recognized using a normalization method of accounting.

The significant components of deferred tax liabilities (assets) that appear on the consolidated balance sheets as of December 31 are as follows:

	MGE Energy		MGE	
(In thousands)	2018	2017	2018	2017
Deferred tax assets				
Investment in ATC	23,638	24,781	-	-
Accrued expenses	15,385	15,135	15,385	15,135
Pension and other postretirement benefits	34,914	32,196	34,914	32,196
Deferred tax regulatory account	37,121	36,124	37,121	36,124
Derivatives	8,861	11,525	8,861	11,525
Other	15,137	12,790	15,185	12,831
Gross deferred income tax assets	135,056	132,551	111,466	107,811
Less valuation allowance	(86)	(86)	(86)	(86)
Net deferred income tax assets	134,970	132,465	111,380	107,725
Deferred tax liabilities				
Property-related	$ 244,114	$ 238,437	$ 244,114	$ 238,544
Investment in ATC	50,771	48,324	-	-
Bond transactions	765	832	765	832
Pension and other postretirement benefits	47,644	42,919	47,644	42,919
Derivatives	8,861	11,525	8,861	11,525
Tax deductible prepayments	6,014	6,169	6,014	6,169
Other	8,753	9,389	8,598	9,222
Gross deferred income tax liabilities	366,922	357,595	315,996	309,211
Deferred income taxes	$ 231,952	$ 225,130	$ 204,616	$ 201,486

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the Tax Act). The Tax Act makes broad and complex changes to the U.S. tax code, including a reduction in the U.S. federal corporate tax rate from 35 percent to 21 percent.

The SEC staff issued Staff Accounting Bulletin No. 118 (SAB 118), which provides guidance on accounting for the tax effects of the Tax Act. SAB 118 provides a measurement period that should not extend beyond one year from the Tax Act enactment date for companies to complete the accounting for certain income tax effects. In accordance with

SAB 118 any subsequent adjustment to these amounts would be recorded in 2018 when the analysis is complete. The analysis was completed, and no material adjustments have been recorded during 2018.

The Tax Act reduced the corporate tax rate to 21 percent, effective January 1, 2018. The one-time impacts recorded to remeasure deferred income tax balances at the 21 percent corporate federal income tax rate as of December 31, 2017, were as follows:

(In thousands)	MGE Energy	MGE
Net Decrease in Deferred Tax Liability	$ 176,871	$ 156,493
Decrease in Regulatory Asset	4,347	4,347
Increase in Regulatory Liability[(b)]	130,497	130,497
Decrease in Investment ATC	20,375	-
Net Deferred Income Tax Benefit Recorded[(c)]	21,651	21,649

(b)

Given that changes in income taxes are generally passed through in customer rates for the regulated utility, a regulatory liability was recorded. The amount and timing of the cash impacts will depend on the period over which certain income tax benefits are provided to customers, which will be subject to review by the PSCW. A portion of the regulatory liability will be returned to customers based on a mandated timeframe dictated by applicable tax laws.

(c)

Generated by nonregulated activities.

Beginning January 1, 2018, MGE began amortizing the regulated utility excess deferred taxes recognized using a normalization method of accounting. For the year ended December 31, 2018, MGE recognized $2.8 million of excess deferred taxes as a reduction of revenue and a corresponding increase in a regulatory liability. The amount and timing of the cash impacts will depend on the period over which certain income tax benefits are provided to customers, which will be determined by the PSCW.

Customer rates approved for 2018 reflect an income tax rate of 35 percent. In January 2018, the PSCW issued an order directing Wisconsin investor-owned utilities to defer the over-collection of income tax expense as a result of the decrease in tax rate to 21 percent. The PSCW issued an order in May 2018 to return to customers the estimated 2018 over-collection of income tax expense. The decision includes a one-time bill credit on customer bills to reflect the estimate of the over-collection for January through June 2018, along with a monthly volumetric bill credit which began in July 2018 and continued through the remainder of 2018 for the estimated remaining annual amount. As of December 31, 2018, MGE returned $8.2 million to customers through bill credits. Any over/under recovery of the actual costs will be subject to the PSCW's review in a future rate case. As of December 31, 2018, MGE has deferred $3.1 million as a regulatory liability and recorded a corresponding reduction in operating revenues for over-collection of income tax expense (net of customer bill credits).

Our state valuation allowance reduces MGE Energy's and MGE's deferred tax assets for state carryforward losses to estimated realizable value due to the uncertainty of future income estimates in various state tax jurisdictions. For tax purposes, as of December 31, 2018, both MGE Energy and MGE had approximately $1.4 million of state tax net operating loss deductions subject to a valuation allowance that expire between 2020 and 2023 if unused.

b.

Accounting for Uncertainty in Income Taxes - MGE Energy and MGE.

The difference between the tax benefit amount taken on prior year tax returns, or expected to be taken on a current year tax return, and the tax benefit amount recognized in the financial statements is accounted for as an unrecognized tax benefit.

A tabular reconciliation of unrecognized tax benefits and is as follows:

(In thousands)			
Unrecognized Tax Benefits:	2018	2017	2016
Unrecognized tax benefits, January 1,	$ 1,924	$ 2,487	$ 2,528
Additions based on tax positions related to the current year	425	552	452
Additions based on tax positions related to the prior years	272	19	39

Reductions based on tax positions related to the prior years	(672)	(1,134)	(532)
Unrecognized tax benefits, December 31,	$ 1,949	$ 1,924	$ 2,487

(In thousands)			
Interest on Unrecognized Tax Benefits:	2018	2017	2016
Accrued interest on unrecognized tax benefits, January 1,	$ 165	$ 388	$ 311
Reduction in interest expense on uncertain tax positions	(136)	(312)	(27)
Interest expense on uncertain tax positions	162	89	104
Accrued interest on unrecognized tax benefits, December 31,	$ 191	$ 165	$ 388

Unrecognized tax benefits are classified with "Other deferred liabilities" on the consolidated balance sheets. The interest component recoverable in rates is offset by a regulatory asset.

As of December 31, 2018, 2017, and 2016, unrecognized tax benefits primarily related to temporary tax differences associated with the change in income tax method of accounting for electric generation and electric and gas distribution repairs. In addition, as of December 31, 2018, unrecognized tax benefits relating to permanent differences and tax credits was $0.3 million. As of December 31, 2017 and 2016, unrecognized tax benefits relating to permanent differences and tax credits was less than $0.1 million.

The unrecognized tax benefits as of December 31, 2018, are not expected to significantly increase or decrease within the next twelve months. In addition, statutes of limitations will expire for MGE Energy and MGE tax returns. The impact of the statutes of limitations expiring is not anticipated to be material. The following table shows tax years that remain subject to examination by major jurisdiction:

Taxpayer	**Open Years**
MGE Energy and consolidated subsidiaries in federal return	2015 through 2018
MGE Energy Wisconsin combined reporting corporation return	2013 through 2018

13.

Pension Plans and Other Postretirement Benefits - MGE Energy and MGE.

MGE maintains qualified and nonqualified pension plans, health care, and life insurance benefits, and defined contribution 401(k) benefit plans for its employees and retirees. MGE's costs for the 401(k) plans were $3.9 million, $3.5 million, and $3.1 million for the years ended December 31, 2018, 2017, and 2016, respectively. A measurement date of December 31 is utilized for all pension and postretirement benefit plans.

All employees hired after December 31, 2006, have been enrolled in the defined contribution pension plan, rather than the defined benefit pension plan previously in place.

a.

Benefit Obligations and Plan Assets.

			Other Postretirement	
(In thousands)	Pension Benefits		Benefits	
Change in Benefit Obligations:	2018	2017	2018	2017
Net benefit obligation at beginning of year	$ 391,269	$ 349,556	$ 82,290	$ 78,842
Service cost	5,723	5,383	1,283	1,231
Interest cost	12,859	12,625	2,612	2,666
Plan participants' contributions	-	-	950	894
Actuarial (gain) loss[a]	(34,439)	37,689	(7,555)	2,749
Gross benefits paid	(15,124)	(13,984)	(4,623)	(4,262)
Less: federal subsidy on benefits paid[b]	-	-	204	170
Benefit obligation at end of year	$ 360,288	$ 391,269	$ 75,161	$ 82,290
Change in Plan Assets:				
Fair value of plan assets at beginning of year	$ 361,651	$ 311,933	$ 48,470	$ 43,177
Actual return on plan assets	(24,485)	56,987	(2,780)	7,104
Employer contributions	1,738	6,715	504	1,557
Plan participants' contributions	-	-	950	894
Gross benefits paid	(15,124)	(13,984)	(4,623)	(4,262)

Fair value of plan assets at end of year	$ 323,780	$ 361,651	$ 42,521	$ 48,470
Funded Status as of December 31	$ (36,508)	$ (29,618)	$ (32,640)	$ (33,820)

(a)

In 2018, higher discount rates were the main driver of the actuarial gain. However, in 2017, lower discount rates were the main driver of the actuarial loss.

(b)

In 2003, the Medicare Prescription Drug, Improvement and Modernization Act of 2003 was signed into law authorizing Medicare to provide prescription drug benefits to retirees. For the years ended December 31, 2018 and 2017, the subsidy due to MGE was $0.2 million.

The accumulated benefit obligation for the defined benefit pension plans as of December 31, 2018 and 2017, was $335.8 million and $356.0 million, respectively.

The amounts recognized in the consolidated balance sheets to reflect the funded status of the plans as of December 31 are as follows:

	Pension Benefits		Other Postretirement Benefits	
(In thousands)	2018	2017	2018	2017
Long-term asset	$ -	$ 7,336	$ -	$ -
Current liability	(1,732)	(1,726)	-	-
Long-term liability	(34,776)	(35,228)	(32,640)	(33,820)
Net liability	$ (36,508)	$ (29,618)	$ (32,640)	$ (33,820)

The following table shows the amounts that have not yet been recognized in our net periodic benefit cost as of December 31 and are recorded as regulatory assets in the consolidated balance sheets:

	Pension Benefits		Other Postretirement Benefits	
(In thousands)	2018	2017	2018	2017
Net actuarial loss	$ 92,978	$ 81,969	$ 10,569	$ 12,600
Prior service benefit	(385)	(429)	(7,153)	(9,821)
Transition obligation	-	-	21	23
Total	$ 92,593	$ 81,540	$ 3,437	$ 2,802

The projected benefit obligation and fair value of plan assets for pension plans with a projected benefit obligation in excess of plan assets were as follows:

(In thousands)	Pension Benefits	
Projected Benefit Obligation in Excess of Plan Assets	2018	2017
Projected benefit obligation, end of year	$ 360,288	$ 36,954
Fair value of plan assets, end of year	323,780	-

The accumulated benefit obligation and fair value of plan assets for pension plans with an accumulated benefit obligation in excess of plan assets were as follows:

(In thousands)	Pension Benefits	
Accumulated Benefit Obligation in Excess of Plan Assets	2018	2017
Accumulated benefit obligation, end of year	$ 31,200	$ 32,813
Fair value of plan assets, end of year	-	-

b.

Net Periodic Benefit Cost.

(In thousands)	Pension Benefits			Other Postretirement Benefits		
Components of Net Periodic Benefit Cost:	2018	2017	2016	2018	2017	2016
Service cost	$ 5,723	$ 5,383	$ 5,365	$ 1,283	$ 1,231	$ 1,271
Interest cost	12,859	12,625	12,393	2,612	2,666	2,681
Expected return on assets	(26,241)	(22,963)	(22,365)	(3,232)	(2,887)	(2,829)
Amortization of:						
Transition obligation	-	-	-	3	3	3
Prior service (credit) cost	(44)	(17)	10	(2,669)	(2,669)	(2,669)
Actuarial loss	5,278	6,352	5,600	488	660	589
Net periodic benefit cost (credit)	$ (2,425)	$ 1,380	$ 1,003	$ (1,515)	$ (996)	$ (954)

The components of net periodic benefit cost, other than the service cost component, are recorded in "Other income, net" on the consolidated statements of income. The service cost component is recorded in "Other operations and maintenance" on the consolidated statements of income. Prior to January 1, 2018, a portion of all net periodic benefit cost components were capitalized within the consolidated balance sheets. The FASB issued authoritative guidance within the codification's Compensation-Retirement Benefits topic that, beginning January 1, 2018, only allows the service cost component of net periodic benefit cost to be eligible for capitalization within the consolidated balance sheets. MGE has regulatory treatment and recognizes regulatory assets or liabilities for timing differences between when net periodic benefit costs are recovered and when costs are recognized.

c.

Plan Assumptions.

The weighted-average assumptions used to determine the benefit obligations were as follows for the years ended December 31:

	Pension Benefits		Other Postretirement Benefits	
	2018	2017	2018	2017
Discount rate	4.32%	3.73%	4.24%	3.58%
Rate of compensation increase	3.20%	3.67%	N/A	N/A
Assumed health care cost trend rates:				
Health care cost trend rate assumed for next year	N/A	N/A	6.25%	6.00%
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	N/A	N/A	5.00%	5.00%
Year that the rate reaches the ultimate trend rate	N/A	N/A	2024	2022

MGE uses individual spot rates, instead of a weighted average of the yield curve spot rates, for measuring the service cost and interest cost components of net periodic benefit cost.

The weighted-average assumptions used to determine the net periodic cost were as follows for the years ended December 31:

	Pension Benefits			Other Postretirement Benefits		
	2018	2017	2016	2018	2017	2016
Discount rate	3.73%	4.30%	4.51%	3.60%	4.09%	4.32%
Expected rate of return on plan assets	7.40%	7.40%	7.65%	6.94%	6.80%	6.96%
Rate of compensation increase	3.72%	3.76%	3.76%	N/A	N/A	N/A

The assumed health care cost trend rates have a significant effect on the amounts reported for the health care plans. The following table shows how an assumed 1% increase or 1% decrease in health care cost trends could impact postretirement benefits in 2018 dollars:

(In thousands)	1% Increase	1% Decrease
Effect on other postretirement benefit obligation	$ 754	$ (980)
Effect on total service and interest cost components	21	(30)

MGE employs a building-block approach in determining the expected long-term rate of return for asset classes. Historical markets are studied and long-term historical relationships among asset classes are analyzed, consistent with the widely accepted capital market principle that assets with higher volatility generate a greater return over the long run. Current market factors, such as interest rates and dividend yields, are evaluated before long-term capital market assumptions are determined.

The expected long-term nominal rate of return for plan assets is primarily a function of expected long-term real rates of return for component asset classes and the plan's target asset allocation in conjunction with an inflation assumption. Peer data and historical returns are reviewed to check for appropriateness.

d.

Investment Strategy.

MGE employs a total return investment approach whereby a mix of equities, fixed income, and real estate investments are used to maximize the expected long-term return of plan assets for a prudent level of risk. Risk tolerance is established through careful consideration of plan liabilities, plan-funded status, and corporate financial condition. The investment portfolio contains a diversified blend of equity, fixed income, and real estate investments. Investment risk is measured and monitored on an ongoing basis through periodic investment portfolio reviews and liability measurements.

The asset allocation for MGE's pension plans as of December 31, 2018 and 2017, and the target allocation for 2019, by asset category, follows:

	Target Allocation	Percentage of Plan Assets at Year End 2018	2017
Equity securities[(a)]	63.0 %	60.0 %	65.0 %
Fixed income securities	30.0 %	33.0 %	29.0 %
Real estate	7.0 %	7.0 %	6.0 %
Total	100.0 %	100.0 %	100.0 %

(a)

Target allocations for equity securities are broken out as follows: 45.5% United States equity, 17.5% non-United States equity.

The fair value of plan assets for the postretirement benefit plans is $42.5 million and $48.5 million as of December 31, 2018 and 2017, respectively. Of this amount, $37.5 million and $43.1 million as of December 31, 2018 and 2017, respectively, were held in the master pension trust and are allocable to postretirement health expenses. The target asset allocation and investment strategy for the portion of assets held in the master pension trust are the same as that explained for MGE's pension plans. The remainder of postretirement benefit assets are held either in an insurance continuance fund for the payment of retiree life benefits or health benefit trusts for payment of retiree health premiums. The asset allocation for the insurance continuance fund is determined by the life insurer. The target asset allocation for the health benefit trusts are established based on a similar investment strategy as assets held in the master pension trust, with consideration for liquidity needs in the health benefit trusts.

e.

Concentrations of Credit Risk.

MGE evaluated its pension and other postretirement benefit plans' asset portfolios for the existence of significant concentrations of credit risk as of December 31, 2018. Types of concentrations that were evaluated include, but are not limited to, investment concentrations in a single entity, type of industry, and foreign country. As of December 31, 2018, there were no significant concentrations (defined as greater than 10 percent of plan assets) of risk in MGE pension and postretirement benefit plan assets.

f.

Fair Value Measurements of Plan Assets.

Pension and other postretirement benefit plan investments are recorded at fair value. See Footnote 15 for more information regarding the fair value hierarchy.

The following descriptions are the categories of underlying plan assets held within the pension and other postretirement benefit plans as of December 31, 2018:

Cash and Cash Equivalents This category includes highly liquid investments with maturities of less than three months which are traded in active markets.

Equity Securities These securities consist of U.S. and international stock funds. The U.S. stock funds are primarily invested in domestic equities. Securities in these funds are typically priced using the closing price from the applicable exchange, NYSE, Nasdaq, etc. The international funds are composed of international equities. Securities are priced using the closing price from the appropriate local stock exchange.

Fixed Income Securities These securities consist of U.S. bond funds and short-term funds. U.S. bond funds are priced by a pricing agent using inputs such as benchmark yields, reported trades, broker/dealer quotes, and issuer spreads. The short-term funds are valued initially at cost and adjusted for amortization of any discount or premium.

Real Estate Real estate funds are funds with a direct investment in pools of real estate properties. These funds are valued by investment managers on a periodic basis using pricing models that use independent appraisals. The fair value of real estate investments is determined using net asset value.

Insurance Continuance Fund (ICF) The ICF is a supplemental retirement plan that includes assets that have been segregated and restricted to pay retiree term life insurance premiums.

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Fixed Rate Fund The Fixed Rate fund is supported by an underlying portfolio of fixed income securities, including public bonds, commercial mortgages, and private placement bonds. Public market data and GAAP reported market values are used when available to determine fair value.

All of the fair values of MGE's plan assets are measured using net asset value, except for cash and cash equivalents which are considered level 1 investments. The fair values of MGE's plan assets by asset category as of December 31 are as follows:

(In thousands)	2018	2017
Cash and Cash Equivalents	$ 701	$ 488
Equity Securities:		
U.S. Large Cap	102,984	124,594
U.S. Mid Cap	23,683	29,138
U.S. Small Cap	28,573	37,782
International Blend	61,299	71,514
Fixed Income Securities:		
Short-Term Fund	4,053	4,641
High Yield Bond	19,437	19,400
Long Duration Bond	93,216	91,678
Real Estate	27,923	25,995
Insurance Continuance Fund	1,491	1,500
Fixed Rate Fund	2,941	3,391
Total	$ 366,301	$ 410,121

g.

Expected Cash Flows.

MGE does not expect to need to make any required contributions to the qualified plans for 2019 and 2020. The contributions for years after 2020 are not yet currently estimated. MGE has adopted the asset smoothing as permitted in accordance with the Pension Protection Act of 2006, including modifications made by WRERA.

Due to uncertainties in the future economic performance of plan assets, discount rates, and other key assumptions, estimated contributions are subject to change. MGE may also elect to make additional discretionary contributions.

In 2018, MGE made $5.6 million in employer contributions to its pension and postretirement plans.

h.

Benefit Payments.

The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid as follows:

	Pension	Other Postretirement Benefits		
(In thousands)	Pension Benefits	Gross Postretirement Benefits	Expected Medicare Part D Subsidy	Net Postretirement Benefits
2019	$ 16,362	$ 4,248	$ (228)	$ 4,020
2020	17,087	4,585	(252)	4,333
2021	17,835	4,994	(276)	4,718
2022	18,956	5,325	(305)	5,020
2023	19,770	5,604	(334)	5,270
2024 - 2028	110,037	29,478	(2,103)	27,375

14.

Derivative and Hedging Instruments - MGE Energy and MGE.

a.

Purpose.

As part of its regular operations, MGE enters into contracts, including options, swaps, futures, forwards, and other contractual commitments, to manage its exposure to commodity prices. To the extent that these contracts are derivatives, MGE assesses whether or not the normal purchases or normal sales exclusion applies. For contracts to which this exclusion cannot be applied, the derivatives are recognized in the consolidated balance sheets at fair value. MGE's financial commodity derivative activities are conducted in accordance with its electric and gas risk management program, which is approved by the PSCW and limits the volume MGE can hedge with specific risk management strategies. The maximum length of time over which cash flows related to energy commodities can be hedged is four years. If the derivative qualifies for regulatory deferral, the derivatives are marked to fair value and are offset with a corresponding regulatory asset or liability depending on whether the derivative is in a net loss or net gain position, respectively. The deferred gain or loss is recognized in earnings in the delivery month applicable to the instrument. Gains and losses related to hedges qualifying for regulatory treatment are recoverable in gas rates through the PGA or in electric rates as a component of the fuel rules mechanism.

b.

Notional Amounts.

The gross notional volume of open derivatives is as follows:

	December 31, 2018	December 31, 2017
Commodity derivative contracts	386,440 MWh	552,310 MWh
Commodity derivative contracts	5,260,000 Dth	5,460,000 Dth
FTRs	2,252 MW	2,226 MW

PPA	2,050 MW	2,650 MW

c.

Financial Statement Presentation.

MGE purchases and sells exchange-traded and over-the-counter options, swaps, and future contracts. These arrangements are primarily entered into to help stabilize the price risk associated with gas or power purchases. These transactions are employed by both MGE's gas and electric segments. Additionally, as a result of the firm transmission agreements that MGE holds on electricity transmission paths in the MISO market, MGE holds financial transmission rights (FTRs). An FTR is a financial instrument that entitles the holder to a stream of revenues or charges based on the differences in hourly day-ahead energy prices between two points on the transmission grid. The fair values of these instruments are offset with a corresponding regulatory asset/liability depending on whether they are in a net loss/gain position. Depending on the nature of the instrument, the gain or loss associated with these transactions will be reflected as cost of gas sold, fuel for electric generation, or purchased power expense in the delivery month applicable to the instrument. As of December 31, 2018 and 2017, the fair value of exchange traded derivatives and FTRs exceeded their cost basis by $0.7 million and $0.2 million, respectively.

MGE is a party to a purchased power agreement that provides MGE with firm capacity and energy during a base term from June 1, 2012, through May 31, 2022. The agreement also allows MGE an option to extend the contract after the base term. The agreement is accounted for as a derivative contract and is recognized at its fair value on the consolidated balance sheets. However, the derivative qualifies for regulatory deferral and is recognized with a corresponding regulatory asset or liability depending on whether the fair value is in a loss or gain position. The fair value of the contract as of December 31, 2018 and 2017, reflects a loss position of $32.5 million and $42.2 million, respectively. The actual cost will be recognized in purchased power expense in the month of purchase.

The following table summarizes the fair value of the derivative instruments on the consolidated balance sheets. All derivative instruments in this table are presented on a gross basis and are calculated prior to the netting of instruments with the same counterparty under a master netting agreement as well as the netting of collateral. For financial statement purposes, instruments are netted with the same counterparty under a master netting agreement as well as the netting of collateral.

(In thousands)	Derivative Assets	Derivative Liabilities	Balance Sheet Location
December 31, 2018			
Commodity derivative contracts[a]	$ 727	$ 270	Other current assets
Commodity derivative contracts[a]	74	72	Other deferred charges
FTRs	241	-	Other current assets
PPA	N/A	8,550	Derivative liability (current)
PPA	N/A	23,980	Derivative liability (long-term)
December 31, 2017			
Commodity derivative contracts[a]	$ 566	$ 603	Derivative liability (current)[b]
Commodity derivative contracts[a]	110	190	Derivative liability (long-term)
FTRs	329	-	Other current assets
PPA	N/A	8,180	Derivative liability (current)
PPA	N/A	33,990	Derivative liability (long-term)

(a)

As of December 31, 2017, collateral of $0.1 million was posted against and netted with derivative liability positions on the consolidated balance sheets. No collateral was posted against derivative positions as of December 31, 2018.

(b)

As of December 31, 2017, MGE presented $0.1 million as other current assets on the consolidated balance sheets.

The following tables show the effect of netting arrangements for recognized derivative assets and liabilities that are subject to a master netting arrangement or similar arrangement on the consolidated balance sheets.

Offsetting of Derivative Assets

(In thousands)		Gross Amounts		Gross Amounts Offset in Balance Sheets		Collateral Posted Against Derivative Positions		Net Amount Presented in Balance Sheets
December 31, 2018								
Commodity derivative contracts	$	801	$	(342)	$	-	$	459
FTRs		241		-		-		241
December 31, 2017								
Commodity derivative contracts	$	676	$	(654)	$	-	$	22
FTRs		329		-		-		329

Offsetting of Derivative Liabilities

(In thousands)		Gross Amounts		Gross Amounts Offset in Balance Sheets		Collateral Posted Against Derivative Positions		Net Amount Presented in Balance Sheets
December 31, 2018								
Commodity derivative contracts	$	342	$	(342)	$	-	$	-
PPA		32,530		-		-		32,530
December 31, 2017								
Commodity derivative contracts	$	793	$	(654)	$	(139)	$	-
PPA		42,170		-		-		42,170

The following tables summarize the unrealized and realized gains/losses related to the derivative instruments on the consolidated balance sheets as of December 31, 2018 and 2017, and the consolidated statements of income for the years ended December 31, 2018 and 2017.

	2018		2017	
(In thousands)	Current and Long-Term Regulatory Asset	Other Current Assets	Current and Long-Term Regulatory Asset	Other Current Assets
Balance as of January 1,	$ 41,958	$ 806	$ 49,281	$ 230
Unrealized gain	(11,094)	-	(2,743)	-
Realized gain (loss) reclassified to a deferred account	523	(523)	(1,260)	1,260
Realized loss reclassified to income statement	443	94	(3,320)	(684)
Balance as of December 31,	$ 31,830	$ 377	$ 41,958	$ 806

	Realized Losses (Gains)			
	2018		2017	
(In thousands)	Fuel for Electric Generation/ Purchased Power	Cost of Gas Sold	Fuel for Electric Generation/ Purchased Power	Cost of Gas Sold
Year Ended December 31:				
Commodity derivative contracts	$ (716)	$ (199)	$ 786	$ 634
FTRs	(702)	-	(1,464)	-
PPA	1,080	-	4,048	-

MGE's commodity derivative contracts, FTRs, and PPA are subject to regulatory deferral. These derivatives are marked to fair value and are offset with a corresponding regulatory asset or liability. Realized gains and losses are deferred on the consolidated balance sheets and are recognized in earnings in the delivery month applicable to the instrument. As a result of the above described treatment, there are no unrealized gains or losses that flow through earnings.

The PPA has a provision that may require MGE to post collateral if MGE's debt rating falls below investment grade (i.e., below BBB-). The amount of collateral that it may be required to post varies from $20.0 million to $40.0 million, depending on MGE's nominated capacity amount. As of December 31, 2018, no collateral is required to be, or has been, posted. Certain counterparties extend MGE a credit limit. If MGE exceeds these limits, the counterparties may require collateral to be posted. As of December 31, 2017, certain counterparties were in a net liability of $0.1 million. As of December 31, 2018, no counterparties were in a net liability position.

Nonperformance of counterparties to the non-exchange traded derivatives could expose MGE to credit loss. However, MGE enters into transactions only with companies that meet or exceed strict credit guidelines, and it monitors these counterparties on an ongoing basis to mitigate nonperformance risk in its portfolio. As of December 31, 2018, no counterparties have defaulted.

15.

Fair Value of Financial Instruments - MGE Energy and MGE.

Fair value is defined as the price that would be received to sell an asset or would be paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date. The accounting standard clarifies that fair value should be based on the assumptions market participants would use when pricing the asset or liability including assumptions about risk. The standard also establishes a three level fair value hierarchy based upon the observability of the assumptions used and requires the use of observable market data when available. The levels are:

Level 1 - Pricing inputs are quoted prices within active markets for identical assets or liabilities.

Level 2 - Pricing inputs are quoted prices within active markets for similar assets or liabilities; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations that are correlated with or otherwise verifiable by observable market data.

Level 3 - Pricing inputs are unobservable and reflect management's best estimate of what market participants would use in pricing the asset or liability.

a.

Fair Value of Financial Assets and Liabilities Recorded at the Carrying Amount.

The carrying amount of cash, cash equivalents, and outstanding commercial paper approximates fair market value due to the short maturity of those investments and obligations. The estimated fair market value of long-term debt is based on quoted market prices for similar financial instruments as of December 31. Since long-term debt is not traded in an active market, it is classified as Level 2. The estimated fair market value of financial instruments are as follows:

	December 31, 2018		December 31, 2017	
(In thousands)	Carrying Amount	Fair Value	Carrying Amount	Fair Value
MGE Energy				
Assets:				
Cash and cash equivalents	$ 83,102	$ 83,102	$ 107,952	$ 107,952
Liabilities:				
Short-term debt - commercial paper	13,000	13,000	4,000	4,000
Long-term debt[(a)]	502,431	518,811	426,883	475,282
MGE				
Assets:				
Cash and cash equivalents	$ 4,843	$ 4,843	$ 5,951	$ 5,951
Liabilities:				
Short-term debt - commercial paper	13,000	13,000	4,000	4,000
Long-term debt[(a)]	502,431	518,811	426,883	475,282

(a)

Includes long-term debt due within one year. Excludes debt issuance costs and unamortized discount of $4.5 million and $4.3 million as of December 31, 2018 and 2017, respectively.

b.

Recurring Fair Value Measurements.

The following table presents the balances of assets and liabilities measured at fair value on a recurring basis.

	Fair Value as of December 31, 2018			
(In thousands)	Total	Level 1	Level 2	Level 3
MGE Energy				
Assets:				
Derivatives, net	$ 1,042	$ 296	$ -	$ 746
Exchange-traded investments	848	848	-	-
Total Assets	$ 1,890	$ 1,144	$ -	$ 746
Liabilities:				
Derivatives, net	$ 32,872	$ 124	$ -	$ 32,748
Deferred compensation	3,078	-	3,078	-
Total Liabilities	$ 35,950	$ 124	$ 3,078	$ 32,748
MGE				
Assets:				
Derivatives, net	$ 1,042	$ 296	$ -	$ 746
Exchange-traded investments	43	43	-	-
Total Assets	$ 1,085	$ 339	$ -	$ 746
Liabilities:				
Derivatives, net	$ 32,872	$ 124	$ -	$ 32,748
Deferred compensation	3,078	-	3,078	-
Total Liabilities	$ 35,950	$ 124	$ 3,078	$ 32,748

	Fair Value as of December 31, 2017			
(In thousands)	Total	Level 1	Level 2	Level 3
MGE Energy				
Assets:				
Derivatives, net	$ 1,005	$ 278	$ -	$ 727
Exchange-traded investments	792	792	-	-
Total Assets	$ 1,797	$ 1,070	$ -	$ 727
Liabilities:				
Derivatives, net[(b)]	$ 42,963	$ 210	$ -	$ 42,753
Deferred compensation	3,065	-	3,065	-
Total Liabilities	$ 46,028	$ 210	$ 3,065	$ 42,753
MGE				
Assets:				
Derivatives, net	$ 1,005	$ 278	$ -	$ 727
Exchange-traded investments	64	64	-	-
Total Assets	$ 1,069	$ 342	$ -	$ 727
Liabilities:				
Derivatives, net[(b)]	$ 42,963	$ 210	$ -	$ 42,753
Deferred compensation	3,065	-	3,065	-
Total Liabilities	$ 46,028	$ 210	$ 3,065	$ 42,753

(b)

These amounts are shown gross and exclude $0.1 million of collateral that was posted against derivative positions with counterparties as of December 31, 2017.

No transfers were made in or out of Level 1 or Level 2 for the year ended December 31, 2018.

Investments include exchange-traded investment securities valued using quoted prices on active exchanges and are therefore classified as Level 1.

Derivatives include exchange-traded derivative contracts, over-the-counter transactions, a purchased power agreement, and FTRs. Most exchange-traded derivative contracts are valued based on unadjusted quoted prices in active markets and are therefore classified as Level 1. A small number of exchange-traded derivative contracts are valued using quoted market pricing in markets with insufficient volumes and are therefore considered unobservable and classified as Level 3. Transactions done with an over-the-counter party are on inactive markets and are therefore classified as Level 3. These transactions are valued based on quoted prices from markets with similar exchange-traded transactions. FTRs are priced based upon monthly auction results for identical or similar instruments in a closed market with limited data available and are therefore classified as Level 3.

The purchased power agreement (see Footnote 14) was valued using an internally-developed pricing model and therefore is classified as Level 3. The model projects future market energy prices and compares those prices to the projected power costs to be incurred under the contract. Inputs to the model require significant management judgment and estimation. Future energy prices are based on a forward power pricing curve using exchange-traded contracts in the electric futures market. A basis adjustment is applied to the market energy price to reflect the price differential between the market price delivery point and the counterparty delivery point. The historical relationship between the delivery points is reviewed and a discount (below 100%) or premium (above 100%) is derived. This comparison is done for both peak times when demand is high and off peak times when demand is low. If the basis adjustment is lowered, the fair value measurement will decrease, and if the basis adjustment is increased, the fair value measurement will increase.

The projected power costs anticipated to be incurred under the purchased power agreement are determined using many factors, including historical generating costs, future prices, and expected fuel mix of the counterparty. An increase in the projected fuel costs would result in a decrease in the fair value measurement of the purchased power agreement. A significant input that MGE estimates is the counterparty's fuel mix in determining the projected power cost. MGE also considers the assumptions that market participants would use in valuing the asset or liability. This consideration includes assumptions about market risk such as liquidity, volatility, and contract duration. The fair value model uses a discount rate that incorporates discounting, credit, and model risks.

The following table presents the significant unobservable inputs used in the pricing model as of December 31:

	Model Input	
Significant Unobservable Inputs	2018	2017
Basis adjustment:		
On peak	92.1%	92.3%
Off peak	92.8%	94.1%
Counterparty fuel mix:		
Internal generation	50%-75%	55%-75%
Purchased power	50%-25%	45%-25%

The deferred compensation plan allows participants to defer certain cash compensation into a notional investment account. These amounts are included within other deferred liabilities in the consolidated balance sheets of MGE Energy and MGE. The notional investments earn interest based upon the semiannual rate of U.S. Treasury Bills having a 26-week maturity increased by 1% compounded monthly with a minimum annual rate of 7%, compounded monthly. The notional investments are based upon observable market data, however, since the deferred compensation obligations themselves are not exchanged in an active market, they are classified as Level 2.

The following table summarizes the changes in Level 3 commodity derivative assets and liabilities measured at fair value on a recurring basis.

(In thousands)	2018	2017	2016
Balance as of January 1,	$ (42,026)	$ (50,306)	$ (53,501)
Realized and unrealized gains (losses):			
Included in regulatory liabilities	10,024	8,281	3,195
Included in other comprehensive income	-	-	-
Included in earnings	132	(3,718)	(5,347)
Included in current assets	(47)	(9)	(142)
Purchases	23,643	24,181	23,346
Sales	-	-	-
Issuances	-	-	-
Settlements	(23,728)	(20,455)	(17,857)

Transfers in and/or out of Level 3	-	-	-
Balance as of December 31,	$ (32,002)	$ (42,026)	$ (50,306)
Total gains (losses) included in earnings attributed to the change in unrealized gains (losses) related to assets and liabilities held as of December 31,(c)	$ -	$ -	$ -

The following table presents total realized and unrealized gains (losses) included in income for Level 3 assets and liabilities measured at fair value on a recurring basis (c).

(In thousands)

Year Ended December 31,	2018	2017	2016
Purchased power expense	$ 355	$ (3,314)	$ (5,262)
Cost of gas sold expense	(223)	(404)	(85)
Total	$ 132	$ (3,718)	$ (5,347)

(c)

MGE's exchange-traded derivative contracts, over-the-counter party transactions, purchased power agreement, and FTRs are subject to regulatory deferral. These derivatives are therefore marked to fair value and are offset in the financial statements with a corresponding regulatory asset or liability.

16.

Share-Based Compensation - MGE Energy and MGE.

Under MGE Energy's Director Incentive Plan and its Performance Unit Plan, non-employee directors and eligible employees, respectively, may receive performance units that entitle the holder to receive a cash payment equal to the value of a designated number of shares of MGE Energy's common stock, plus dividend equivalent payments thereon, at the end of the set performance period set in the award. In accordance with the plans' provisions, these awards are subject to prescribed vesting schedules and must be settled in cash. Accordingly, no shares of common stock will be issued in connection with the plans.

On the grant date, the cost of the director or employee services received in exchange for a performance unit award is measured based on the current market value of MGE Energy common stock. The fair value of the awards is remeasured quarterly, including as of December 31, 2018, as required by applicable accounting standards. Changes in fair value as well as the original grant are recognized as compensation cost. Since this amount is remeasured throughout the vesting period, the compensation cost is subject to variability.

Units granted under the Director Incentive Plan are subject to a three-year vesting schedule. The most recent three years of units granted under this plan are as follows:

	MGE Energy
Grant Date	Units Granted
January 18, 2019	5,175
March 1, 2018	1,106
January 19, 2018	4,704
January 20, 2017	4,608

Units granted under the Performance Unit Plan are subject to a five-year vesting schedule. The most recent units granted under this plan are as follows:

	MGE Energy
Grant Date	Units Granted
February 15, 2019	17,022
February 16, 2018	17,830
March 1, 2017	14,704
February 19, 2016	19,055
February 20, 2015	18,948

For nonretirement eligible employees under the Performance Unit Plan, stock-based compensation costs are accrued and recognized using the graded vesting method. Compensation cost for retirement eligible employees or employees that will become retirement eligible during the vesting schedule are recognized on an abridged horizon as retirement eligibility accelerates vesting.

During the years ended December 31, 2018, 2017 and 2016, MGE recorded $1.1 million, $1.0 million, and $3.1 million, respectively, in compensation expense as a result of awards under the plans. In January 2018, cash payments of $1.6 million were distributed relating to awards that were granted under the plans. No forfeitures of units occurred during the years ended December 31, 2018, 2017, and 2016. As of December 31, 2018, $5.2 million of outstanding awards are vested. Of this amount, no cash settlements have occurred as cash payments are only made at the end of the period covered by the awards.

17.

Commitments and Contingencies.

a.

Purchase Contracts - MGE Energy and MGE.

MGE Energy and MGE have entered into various commodity supply, transportation, and storage contracts to meet their obligations to deliver electricity and natural gas to customers. Management expects to recover these costs in future customer rates. As of December 31, 2018, the future minimum commitments related to these purchase contracts were as follows:

(In thousands)	2019	2020	2021	2022	2023	Thereafter
Coal[(a)]	$ 25,167	$ 8,213	$ 828	$ -	$ -	$ -
Natural gas						
Transportation and storage[(b)]	21,051	20,853	20,853	20,853	20,853	53,361
Supply[(c)]	15,423	-	-	-	-	-
Purchase power[(d)]	27,577	28,082	28,675	15,533	5,641	21,751
Other	6,261	3,007	2,980	2,894	2,825	7
	$ 95,479	$ 60,155	$ 53,336	$ 39,280	$ 29,319	$ 75,119

(a)

Total coal commitments for the Columbia and Elm Road Units, including transportation. Fuel procurement for MGE's jointly owned Columbia and Elm Road Units is handled by WPL and WEPCO, respectively, who are the operators of those facilities.

(b)

MGE's natural gas transportation and storage contracts require fixed monthly payments for firm supply pipeline transportation and storage capacity. The pricing components of the fixed monthly payments for the transportation and storage contracts are established by FERC but may be subject to change.

(c)

These commitments include market-based pricing.

(d)

MGE has several purchase power agreements to help meet future electric supply requirements.

b.

Leases - MGE Energy and MGE.

MGE has noncancelable operating leases, primarily for combustion turbines, railcars, and computer equipment. The operating leases generally do not contain renewal options, with the exception of certain railcar operating leases. These leases have a renewal option of one year or less. MGE is required to pay all executory costs, such as maintenance and insurance, for its leases.

Future minimum rental payments as of December 31, 2018, under agreements classified as operating leases with noncancelable terms in excess of one year are as follows:

(In thousands)	2019	2020	2021	2022	2023	Thereafter
Minimum lease payments	$ 1,646	$ 1,371	$ 1,095	$ 989	$ 975	$ 22,707

Rental expense under operating leases totaled $1.6 million, $1.7 million, and $2.0 million for 2018, 2017, and 2016, respectively.

c.

Environmental - MGE Energy and MGE.

Water Quality

Water quality regulations promulgated by the EPA and WDNR in accordance with the Federal Water Pollution Control Act, or more commonly known as the Clean Water Act (CWA), impose restrictions on discharges of various pollutants into surface waters. The CWA also regulates surface water quality issues that affect aquatic life, such as water temperatures, intake structures, and wetlands filling. The CWA also includes discharge standards, which require the use of effluent-treatment processes equivalent to categorical "best practicable" or "best available" technologies. The CWA regulates discharges from "point sources," such as power plants, through establishing discharge limits in water discharge permits. MGE's power plants operate under Wisconsin Pollution Discharge Elimination System (WPDES) permits issued by the WDNR to ensure compliance with these discharge limits. Permits are subject to periodic renewal.

EPA's Effluent Limitations Guidelines and Standards for Steam Electric Power Generating Point Source Category

In November 2015, the EPA published its final rule setting Effluent Limitations Guidelines (ELG) for the steam electric power generating industry. The ELG rule establishes federal limits on the amount of metals and other pollutants that can be discharged in wastewater from new and existing steam electric generation plants. The rule will be applied to Wisconsin-based power plants as they renew their WPDES permits, no later than 2023. The operators of the Columbia and Elm Road Units have indicated that equipment upgrades may be necessary to comply with the new discharge standards. Management believes that any compliance costs will be recovered in future rates based on previous treatment of environmental compliance projects.

EPA Cooling Water Intake Rules (Section 316(b))

Section 316(b) of the Clean Water Act requires that the cooling water intake structures at electric power plants meet best available technology standards so that mortality from entrainment (drawing aquatic life into a plant's cooling system) and impingement (trapping aquatic life on screens) are reduced. The EPA finalized its Section 316(b) rule for existing facilities in 2014. Section 316(b) requirements are implemented in Wisconsin through modifications to plants' WPDES permits, which govern plant wastewater discharges.

The WCCF, Blount, and Columbia plants are considered existing plants under this rule. The WCCF facility already employs a system that meets the Section 316(b) rule. The Blount plant's WPDES permit assumes that Blount meets best technology available (BTA) for the duration of the permit, which expires in 2023. However, MGE needs to perform an entrainment study by the end of 2021 to determine future BTA, which will be included with the next permit renewal. Section 316(b) applies to river intakes at the Columbia plant. The operator of the Columbia plant is in the process of a WPDES permit renewal. The draft permit directs the Columbia operator to conduct similar studies on their intake structures. The study requirements will not be known until the permit is final. Future BTA requirements at Blount and Columbia will be based on the results of these required intake studies and will be specified in the next permits issued in 2023 or later. MGE expects that the Section 316(b) rule will not have a material effect on its existing plants.

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Energy Efficiency and Renewables

The Wisconsin Energy Efficiency and Renewables Act requires that 10% of the state's electricity be generated from renewable sources. MGE is in compliance with the requirement. The costs to comply with the Act and its accompanying regulations are being recovered in rates.

Air Quality

Federal and state air quality regulations impose restrictions on various emissions, including emissions of particulate matter (PM), sulfur dioxide (SO_2), nitrogen oxides (NO_x), and other pollutants, and require permits for operation of emission sources. These permits have been obtained by MGE and must be renewed periodically. Current EPA initiatives under the Clean Air Act, including the Cross-State Air Pollution Rule (CSAPR), and National Ambient Air Quality Standards (NAAQS), and the Affordable Clean Energy (ACE) rule have the potential to result in additional operating and capital expenditure costs for MGE.

EPA's Greenhouse Gas (GHG) Reduction Guidelines under the Clean Air Act 111(d) Rule

The EPA's Clean Power Plan (CPP) rule became effective in December 2015, setting guidelines for states to use in developing plans to control GHG emissions from existing fossil fuel-fired EGUs and systems. When fully implemented in 2030, the CPP was projected to reduce GHG emissions from this sector by 32% below 2005 levels. States were given up to three years to submit a plan or be subject to a federal plan to meet the reduction goals, and states were expected to meet interim goals starting in 2022 and the final goals in 2030. Implementation of the rule was expected to have a direct impact on coal and natural gas fired generating units, including possible changes in dispatch and additional operating costs. In February 2016, the U.S. Supreme Court stayed implementation of the CPP which remains in effect. In October 2017, the EPA proposed to rescind the CPP.

In August 2018, the EPA proposed the ACE rule which would replace the CPP, if successfully implemented. The ACE proposal directs states to submit plans to the EPA for approval that implement standards of performance (called Best System of Emissions Reductions, or BSER) for individual EGUs over 25 MW. ACE defines BSER as on-site, heat-rate efficiency improvements, whereas the CPP defines BSERs using carbon dioxide emission performance rates. Simple cycle units such as smaller combustion units, and combined cycle units such as the WCCF are exempt from the proposed rule. Under the ACE proposal, if a state fails to prepare a plan, or its plan is not approved by the EPA, a federal implementation plan will be issued for that state. The proposed ACE as it is currently written has the potential to impact Blount, Columbia, and the Elm Road Units.

Given the pending legal proceedings, and the proposed ACE rule, the nature and timing of any final requirements is subject to uncertainty. MGE is unable to determine with any certainty the impact of the CPP and proposed ACE rule on our operations. If an ACE rule is implemented substantially in the form of the CPP rule, it is expected to have a material impact on MGE. MGE will continue to monitor developments with the proposed ACE rule, the CPP rule, and related litigation.

National Ambient Air Quality Standards (NAAQS) and Related Rules

The EPA's NAAQS regulations have been developed to set ambient levels of six pollutants to protect sensitive human populations (primary NAAQS) and the environment (secondary NAAQS) from the negative effects of exposure to these pollutants at higher levels. The Clean Air Act requires that the EPA periodically review, and adjust as necessary, the NAAQS for these six air pollutants. The EPA's NAAQS review can result in a lowering of the allowed ambient levels of a pollutant, a change in how the pollutant is monitored, and/or a change in which sources of that pollutant are regulated. States implement any necessary monitoring and measurement changes and recommend areas for attainment (meets the ambient requirements) or nonattainment (does not meet these standards). The EPA makes the final attainment and nonattainment determinations. States must come up with a state implementation plan (SIP) to get nonattainment areas into attainment and maintain air quality in attainment areas. A company with facilities located in a nonattainment area will be most affected. Their facilities may be subject to additional data submissions and measurement during permitting renewals, their facilities may need to meet new emission limitations set by the SIP (which could result in significant capital expenditures), and the company may have additional expenses and/or difficulties expanding existing facilities or building new facilities. The process from determining acceptable primary and/or secondary NAAQS to executing SIPs can take years. Since the NAAQS regulations have the potential to affect both existing and new facilities in areas, MGE continuously monitors changes to these rules to evaluate whether changes could impact its operations. In addition, the EPA has adopted interstate

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transport rules, such as the CSAPR, to address contributions to NAAQS nonattainment from upwind sources in neighboring states. In the following paragraphs we discuss specific NAAQS and transport rule developments that may affect MGE.

Ozone NAAQS

In May 2018, the EPA issued a final rule which designated the northeast portion of Milwaukee County as being in nonattainment with Ozone NAAQS. The Elm Road Units are located in Milwaukee County, outside the designated nonattainment area. In August 2018, several environmental groups, the City of Chicago, and the State of Illinois filed federal lawsuits challenging several of the EPA's attainment designation decisions, including the partial Milwaukee County designation as being too narrow and not sufficiently protective. MGE is monitoring the outcome of this lawsuit and how it may affect the Elm Road Units in Milwaukee County. If the entire county where to be considered in nonattainment as a result of this lawsuit, the State of Wisconsin would need to develop an implementation plan that addressed emissions that contribute to Ozone (NO_x and Volatile Organic Compound emissions) for the County, which could affect operations and emissions control obligations of the Elm Road units. MGE is monitoring the outcome of this lawsuit and how it may affect the Elm Road Units in Milwaukee County. At this time MGE expects that the 2015 Ozone NAAQS will not have a material effect on its existing plants based on final designations.

EPA's Cross-State Air Pollution Rule: Proposed Ozone Season Update based on 2008 Ozone NAAQS

The EPA's CSAPR is an interstate air pollution transport rule designed to reduce ozone and fine particulate (PM2.5) air levels in areas that the EPA has determined are being significantly impacted by pollution from neighboring and upwind states. This is accomplished in the CSAPR through a reduction in SO_2 and NO_x from qualifying fossil-fuel fired power plants in upwind or "contributing" states. NO_x and SO_2 contribute to fine particulate pollution and NO_x contributes to ozone formation in downwind areas. Reductions are achieved through a cap and trade system. Individual plants can meet their caps through modifications and/or buying allowances on the market.

In October 2016, the EPA finalized rulemaking for an update to CSAPR that incorporated 2008 Ozone NAAQS standards into the rule (the original CSAPR is based on 1997 Ozone NAAQS standards) and began further reducing summertime ozone season NO_x allowances in 2017. The update affects 22 states, including Wisconsin, by further limiting statewide NO_x allowances in each of those states. The rule also includes revisions to CSAPR that are designed to address issues remaining from the D.C. Circuit remand of CSAPR, including Wisconsin's inclusion in the NO_x ozone season portion of the rule. The State of Wisconsin filed a legal challenge to the CSAPR update rule asserting, among other things, that the rule over-controls NO_x emissions in Wisconsin.

MGE has met our CSAPR obligations in 2018 and 2017 through a combination of reduced emissions through pollution control (e.g. SCR installation at Columbia), as well as owned, received, and purchased allowances. There remains uncertainty around CSAPR due to legal challenges, however, MGE expects that we will meet ongoing CSAPR obligations for the foreseeable future. MGE will continue to monitor developments and litigations to this rule.

Clean Air Visibility Rule (CAVR)

Columbia is subject to the best available retrofit technology (BART) regulations, a subsection of the EPA's CAVR, which may require pollution control retrofits. Columbia's existing pollution control upgrades, and the EPA's stance that compliance with the CSAPR equals compliance with BART, should mean that Columbia will not need to do additional work to meet BART requirements. At this time, however, the BART regulatory obligations, compliance strategies, and costs remain uncertain in Wisconsin due to the continued legal challenges surrounding CSAPR and CAVR. MGE will continue to monitor developments to this rule.

Solid Waste

EPA's Coal Combustion Residuals Rule

The EPA's Coal Combustion Residuals Rule (CCR), which regulates coal ash from burning coal for purpose of generating electricity as a solid waste, and defines what ash use activities would be considered generally exempt beneficial reuse of coal ash. The CCR rule also regulates existing, modified, and new landfills, ash ponds, and other surface impoundments used for coal combustion residuals by regulating their design, location, monitoring, and operation.

Review of the Elm Road Units has indicated that the costs to comply with this rule are not expected to be significant. Columbia's operator has completed a review of their system and has determined that an onsite ash pond will need to be closed and replaced with a dry ash handling system. The dry ash handling system installation is planned for 2020-2021.

In July 2018, the EPA published a final rule that included amendments to the CCR (which include the allowance of alternative performance standards for landfills and surface impoundments, revised risk-based groundwater protection standards, and an extension of the deadline by which certain facilities must cease the placement of waste in CCR units). In August 2018, the Court of Appeals for the D.C. Circuit vacated parts of the CCR for not being sufficiently protective of the environment. It is unclear how the EPA will respond to that decision. MGE will continue to monitor potential rule modifications to assess potential impacts on our operations.

In 2015, MGE recorded an asset retirement obligation for its share of the legal liability associated with the effect of the CCR. Actual costs of compliance may be different than the amount recorded due to potential changes in compliance strategies that will be used, as well as other potential cost estimate changes.

Columbia

Based upon current available information, compliance with various environmental requirements and initiatives is expected to result in significant additional operating and capital expenditures at Columbia as noted below.

Columbia Clean Air Act Litigation

Columbia is a coal-fired generating station operated by WPL in which WPL, WPSC, and MGE have ownership interests. In December 2009, the EPA sent a Notice of Violation (NOV) to the co-owners, including MGE. The NOV alleged that WPL, which is the plant operator, and the Columbia co-owners failed to comply with appropriate pre-construction review and permitting requirements and, as a result, violated the Prevention of Significant Deterioration program requirements, Title V Operating Permit requirements of the CAA, and the Wisconsin SIP. In June 2013, the court approved and entered a consent decree entered by the EPA, Sierra Club, and the co-owners of Columbia. One of the requirements of the consent decree requires installation of an SCR system at Columbia Unit 2 by December 31, 2018. Installation of the SCR was approved by the PSCW, which was placed in service in 2018.

d.

Legal Matters - MGE Energy and MGE.

MGE is involved in various legal matters that are being defended and handled in the normal course of business. MGE maintains accruals for such costs that are probable of being incurred and subject to reasonable estimation. The accrued amount for these matters is not material to the financial statements. MGE does not expect the resolution of these matters to have a material adverse effect on its consolidated results of operations, financial condition, or cash flows.

e.

Other Commitments.

MGE Energy holds investments in nonpublic venture funds. From time to time, these entities require additional capital infusions from their investors. MGE Energy has committed to contribute $11.4 million in capital for such infusions. The timing of these infusions is dependent on the needs of the investee and is therefore uncertain at this time.

In addition, MGE Energy has a three year agreement with a venture debt fund expiring in December 2019. MGE Energy has committed to invest up to a total of $1.5 million into this fund. As of December 31, 2018, MGE Energy has $0.6 million remaining in commitments. The timing of infusions is dependent on the needs of the fund and is therefore uncertain at this time.

MGE has several other commitments related to various projects. Payments for these commitments are expected to be as follows:

(In thousands)	2019	2020	2021	2022	2023	Thereafter
Other commitments	$ 333	$ 333	$ 333	$ 333	$ 333	$ 3,665

18.

Asset Retirement Obligations - MGE Energy and MGE.

MGE recorded an obligation for the fair value of its legal liability for asset retirement obligations (AROs) associated with removal of the West Campus Cogeneration Facility and the Elm Road Units, electric substations, combustion turbine generating units, wind generating facilities, and photovoltaic generating facilities, all of which are located on property not owned by MGE Energy and MGE and would need to be removed upon the ultimate end of the associated leases. The significant conditional AROs identified by MGE included the costs of abandoning in place gas services and mains, the abatement and disposal of equipment and buildings contaminated with asbestos and PCBs, and the proper disposal and removal of tanks, batteries, and underground cable. Changes in management's assumptions regarding settlement dates, settlement methods, or assigned probabilities could have a material effect on the liabilities and the associated regulatory asset recorded as of December 31, 2018.

MGE also may have AROs relating to the removal of various assets, such as certain electric and gas distribution facilities. These facilities are generally located on property owned by third parties, on which MGE is permitted to operate by lease, permit, easement, license, or service agreement. The asset retirement obligations associated with these facilities cannot be reasonably determined due to the indeterminate life of the related agreements.

The following table summarizes the change in AROs. Amounts include conditional AROs.

(In thousands)	2018	2017
Balance as of January 1,	$ 26,738	$ 26,886
Liabilities incurred[a]	1,943	145
Accretion expense	1,415	1,359
Liabilities settled[b]	(175)	(1,789)
Revisions in estimated cash flows	59	137
Balance as of December 31,	$ 29,980	$ 26,738

(a)

In 2018, MGE recorded an obligation of $1.6 million for the fair value of its legal liability for AROs associated with Forward Wind. See Footnote 5 for additional information on the purchase of Forward Wind.

(b)

In 2017, MGE removed asbestos at Blount for $1.6 million.

19.

Revenue - MGE Energy and MGE.

Revenues disaggregated by revenue source were as follows:

(In thousands)	Year Ended December 31,		
Electric revenues	2018	2017	2016
Residential	$ 138,566	$ 136,168	$ 136,792
Commercial[(a)]	204,683	216,461	213,101
Industrial	13,878	16,176	17,589
Other-retail/municipal	34,023	38,010	35,559
Total retail	391,150	406,815	403,041
Sales to the market	7,438	4,067	6,135
Other revenues	1,870	2,323	1,483
Adjustments to revenues	424	721	(1,653)
Total electric revenues	400,882	413,926	409,006
Gas revenues			
Residential	94,017	88,695	81,014
Commercial/Industrial[(a)]	59,060	55,151	48,497
Total retail	153,077	143,846	129,511
Gas transportation	4,283	4,561	4,635
Other revenues	407	418	397
Total gas revenues	157,767	148,825	134,543
Nonregulated energy revenues	1,119	348	1,196
Total Operating Revenue[(a)]	$ 559,768	$ 563,099	$ 544,745

(a)

In 2017 and 2016, MGE had less than $0.1 million of revenues related to CNG vehicle fuel servicing. No revenue was recognized for fuel servicing by MGE Energy in 2017 and 2016.

Performance Obligations

A performance obligation is a promise in a contract to transfer a distinct good or service to the customer and is the unit of account. A contract's transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. The majority of MGE Energy's and MGE's contracts have a single performance obligation.

Retail Revenue (Residential, Commercial, Industrial, and Other Retail/Municipal)

Retail revenue of electric and gas utility service represent MGE's core business activities. Tariffs are approved by the PSCW through a rate order and provide MGE's customers with the standard terms and conditions, including pricing terms. The performance obligation to deliver electricity or gas is satisfied over time as the customer simultaneously receives and consumes the commodities provided by MGE. MGE recognizes revenues as the commodity is delivered to customers. Meters are read on a systematic basis throughout the month based on established meter-reading schedules and the customer is subsequently billed for their services. At the end of the month, MGE accrues an estimate for the unbilled amount of commodities delivered to customers. The unbilled revenue estimate is based on daily system demand volumes, weather factors, estimated line losses, estimated customer usage by class, and applicable customer rates.

Utility Cost Recovery Mechanisms

MGE's tariff rates include a provision for fuel cost recovery. The PSCW allows Wisconsin utilities to defer electric fuel-related costs, less excess revenues, that fall outside a symmetrical cost tolerance band. Any over/under recovery of the actual costs in a given year is determined in the following year and is then reflected in future billings to electric retail customers. Over-collection of fuel-related costs that are outside the approved range will be recognized as a reduction of revenue. Prior to adoption of the new revenue recognition guidance, effective January 1, 2018, over-collected fuel-related costs were reflected in "Purchased power" expense. Under-collection of these costs will continue to be recognized in "Purchased power" expense in the consolidated statements of income. The cumulative effects of these deferred amounts will be recorded in "Regulatory assets" or "Regulatory liabilities" on the consolidated balance sheets until they are reflected in future billings to customers. See Footnote 8.b. for further information.

MGE received a PSCW order in January 2018 to defer the over-collection of income tax expense collected in customer rates as a result of the Tax Cuts and Jobs Act (the Tax Act) reduction in the income tax rate to 21 percent. See Footnote 12 for further information.

MGE has other cost recovery mechanisms. For example, any over-collection of the difference between actual costs incurred and the amount of costs collected from customers is recorded as a reduction of revenue in the period incurred.

Sales to the Market

Sales to the market include energy charges, capacity or demand charges, and ancillary charges represented by wholesale sales of electricity made to third parties who are not ultimate users of the electricity. Most of these sales are spot market transactions on the markets operated by MISO. Each transaction is considered a performance obligation and revenue is recognized in the period in which energy charges, capacity or demand charges, and ancillary services are sold into MISO. MGE reports, on a net basis, transactions on the MISO markets in which it buys and sells power within the same hour to meet electric energy delivery requirements.

Transportation of Gas

MGE has contracts under which MGE provides gas transportation services to customers who have elected to purchase gas from a third party and have the gas delivered via pipelines within MGE's service territory. Revenue is recognized as service is rendered or gas is delivered to customers. Tariffs are approved by the PSCW through a rate order and provide gas transportation customers with the standard terms and conditions, including pricing terms.

20.

Noncontrolling Interest - MGE.

The noncontrolling interest on MGE's consolidated balance sheets as of December 31 was as follows:

(In thousands)	2018	2017
MGE Power Elm Road[(a)]	$ 97,519	$ 97,635
MGE Power West Campus[(a)]	43,935	43,267
Total Noncontrolling Interest	$ 141,454	$ 140,902

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The net income attributable to noncontrolling interest, net of tax, for the years ended December 31, 2018, 2017, and 2016 was as follows:

(In thousands)	2018	2017	2016
MGE Power Elm Road[(a)]	$ 15,384	$ 29,274	$ 14,748
MGE Power West Campus[(a)]	7,168	13,963	7,200
MGE Transco[(b)]	-	-	1,410
Net Income Attributable to Noncontrolling Interest, Net of Tax	$ 22,552	$ 43,237	$ 23,358

(a)

MGE Power Elm Road and MGE Power West Campus are not subsidiaries of MGE; however, they have been consolidated in the consolidated financial statements of MGE (see Footnote 3). MGE Power Elm Road and MGE Power West Campus are 100% owned by MGE Power, and MGE Power is 100% owned by MGE Energy. MGE Energy's proportionate share of the equity and net income (through its wholly owned subsidiary MGE Power) of MGE Power Elm Road and MGE Power West Campus is classified within the MGE consolidated financial statements as noncontrolling interest. In 2017, there was a $14.8 million and $6.8 million one-time tax impact as a result of the Tax Act for MGE Power Elm Road and MGE Power West Campus, respectively. The Tax Act reduced the federal tax rate from 35% to 21%. See Footnote 12 for further information.

(b)

As of December 31, 2018, MGE Energy is the owner of MGE Transco. In July 2016, MGE's ownership interest in MGE Transco declined below a majority as a result of continued funding of ATC capital contributions by MGE Energy. As a result of the change in majority ownership in MGE Transco, MGE deconsolidated MGE Energy's proportionate share of the equity in MGE Transco. The change in consolidation was applied prospectively by reducing its investment and noncontrolling interest on MGE's consolidated financial statements. The change had no effect on MGE Energy's consolidated financial statements; however, MGE Energy's proportionate share of the equity and net income of MGE Transco classified as noncontrolling interest was deconsolidated from MGE's financial statements. No gain or loss was recognized in July 2016 due to MGE ceasing to have a controlling financial interest.

21.

Segment Information - MGE Energy and MGE.

The electric utility business purchases, generates and distributes electricity, and contracts for transmission service. The gas utility business purchases and distributes natural gas and contracts for the transportation of natural gas. Both the electric and gas segments operate through MGE Energy's principal subsidiary, MGE.

The nonregulated energy operations are conducted through MGE Energy's subsidiaries: MGE Power, MGE Power Elm Road, and MGE Power West Campus. These subsidiaries own and lease electric generating capacity to assist MGE. MGE Power Elm Road has an ownership interest in two coal-fired generating units in Oak Creek, Wisconsin, which are leased to MGE, and MGE Power West Campus owns a controlling interest in the electric generation plant of a natural gas-fired cogeneration facility on the UW campus. MGE Power West Campus's portion is also leased to MGE.

The transmission investment segment invests in ATC, a company that provides electric transmission services primarily in Wisconsin, and ATC Holdco, a company formed to pursue electric transmission development and investments outside of Wisconsin. These investments are held in MGE Transco and MGEE Transco, respectively. See Footnote 6 for further discussion.

The "All Others" segment includes: corporate, CWDC, MAGAEL, MGE State Energy Services, MGE Services, NGV Fueling Services (dissolved in 2018), and North Mendota. These entities' operations consist of investing in companies and property which relate to the regulated operations, financing the regulated operations, or owning and operating natural gas compression equipment.

General corporate expenses include the cost of executive management, corporate accounting and finance, information technology, risk management, human resources and legal functions, and employee benefits that are allocated to electric and gas segments based on formulas prescribed by the PSCW. Identifiable assets are those used in MGE's operations in each segment.

Sales between our electric and gas segments are based on PSCW approved tariffed rates. Additionally, intersegment operations related to the leasing arrangement between our electric segment and MGE Power Elm Road/MGE Power West Campus are based on terms previously approved by the PSCW. Consistent with internal reporting, management has presented the direct financing capital leases between MGE and MGE Power Elm Road/MGE Power West Campus based on actual lease payments included in rates. Lease payments made by MGE to MGE Power Elm Road and MGE Power West Campus are shown as operating expenses. The lease payments received by MGE Power Elm Road and MGE Power West Campus from MGE are shown as lease income in interdepartmental revenues. The depreciation expense associated with the Elm Road Units and WCCF is reflected in the nonregulated energy segment.

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The following table shows segment information for MGE Energy's and MGE's operations:

(In thousands) **MGE Energy**	Electric	Gas	Non-Regulated Energy	Transmission Investment	All Others	Consolidation/ Elimination Entries	Consolidated Total
Year Ended December 31, 2018							
Operating revenues	$ 400,882	$ 157,767	$ 1,119	$ -	$ -	$ -	$ 559,768
Interdepartmental revenues	(289)	16,076	39,526	-	-	(55,313)	-
Total operating revenues	400,593	173,843	40,645	-	-	(55,313)	559,768
Depreciation and amortization	(38,925)	(10,060)	(7,427)	-	-	-	(56,412)
Other operating expenses	(297,374)	(145,883)	(144)	(16)	(1,045)	55,313	(389,149)
Operating income (loss)	64,294	17,900	33,074	(16)	(1,045)	-	114,207
Other income (deductions), net	7,294	3,132	-	8,602	(1,973)	-	17,055
Interest (expense) income, net	(12,198)	(3,692)	(5,307)	-	1,588	-	(19,609)
Income (loss) before taxes	59,390	17,340	27,767	8,586	(1,430)	-	111,653
Income tax (provision) benefit	(13,453)	(4,474)	(7,534)	(2,345)	372	-	(27,434)
Net income (loss)	$ 45,937	$ 12,866	$ 20,233	$ 6,241	$ (1,058)	$ -	$ 84,219
Year Ended December 31, 2017							
Operating revenues	$ 413,926	$ 148,825	$ 348	$ -	$ -	$ -	$ 563,099
Interdepartmental revenues	(510)	14,974	44,468	-	-	(58,932)	-
	413,416	163,799	44,816	-	-	(58,932)	563,099

Total operating revenues							
Depreciation and amortization	(36,660)	(9,000)	(7,417)	-	-	-	(53,077)
Other operating expenses[(a)]	(308,100)	(135,029)	(190)	(9)	(1,001)	58,932	(385,397)
Operating income (loss)	68,656	19,770	37,209	(9)	(1,001)	-	124,625
Other income (deductions), net[(a)]	4,539	1,912	-	9,844	(1,896)	-	14,399
Interest (expense) income, net	(11,257)	(3,234)	(5,533)	-	700	-	(19,324)
Income (loss) before taxes	61,938	18,448	31,676	9,835	(2,197)	-	119,700
Income tax (provision) benefit[(b)]	(20,547)	(7,303)	8,860	(3,954)	850	-	(22,094)
Net income (loss)	$ 41,391	$ 11,145	$ 40,536	$ 5,881	$ (1,347)	$ -	$ 97,606
Year Ended December 31, 2016							
Operating revenues	$ 409,006	$ 134,543	$ 1,196	$ -	$ -	$ -	$ 544,745
Interdepartmental revenues	1,912	21,378	43,930	-	-	(67,220)	-
Total operating revenues	410,918	155,921	45,126	-	-	(67,220)	544,745
Depreciation and amortization	(29,122)	(8,128)	(7,372)	-	(24)	-	(44,646)
Other operating expenses[(a)]	(313,649)	(128,721)	(155)	(17)	(895)	67,220	(376,217)
Operating income (loss)	68,147	19,072	37,599	(17)	(919)	-	123,882
Other income, net[(a)]	3,668	1,668	-	8,429	292	-	14,057
Interest (expense) income, net	(11,147)	(3,223)	(5,768)	-	272	-	(19,866)
Income (loss) before taxes	60,668	17,517	31,831	8,412	(355)	-	118,073
Income tax (provision) benefit	(20,115)	(6,894)	(12,775)	(2,836)	107	-	(42,513)

Net income (loss)	$ 40,553	$ 10,623	$ 19,056	$ 5,576	$ (248)	$ -	$ 75,560

(a)

Reflects retrospective application of new accounting pronouncement related to pension and other postretirement benefits. See Footnote 2 for further information.

(b)

In December 2017, there was a $21.7 million one-time tax impact as a result of the Tax Act. See Footnote 12 for further information.

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(In thousands)					Consolidation/	
MGE	Electric	Gas	Nonregulated Energy	Transmission Investment(d)	Elimination Entries	Consolidated Total
Year Ended December 31, 2018						
Operating revenues	$ 400,882	$ 157,767	$ 1,119	$ -	$ -	$ 559,768
Interdepartmental revenues	(289)	16,076	39,526	-	(55,313)	-
Total operating revenues	400,593	173,843	40,645	-	(55,313)	559,768
Depreciation and amortization	(38,925)	(10,060)	(7,427)	-	-	(56,412)
Other operating (expenses) income(c)	(310,626)	(150,195)	(7,678)	-	55,313	(413,186)
Operating income(c)	51,042	13,588	25,540	-	-	90,170
Other income, net(c)	7,093	2,970	-	-	-	10,063
Interest expense, net	(12,198)	(3,692)	(5,307)	-	-	(21,197)
Net income	45,937	12,866	20,233	-	-	79,036
Less: Net income attributable to noncontrolling interest, net of tax	-	-	-	-	(22,552)	(22,552)
Net income attributable to MGE	$ 45,937	$ 12,866	$ 20,233	$ -	$ (22,552)	$ 56,484
Year Ended December 31, 2017						
Operating revenues	$ 413,929	$ 148,834	$ 348	$ -	$ -	$ 563,111
Interdepartmental revenues	(513)	14,965	44,468	-	(58,920)	-
Total operating revenues	413,416	163,799	44,816	-	(58,920)	563,111
Depreciation and amortization	(36,660)	(9,000)	(7,417)	-	-	(53,077)
Other operating (expenses) income(a)(b)(c)	(328,093)	(142,175)	8,670	-	58,920	(402,678)

Operating income[c]	48,663	12,624	46,069	-	-	107,356
Other income, net[a][c]	3,985	1,755	-	-	-	5,740
Interest expense, net	(11,257)	(3,234)	(5,533)	-	-	(20,024)
Net income	41,391	11,145	40,536	-	-	93,072
Less: net income attributable to noncontrolling interest, net of tax	-	-	-	-	(43,237)	(43,237)
Net income attributable to MGE	$ 41,391	$ 11,145	$ 40,536	$ -	$ (43,237)	$ 49,835
Year Ended December 31, 2016						
Operating revenues	$ 409,030	$ 134,572	$ 1,196	$ -	$ -	$ 544,798
Interdepartmental revenues	1,888	21,349	43,930	-	(67,167)	-
Total operating revenues	410,918	155,921	45,126	-	(67,167)	544,798
Depreciation and amortization	(29,122)	(8,128)	(7,372)	-	-	(44,622)
Other operating expenses[a][c]	(333,632)	(135,578)	(12,930)	-	67,167	(414,973)
Operating income (loss)[c]	48,164	12,215	24,824	-	-	85,203
Other income (deductions), net[a][c]	3,536	1,631	-	4,360	-	9,527
Interest expense, net	(11,147)	(3,223)	(5,768)	-	-	(20,138)
Net income	40,553	10,623	19,056	4,360	-	74,592
Less: Net income attributable to noncontrolling interest, net of tax	-	-	-	-	(23,358)	(23,358)
Net income attributable to MGE	$ 40,553	$ 10,623	$ 19,056	$ 4,360	$ (23,358)	$ 51,234

(a)

Reflects retrospective application of new accounting pronouncement related to pension and other postretirement benefits. See Footnote 2 for further information.

(b)

In December 2017, there was a $21.7 million one-time tax impact as a result of the Tax Act. See Footnote 12 for further information.

(c)

Amounts are shown net of the related tax expense, consistent with the presentation on the MGE Consolidated Statements of Income.

(d)

As of July 31, 2016, MGE no longer consolidates MGE Energy's proportionate share of equity earnings in MGE Transco. See Footnote 6 for further information.

The following table shows segment information for MGE Energy's and MGE's assets and capital expenditures:

	Utility		Consolidated				
(In thousands)							
MGE Energy	Electric	Gas	Nonregulated Energy	Transmission Investment[e]	All Others	Consolidation/ Elimination Entries	Total
Assets:							
December 31, 2018	$ 1,193,083	$ 377,005	$ 265,301	$ 66,366	$ 465,661	$ (378,798)	$ 1,988,618
December 31, 2017	1,058,988	354,875	270,384	61,783	485,548	(376,396)	1,855,182
December 31, 2016	1,038,308	329,538	271,277	74,535	465,202	(377,800)	1,801,060
Capital Expenditures:							
Year ended Dec. 31, 2018	$ 176,399	$ 30,497	$ 5,301	$ -	$ -	$ -	$ 212,197
Year ended Dec. 31, 2017	77,353	26,847	3,931	-	-	-	108,131
Year ended Dec. 31, 2016	50,699	29,136	3,824	-	-	-	83,659

	Utility		Consolidated		
(In thousands)					
MGE	Electric	Gas	Nonregulated Energy	Consolidation/ Elimination Entries	Total
Assets:					
December 31, 2018	$ 1,193,083	$ 377,005	$ 265,251	$ (448)	$ 1,834,891
December 31, 2017	1,058,988	354,875	270,334	(156)	1,684,041
December 31, 2016	1,038,308	329,538	271,227	(221)	1,638,852
Capital Expenditures:					
Year ended Dec. 31, 2018	$ 176,399	$ 30,497	$ 5,301	$ -	$