
UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
for the quarterly period ended June 30, 2018
Commission File Number 001-06706

BADGER METER, INC.

4545 W. Brown Deer Road
Milwaukee, Wisconsin 53223
(Address of principal executive offices)

(414) 355-0400
(Registrant's telephone number, including area code)

A Wisconsin Corporation
IRS Employer Identification No. 39-0143280

Indicate by check mark whether the registrant (1) has 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 registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

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 definitions of "large accelerated filer," "accelerated filer," "non-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	☐	(Do not check if a smaller reporting company)	☐
Emerging growth company	☐	Smaller reporting company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of July 12, 2018, there were 29,113,582 shares of Common stock outstanding with a par value of \$1 per share.

BADGER METER, INC.
Quarterly Report on Form 10-Q for the Period Ended June 30, 2018
Index

	<u>Page No.</u>
Part I. Financial Information:	
Item 1	Financial Statements (unaudited):
	Consolidated Condensed Balance Sheets - June 30, 2018 and December 31, 2017 4
	Consolidated Statements of Operations - Three and Six Months Ended June 30, 2018 and 2017 5
	Consolidated Statements of Comprehensive Income - Three and Six Months Ended June 30, 2018 and 2017 6
	Consolidated Condensed Statements of Cash Flows - Six Months Ended June 30, 2018 and 2017 7
	Notes to Unaudited Consolidated Condensed Financial Statements 8
Item 2	Management's Discussion and Analysis of Financial Condition and Results of Operations 17
Item 3	Quantitative and Qualitative Disclosures about Market Risk 23
Item 4	Controls and Procedures 23
Part II. Other Information:	
Item 6	Exhibits 24
	Signatures 25

Special Note Regarding Forward Looking Statements

Certain statements contained in this Quarterly Report on Form 10-Q, as well as other information provided from time to time by Badger Meter, Inc. (the “Company”) or its employees, may contain forward looking statements that involve risks and uncertainties that could cause actual results to differ materially from those in the forward looking statements. The words “anticipate,” “believe,” “estimate,” “expect,” “think,” “should,” “could” and “objective” or similar expressions are intended to identify forward looking statements. All such forward looking statements are based on the Company’s then current views and assumptions and involve risks and uncertainties. Some risks and uncertainties that could cause actual results to differ materially from those expressed or implied in forward looking statements include those described in Item 1A of the Company’s Annual Report on Form 10-K for the year ended December 31, 2017 that include, among other things:

- the continued shift in the Company’s business from lower cost, manually read meters toward more expensive, value-added automatic meter reading (AMR) systems, advanced metering infrastructure (AMI) systems and advanced metering analytics (AMA) systems that offer more comprehensive solutions to customers’ metering needs;
- the success or failure of newer Company products;
- changes in competitive pricing and bids in both the domestic and foreign marketplaces, and particularly in continued intense price competition on government bid contracts for lower cost, manually read meters;
- the actions (or lack thereof) of the Company’s competitors;
- changes in the Company’s relationships with its alliance partners, primarily its alliance partners that provide radio solutions, and particularly those that sell products that do or may compete with the Company’s products;
- changes in the general health of the United States and foreign economies, including to some extent such things as the length and severity of global economic downturns, international or civil conflicts that affect international trade, the ability of municipal water utility customers to authorize and finance purchases of the Company’s products, the Company’s ability to obtain financing, housing starts in the United States, and overall industrial activity;
- unusual weather, weather patterns or other natural phenomena, including related economic and other ancillary effects of any such events;
- economic policy changes, including but not limited to, trade policy and corporate taxation;
- the timing and impact of government funding programs that stimulate national and global economies, as well as the impact of government budget cuts or partial shutdowns of governmental operations;
- changes in the cost and/or availability of needed raw materials and parts, such as volatility in the cost of brass castings as a result of fluctuations in commodity prices, particularly for copper and scrap metal at the supplier level, foreign-sourced electronic components as a result of currency exchange fluctuations, tariffs, duties and/or lead times, and plastic resin as a result of changes in petroleum and natural gas prices;
- the Company’s ability to successfully integrate acquired businesses or products;
- changes in foreign economic conditions, particularly currency fluctuations in the United States dollar, the Euro and the Mexican peso;
- the inability to develop technologically advanced products;
- the failure of the Company’s products to operate as intended;
- the inability to protect the Company’s proprietary rights to its products;
- the Company’s expanded role as a prime contractor for providing complete technology systems to governmental entities, which brings with it added risks, including but not limited to, the Company’s responsibility for subcontractor performance, additional costs and expenses if the Company and its subcontractors fail to meet the timetable agreed to with the governmental entity, and the Company’s expanded warranty and performance obligations;
- disruptions and other damages to information technology, other networks, operations and property (Company or third party) due to breaches in data security or any other cybersecurity attack;
- transportation delays or interruptions;
- violations or alleged violations of the U.S. Foreign Corrupt Practices Act (FCPA) or other anti-corruption laws and the Foreign Account Tax Compliance provisions of the Hiring Incentives to Restore Employment Act (referred to as FATCA);
- the loss of or disruption in certain single-source suppliers; and
- changes in laws and regulations, particularly laws dealing with the content or handling of materials used in the Company’s products.

All of these factors are beyond the Company’s control to varying degrees. Shareholders, potential investors and other readers are urged to consider these factors carefully in evaluating the forward looking statements contained in this Quarterly Report on Form 10-Q and are cautioned not to place undue reliance on such forward looking statements. The forward looking statements made in this document are made only as of the date of this document and the Company assumes no obligation, and disclaims any obligation, to update any such forward looking statements to reflect subsequent events or circumstances.

Part I – Financial Information

Item 1 Financial Statements

BADGER METER, INC.

Consolidated Condensed Balance Sheets

	June 30, (Unaudited)	December 31,
	(In thousands)	
	2018	2017
Assets		
Current assets:		
Cash	\$ 12,125	\$ 11,164
Receivables	65,303	58,210
Inventories:		
Finished goods	25,199	23,125
Work in process	19,643	22,035
Raw materials	40,814	40,012
Total inventories	85,656	85,172
Prepaid expenses and other current assets	5,070	4,077
Total current assets	168,154	158,623
Property, plant and equipment, at cost	215,513	212,485
Less accumulated depreciation	(122,838)	(118,884)
Net property, plant and equipment	92,675	93,601
Intangible assets, at cost less accumulated amortization	59,113	59,326
Other assets	9,240	9,897
Deferred income taxes	816	2,856
Goodwill	71,109	67,424
Total assets	\$ 401,107	\$ 391,727
Liabilities and shareholders' equity		
Current liabilities:		
Short-term debt	\$ 42,430	\$ 44,550
Payables and other current liabilities	28,092	28,601
Accrued compensation and employee benefits	9,632	15,509
Warranty and after-sale costs	4,110	3,367
Income and other taxes	1,363	1,082
Total current liabilities	85,627	93,109
Other long-term liabilities	13,657	4,073
Deferred income taxes	1,294	3,434
Accrued non-pension postretirement benefits	5,718	5,703
Other accrued employee benefits	6,341	7,956
Commitments and contingencies (Note 6)		
Shareholders' equity:		
Common stock	37,177	37,165
Capital in excess of par value	33,681	32,182
Reinvested earnings	250,242	244,224
Accumulated other comprehensive loss	(5,508)	(10,893)
Less: Employee benefit stock	(461)	(460)
Treasury stock, at cost	(26,661)	(24,766)
Total shareholders' equity	288,470	277,452
Total liabilities and shareholders' equity	\$ 401,107	\$ 391,727

See accompanying notes to unaudited consolidated condensed financial statements.

BADGER METER, INC.
Consolidated Statements of Operations

	Three Months Ended June 30,		Six Months Ended June 30,	
	(Unaudited)		(Unaudited)	
	(In thousands except share and per share amounts)			
	2018	2017	2018	2017
Net sales	\$ 113,648	\$ 104,176	\$ 218,689	\$ 205,782
Cost of sales	72,144	63,122	140,437	126,078
Gross margin	41,504	41,054	78,252	79,704
Selling, engineering and administration	25,153	24,214	51,927	49,299
Operating earnings	16,351	16,840	26,325	30,405
Interest expense, net	409	147	699	325
Other pension and postretirement costs	8,031	249	8,012	345
Earnings before income taxes	7,911	16,444	17,614	29,735
Provision for income taxes	1,757	5,830	3,914	10,372
Net earnings	\$ 6,154	\$ 10,614	\$ 13,700	\$ 19,363
Earnings per share:				
Basic	\$ 0.21	\$ 0.37	\$ 0.47	\$ 0.67
Diluted	\$ 0.21	\$ 0.36	\$ 0.47	\$ 0.67
Dividends declared per common share	\$ 0.130	\$ 0.115	\$ 0.260	\$ 0.230
Shares used in computation of earnings per share:				
Basic	28,963,373	28,938,451	28,965,735	28,938,851
Impact of dilutive securities	170,070	159,369	193,665	170,824
Diluted	29,133,443	29,097,820	29,159,400	29,109,675

See accompanying notes to unaudited consolidated condensed financial statements.

BADGER METER, INC.
Consolidated Statements of Comprehensive Income

	Three Months Ended June 30,		Six Months Ended June 30,	
	(Unaudited)		(Unaudited)	
	(In thousands)			
	2018	2017	2018	2017
Net earnings	\$ 6,154	\$ 10,614	\$ 13,700	\$ 19,363
Other comprehensive income:				
Foreign currency translation adjustment	(808)	1,049	(387)	1,340
Pension and postretirement benefits, net of tax	5,711	71	5,772	154
Comprehensive income	\$ 11,057	\$ 11,734	\$ 19,085	\$ 20,857

See accompanying notes to unaudited consolidated condensed financial statements.

BADGER METER, INC.
Consolidated Condensed Statements of Cash Flows

	Six Months Ended June 30	
	(Unaudited) (In thousands)	
	2018	2017
Operating activities:		
Net earnings	\$ 13,700	\$ 19,363
Adjustments to reconcile net earnings to net cash provided by operations:		
Depreciation	5,894	5,997
Amortization	6,543	5,994
Deferred income taxes	59	(53)
Noncurrent employee benefits	84	541
Pension termination settlement charge	8,168	—
Contribution to pension plan	(1,600)	—
Stock-based compensation expense	944	779
Changes in:		
Receivables	(6,765)	(3,754)
Inventories	167	4,759
Prepaid expenses and other assets	(3,101)	(3,734)
Liabilities other than debt	1,106	7,453
Total adjustments	11,499	17,982
Net cash provided by operations	25,199	37,345
Investing activities:		
Property, plant and equipment expenditures	(5,242)	(6,762)
Acquisitions, net of cash acquired and future payments	(8,048)	(18,376)
Net cash used for investing activities	(13,290)	(25,138)
Financing activities:		
Net (decrease) increase in short-term debt	(2,000)	2,161
Dividends paid	(7,542)	(6,673)
Proceeds from exercise of stock options	231	1,014
Repurchase of treasury stock	(1,989)	(3,288)
Issuance of treasury stock	431	533
Net cash used for financing activities	(10,869)	(6,253)
Effect of foreign exchange rates on cash	(79)	558
Increase in cash	961	6,512
Cash – beginning of period	11,164	7,338
Cash – end of period	\$ 12,125	\$ 13,850

See accompanying notes to unaudited consolidated condensed financial statements.

BADGER METER, INC.

Notes to Unaudited Consolidated Condensed Financial Statements

Note 1 Basis of Presentation

In the opinion of management, the accompanying unaudited consolidated condensed financial statements of Badger Meter, Inc. (the “Company” or “Badger Meter”) contain all adjustments (consisting only of normal recurring accruals except as otherwise discussed) necessary to present fairly the Company’s consolidated condensed financial position at June 30, 2018 , results of operations for the three- and six-month periods ended June 30, 2018 and 2017 , comprehensive income for the three- and six-month periods ended June 30, 2018 and 2017 , and cash flows for the six-month periods ended June 30, 2018 and 2017 . The results of operations for any interim period are not necessarily indicative of the results to be expected for the full year.

The preparation of financial statements in conformity with United States generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Note 2 Additional Financial Information Disclosures

The consolidated condensed balance sheet at December 31, 2017 was derived from amounts included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2017 . Refer to the footnotes to the financial statements included in that report for a description of the Company’s accounting policies and for additional details of the Company’s financial condition. The details in those notes have not changed except as discussed below and as a result of normal adjustments in the interim.

Warranty and After-Sale Costs

The Company estimates and records provisions for warranties and other after-sale costs in the period in which the sale is recorded, based on a lag factor and historical warranty claim experience. After-sale costs represent a variety of activities outside of the written warranty policy, such as investigation of unanticipated problems after the customer has installed the product, or analysis of water quality issues. Changes in the Company’s warranty and after-sale costs reserve are as follows:

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
(In thousands)				
Balance at beginning of period	\$ 3,702	\$ 2,548	\$ 3,367	\$ 2,779
Net additions charged to earnings	1,274	1,231	2,315	1,983
Adjustments to pre-existing warranties	(48)	440	(101)	46
Costs incurred	(818)	(1,155)	(1,471)	(1,744)
Balance at end of period	<u>\$ 4,110</u>	<u>\$ 3,064</u>	<u>\$ 4,110</u>	<u>\$ 3,064</u>

Rights Agreement

The shareholder rights plan that was in effect since February 15, 2008 expired on May 26, 2018 and the Board of Directors decided not to renew the plan.

Note 3 Employee Benefit Plans

The Company maintains a non-contributory defined benefit pension plan that covers substantially all U.S. employees who were employed at December 31, 2011. After that date, no further benefits are being accrued in this plan. For the frozen pension plan, benefits are based primarily on years of service and, for certain plans, levels of compensation. The Company has taken steps towards terminating the pension plan and expects the termination to be finalized in the third quarter of 2018. The ultimate settlement obligation will depend upon the nature and timing of participant settlements at prevailing market conditions. During the three months ended June 30, 2018, in connection with the Company’s ongoing activities to terminate the plan, lump-sum distributions to participants of the Plan exceeded the service and interest components of net periodic pension cost. As a result, the company recorded a pre-tax settlement charge of \$8.2 million during the second quarter of 2018 due for the most part to the initial transfer of pension funds to individuals who elected to rollover their accounts or transfer them to their plan.

The Company also maintains supplemental non-qualified plans for certain officers and other key employees, and an Employee Savings and Stock Option Plan (“ESSOP”) for the majority of the U.S. employees.

The Company additionally has a postretirement healthcare benefit plan that provides medical benefits for certain U.S. retirees and eligible dependents hired prior to November 1, 2004. Employees are eligible to receive postretirement healthcare benefits upon meeting certain age and service requirements. No employees hired after October 31, 2004 are eligible to receive these benefits. This plan requires employee contributions to offset benefit costs.

The following table sets forth the components of net periodic benefit (income) cost for the three months ended June 30, 2018 and 2017 based on December 31, 2017 and 2016 actuarial measurement dates, respectively:

(In thousands)	Defined pension plan benefits		Other postretirement benefits	
	2018	2017	2018	2017
Service cost (income) – benefits earned during the year	\$ 41	\$ (11)	\$ 28	\$ 28
Interest cost on projected benefit obligations	222	469	47	66
Expected return on plan assets	(591)	(396)	—	—
Amortization of prior service cost	—	—	—	(7)
Amortization of net loss (benefit)	201	141	(15)	(24)
Settlement expense	8,168	—	—	—
Net periodic benefit cost	\$ 8,041	\$ 203	\$ 60	\$ 63

The following table sets forth the components of net periodic benefit cost for the six months ended June 30, 2018 and 2017 based on December 31, 2017 and 2016 actuarial measurement dates, respectively:

(In thousands)	Defined pension plan benefits		Other postretirement benefits	
	2018	2017	2018	2017
Service cost – benefits earned during the year	\$ 70	\$ 13	\$ 62	\$ 63
Interest cost on projected benefit obligations	317	787	95	117
Expected return on plan assets	(835)	(798)	—	—
Amortization of prior service cost	—	—	(7)	(13)
Amortization of net loss (benefit)	289	276	(15)	(24)
Settlement expense	8,168	—	—	—
Net periodic benefit cost	\$ 8,009	\$ 278	\$ 135	\$ 143

The Company disclosed in its financial statements for the year ended December 31, 2017 that it was not required to make a minimum contribution to the defined benefit pension plan for the 2018 calendar year. The Company made a \$1.6 million payment in June 2018 related to the 2017 plan year. The Company believes that no additional contributions will be required during 2018 as it will be terminated prior to the end of 2018.

The Company also disclosed in its financial statements for the year ended December 31, 2017 that it estimated it would pay \$0.4 million in other postretirement benefits in 2018 based on actuarial estimates. As of June 30, 2018, \$142,000 of such benefits have been paid. The Company continues to believe that its estimated payments for the full year are reasonable. However, such estimates contain inherent uncertainties because cash payments can vary significantly depending on the timing of postretirement medical claims and the collection of the retirees’ portion of certain costs. Note that the amount of benefits paid in calendar year 2018 will not impact the expense for postretirement benefits for 2018.

Note 4 Accumulated Other Comprehensive Loss

Components of and changes in accumulated other comprehensive loss at June 30, 2018 are as follows:

<u>(In thousands)</u>	Unrecognized pension and postretirement benefits	Foreign currency	Total
Balance at beginning of period	\$ (11,597)	\$ 704	\$ (10,893)
Other comprehensive loss before reclassifications	—	(387)	(387)
Amounts reclassified from accumulated other comprehensive loss, net of tax of \$(1.9 million)	5,772	—	5,772
Net current period other comprehensive income (loss), net of tax	5,772	(387)	5,385
Accumulated other comprehensive (loss) income	<u>\$ (5,825)</u>	<u>\$ 317</u>	<u>\$ (5,508)</u>

Details of reclassifications out of accumulated other comprehensive loss during the six months ended June 30, 2018 are as follows:

<u>(In thousands)</u>	Amount reclassified from accumulated other comprehensive loss
Amortization of pension and postretirement benefits items:	
Prior service benefit (1)	\$ (756)
Settlement expense (1)	8,168
Amortization of actuarial loss (1)	274
Total before tax	7,686
Income tax benefit	(1,914)
Amount reclassified out of accumulated other comprehensive loss	<u>\$ 5,772</u>

(1) These accumulated other comprehensive loss components are included in the computation of net periodic benefit (income) cost in Note 3 “Employee Benefit Plans.”

Components of and changes in accumulated other comprehensive loss at June 30, 2017 are as follows:

<u>(In thousands)</u>	Unrecognized pension and postretirement benefits	Foreign currency	Total
Balance at beginning of period	\$ (10,495)	\$ (1,140)	\$ (11,635)
Other comprehensive income before reclassifications	—	1,340	1,340
Amounts reclassified from accumulated other comprehensive loss, net of tax of \$(0.1) million	154	—	154
Net current period other comprehensive income, net of tax	154	1,340	1,494
Accumulated other comprehensive (loss) income	<u>\$ (10,341)</u>	<u>\$ 200</u>	<u>\$ (10,141)</u>

Details of reclassifications out of accumulated other comprehensive loss during the six months ended June 30, 2017 are as follows:

(In thousands)	Amount reclassified from accumulated other comprehensive loss
Amortization of pension and postretirement benefits items:	
Prior service benefit (1)	\$ (13)
Amortization of actuarial loss (1)	252
Total before tax	239
Income tax benefit	(85)
Amount reclassified out of accumulated other comprehensive loss	\$ 154

- (1) These accumulated other comprehensive loss components are included in the computation of net periodic benefit (income) cost in Note 3 "Employee Benefit Plans."

Note 5 Acquisitions

On April 2, 2018, the Company acquired 100% of the outstanding stock of Innovative Metering Solutions, Inc. ("IMS") of Odessa, Florida, which was one of the Company's distributors serving Florida.

The total purchase consideration was approximately \$12.0 million, which included \$7.7 million in cash, a \$0.3 million working capital adjustment, a balance sheet holdback of \$0.7 million and settlement of \$3.3 million of pre-existing Company receivables. The working capital adjustment was settled in the second quarter of 2018 and the balance sheet holdback has been included as a payable on the Company's consolidated balance sheet. The Company's preliminary allocation of the purchase price at June 30, 2018 included \$3.8 million of receivables, \$0.8 million of inventories, \$0.1 million of machinery and equipment, \$3.6 million of intangibles and \$3.7 million of goodwill. The intangible assets acquired are customer relationships with an estimated average useful life of 10 years. The preliminary allocation of the purchase price to the assets acquired was based upon the estimated fair values at the date of acquisition. As of June 30, 2018, the Company had not completed its analysis for estimating the fair value of the assets acquired.

The IMS acquisition was accounted for under the purchase method, and accordingly, the results of operations were included in the Company's financial statements from the date of acquisition. The acquisition did not have a material impact on the Company's consolidated financial statements or the notes thereto.

On November 1, 2017, the Company acquired certain assets of Utility Metering Services, Inc.'s business Carolina Meter & Supply ("Carolina Meter") of Wilmington, North Carolina, which was one of the Company's distributors serving North Carolina, South Carolina and Virginia.

The total purchase consideration for the Carolina Meter assets was \$6.2 million, which included \$2.0 million in cash and settlement of \$4.2 million of pre-existing Company receivables. The Company's preliminary allocation of the purchase price at December 31, 2017 included \$0.6 million of receivables, \$0.3 million of inventories, \$3.3 million of intangibles and \$2.0 million of goodwill. The intangible assets acquired are primarily customer relationships with an estimated average useful life of 12 years. The preliminary allocation of the purchase price to the assets acquired was based upon the estimated fair values at the date of acquisition. As of June 30, 2018, the Company had not completed its analysis for estimating the fair value of the assets acquired.

The Carolina Meter acquisition was accounted for under the purchase method, and accordingly, the results of operations were included in the Company's financial statements from the date of acquisition. The acquisition did not have a material impact on the Company's consolidated financial statements or the notes thereto.

On May 1, 2017, the Company acquired 100% of the outstanding common stock of D-Flow Technology AB ("D-Flow") of Luleå, Sweden. The D-Flow acquisition facilitates the continued advancement of the existing E-Series® ultrasonic product line while also adding a technology center for the Company.

The purchase price was approximately \$23.2 million in cash, plus a small working capital adjustment. The purchase price included \$5.0 million in payments that are anticipated to be made in 2018 which are recorded in payables and other current liabilities on the Consolidated Balance Sheets at June 30, 2018. The Company's preliminary allocation of the purchase price included approximately \$0.3 million in receivables, \$0.6 million of inventories, \$0.2 million in property, plant and equipment, \$10.9 million of intangibles and \$16.1 million of goodwill. The majority of the intangible assets acquired related to ultrasonic technology. The Company also assumed \$4.9 million of liabilities as part of the acquisition. As of March 31, 2018, the Company completed its analysis for estimating the fair value of the assets acquired and liabilities assumed with no additional adjustments.

The D-Flow acquisition was accounted for under the purchase method, and accordingly, the results of operations were included in the Company's financial statements from the date of acquisition. The acquisition did not have a material impact on the Company's consolidated condensed financial statements or the notes thereto.

Note 6 Contingencies, Litigation and Commitments

In the normal course of business, the Company is named in legal proceedings. There are currently no material legal proceedings pending with respect to the Company.

The Company is subject to contingencies related to environmental laws and regulations. A future change in circumstances with respect to specific matters or with respect to sites formerly or currently owned or operated by the Company, off-site disposal locations used by the Company, and property owned by third parties that is near such sites, could result in future costs to the Company and such amounts could be material. Expenditures for compliance with environmental control provisions and regulations during 2017 and the first half of 2018 were not material.

The Company relies on single suppliers for most brass castings and certain resin and electronic subassemblies in several of its product lines. The Company believes these items would be available from other sources, but that the loss of certain suppliers would result in a higher cost of materials, delivery delays, short-term increases in inventory and higher quality control costs in the short term. The Company attempts to mitigate these risks by working closely with key suppliers, purchasing minimal amounts from alternative suppliers and by purchasing business interruption insurance where appropriate.

The Company reevaluates its exposures on a periodic basis and makes adjustments to reserves as appropriate.

Note 7 Income Taxes

The provision for income taxes as a percentage of earnings before income taxes for the second quarter of 2018 was 22.2% compared to 35.5% in the second quarter of 2017. The provision for income taxes as a percentage of earnings before income taxes for the first half of 2018 was 22.2% compared to 34.9% for the first half of 2017. Interim provisions are tied to an estimate of the overall annual rate which can vary due to state taxes and the relationship of foreign and domestic earnings. These items cause variations between periods. The decrease between years was due almost entirely to the lower Federal tax rate, which declined from 35% in 2017 to 21% in 2018 as a result of U.S. tax reform that was enacted in December 2017. For the six-months ended June 30, 2018 and 2017, the Company recognized discrete tax benefits related to a pension plan payment (2018 only) and the excess tax benefits from stock-based compensation of \$0.5 million and \$0.2 million, respectively.

In December 2017, the Tax Cuts and Jobs Act of 2017 (the "Act") was signed into law making significant changes to the Internal Revenue Code. Changes include, but are not limited to, a corporate tax rate decrease from 35% to 21% effective for tax years beginning after December 31, 2017, the transition of U.S. international taxation from a worldwide tax system to a territorial system, and a one-time transition tax on the mandatory deemed repatriation of cumulative foreign earnings as of December 31, 2017.

On December 22, 2017, Staff Accounting Bulletin No. 118 ("SAB 118") was issued to address the application of U.S. GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Act. For the three- and six-month periods months ended June 30, 2018, the Company did not update the provisional amount of transition tax recorded as of December 31, 2017, as there was no new information that would materially impact the Company's consolidated financial statements. The Company will continue to monitor any new guidance and update its transition tax calculation in a later quarter if necessary. Additional work is still needed for a more detailed analysis of the Company's deferred tax assets and liabilities and its historical foreign earnings, as well as potential correlative adjustments. Any subsequent adjustment to these amounts will be recorded to current tax expense in the quarter that the analysis is completed.

The Company is subject to numerous other provisions of the Act that are effective for tax years starting after December 31, 2017. These provisions include the Global Intangible Low-Taxed Income inclusion, the deduction for Foreign-Derived Intangible Income, the business interest expense deduction limitation under Section 163(j), the executive compensation provision under Section 162(m), and the reduced deduction for certain meals and entertainment related expenses. The Company will continue to refine its computation related to these provisions as additional guidance becomes available. The net impact of these provisions is not expected to have a material impact on the Company's consolidated financial statements.

Note 8 Fair Value Measurements of Financial Instruments

The Company applies the accounting standards for fair value measurements and disclosures for its financial assets and financial liabilities. The carrying amounts of cash, receivables and payables in the financial statements approximate their fair values due to the short-term nature of these financial instruments. Short-term debt is comprised of notes payable drawn against the Company's lines of credit and commercial paper. Because of its short-term nature, the carrying amount of the short-term debt also approximates fair value. Included in other assets are insurance policies on various individuals who were associated with the Company. The carrying amounts of these insurance policies approximate their fair value.

Note 9 Subsequent Events

The Company evaluates subsequent events at the date of the balance sheet as well as conditions that arise after the balance sheet date but before the financial statements are issued. The effects of conditions that existed at the balance sheet date are recognized in the financial statements. Events and conditions arising after the balance sheet date but before the financial statements are issued are evaluated to determine if disclosure is required to keep the financial statements from being misleading. To the extent such events and conditions exist, if any, disclosures are made regarding the nature of events and the estimated financial effects for those events and conditions. For purposes of preparing the accompanying consolidated condensed financial statements and the notes to these financial statements, the Company evaluated subsequent events through the date that the accompanying financial statements were issued, and has determined that no material subsequent events exist through the date of this filing.

Note 10 New Pronouncements

In February 2018, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2018-02 "Income Statement - Reporting Comprehensive Income (Topic 220)." Under existing U.S. generally accepted accounting principles, the effects of changes in tax rates and laws on deferred tax balances are recorded as a component of income tax expense in the period in which the law was enacted. When deferred tax balances related to items originally recorded in accumulated other comprehensive income are adjusted, certain tax effects become stranded in accumulated other comprehensive income. The amendments in ASU 2018-02 allow a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act of 2017. The amendments in this ASU also require certain disclosures about stranded tax effects. The guidance is effective for fiscal years beginning after December 15, 2018 and interim periods within those fiscal years. Early adoption in any period is permitted. The Company's provisional adjustments recorded in 2017 to account for the impact of the Tax Cuts and Jobs Act resulted in stranded tax effects. The Company is currently evaluating the timing and impact of adopting ASU 2018-02.

In May 2017, the FASB issued ASU 2017-09 "Compensation - Stock Compensation (Topic 718)," which clarifies when a change to terms or conditions of a share-based payment award must be accounted for as a modification. The new guidance requires modification accounting if the vesting condition, fair value or the award classification is not the same both before and after a change to the terms and conditions of the award. The new guidance was adopted on a prospective basis on January 1, 2018. The adoption of this standard did not have an impact on the Company's consolidated financial statements.

In March 2017, the FASB issued ASU 2017-07 "Compensation - Retirement Benefits (Topic 715)," which changes the presentation of defined benefit and post-retirement benefit plan expense on the income statement by requiring separation between operating and non-operating expense. Under the ASU, the service cost of net periodic benefit expense is an operating expense that will be reported with similar compensation costs. The non-operating components, which include all other components of net periodic benefit expense, are reported outside of operating income. The ASU also stipulates that only the service cost component of pension and postretirement (benefits) costs is eligible for capitalization. The ASU was adopted by the Company on January 1, 2018. Application was done retrospectively for the presentation of the components of these (benefits) costs. In the Consolidated Statements of Operations, the Company previously recorded service and other (benefits) costs in operating cost and expense accounts along with compensation costs. The adoption of the standard resulted in reclassification of those (benefits) costs to the other pension and postretirement (benefits) costs line in the Consolidated Statements of Operations. Adoption of the standard increased operating earnings for 2018 by \$8.0 million in both the three- and six-month periods ending June 30, 2018. Those amounts are established in other pension and postretirement (benefits) costs. In the three- and six-month periods ending June 30,

2017 operating earnings were increased by \$0.2 million and \$0.3 million, respectively. A corresponding amount was reclassified to other pension and postretirement (benefits) costs. The specific net periodic benefit components are disclosed in Note 3 "Employee Benefit Plans."

In January 2017, the FASB issued ASU 2017-04 "Intangibles - Goodwill and Other (Topic 350)." The update requires a single-step quantitative test to measure potential impairment based on the excess of a reporting unit's carrying amount over its fair value. A qualitative assessment can still be completed first for an entity to determine if a quantitative impairment test is necessary. The ASU is effective for fiscal year 2021 and is to be adopted on a prospective basis. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017.

In February 2016, the FASB issued ASU 2016-02 "Leases (Topic 842)," which requires lessees to record most leases on their balance sheets. Lessees initially recognize a lease liability (measured at the present value of the lease payments over the lease term) and a right-of-use ("ROU") asset (measured at the lease liability amount, adjusted for lease prepayments, lease incentives received and the lessee's initial direct costs). Lessees can make an accounting policy election not to recognize ROU assets and lease liabilities for leases with a lease term of 12 months or less as long as the leases do not include options to purchase the underlying assets that the lessee is reasonably certain to exercise. For lessors, the guidance modifies the classification criteria and the accounting for sales-type and direct financing leases. The standard requires the use of a modified retrospective approach for leases that exist or are entered into after the beginning of the earliest comparative period in the financial statements. Full retrospective application is prohibited. The Company plans to adopt the ASU beginning on the effective date of January 1, 2019. The Company expects that upon adoption the consolidated balance sheet will increase for the recognition of right of use assets and lease liabilities for operating leases. The Company is currently reviewing all of the available practical expedients for transition and is evaluating the impact that the adoption of this guidance will have on its financial condition, results of operations and the presentation of its consolidated financial statements.

In May 2014, the FASB issued ASU 2014-09 "Revenue from Contracts with Customers (Topic 606)." ASU 2014-09 provides a single principles-based, five-step model to be applied to all contracts with customers. The five steps are to identify the contract(s) with the customer, to identify the performance obligations in the contract, to determine the transaction price, to allocate the transaction price to the performance obligations in the contract and to recognize revenue when each performance obligation is satisfied. Revenue will be recognized when promised goods or services are transferred to the customer in an amount that reflects the consideration expected in exchange for those goods or services. In addition, the standard requires disclosure of the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. During 2016, the FASB issued additional ASU's which enhanced the originally issued guidance. These ASU's encompassed narrow scope improvements and practical expedients along with providing further clarifications. Effective January 1, 2018, the Company adopted ASU 2014-09 using the modified retrospective method, which resulted in an immaterial impact. For a complete discussion of the adoption of ASU 2014-09, see Note 11 "Revenue Recognition."

Note 11 Revenue Recognition

Adoption of ASU 2014-09 "Revenue from Contracts with Customers (Topic 606)"

On January 1, 2018, the Company adopted ASU 2014-09 using the modified retrospective method applied to those contracts that were not completed or substantially complete as of January 1, 2018. Results for the reporting period beginning after January 1, 2018 are presented under Topic 606, while prior period amounts have not been adjusted and continue to be reported in accordance with the Company's historic accounting under Topic 605. The Company recorded a net reduction to opening retained earnings of \$0.1 million as of January 1, 2018 as a result of the cumulative impact of adopting Topic 606. The impact to revenues as a result of applying Topic 606 for the three- and six-month periods ended June 30, 2018 was a decrease of \$35,000 and \$76,000, respectively.

Contracts with Customers

Revenue for sales of products and services is derived from contracts with customers. The products and services promised in contracts include the sale of municipal and flow instrumentation products, such as flow meters and radios, software access and other ancillary services. Contracts with each customer generally state the terms of the sale, including the description, quantity and price of each product or service. Payment terms are stated in the contract. Since the customer typically agrees to a stated rate and price in the contract that does not vary over the life of the contract, the majority of the Company's contracts do not contain variable consideration. The Company establishes a provision for estimated warranty and returns as well as certain after sale costs as discussed in Note 2 "Additional Financial Information Disclosures."

Disaggregation of Revenue

In accordance with Topic 606, the Company disaggregates revenue from contracts with customers into geographical regions and by the timing of when goods and services are transferred. The Company determined that disaggregating revenue into these categories meets the disclosure objective in Topic 606 which is to depict how the nature, amount, timing and uncertainty of revenue and cash flows are affected by regional economic factors.

Information regarding revenues disaggregated by geographic area is as follows (in millions):

	Three Months Ended June 30, 2018	Six Months Ended June 30, 2018
Revenues:		
United States	\$ 97,910	\$ 189,063
Foreign:		
Asia	3,161	4,861
Canada	3,529	6,789
Europe	5,101	10,148
Mexico	483	1,106
Middle East	3,204	5,356
Other	260	1,366
Total	<u>\$ 113,648</u>	<u>\$ 218,689</u>

Information regarding revenues disaggregated by the timing of when goods and services are transferred is as follows (in millions) :

	Three Months Ended June 30, 2018	Six Months Ended June 30, 2018
Revenue recognized over time	\$ 3,061	5,748
Revenue recognized at a point in time	110,587	212,941
Total	<u>\$ 113,648</u>	<u>\$ 218,689</u>

Contract Balances

The Company performs its obligations under a contract with a customer by transferring products and/or services in exchange for consideration from the customer. The Company typically invoices its customers as soon as control of an asset is transferred and a receivable for the Company is established. The Company, however, recognizes a contract liability when a customer prepay for goods and/or services and the Company has not transferred control of the goods and/or services.

The opening and closing balances of the Company's contract liabilities and receivables are as follows:

	June 30, 2018	December 31, 2017
Receivables	\$ 65,303	\$ 58,210
Contract liabilities	\$ 13,460	\$ 9,670

The balance of contract assets was immaterial as the Company did not have a significant amount of uninvoiced receivables in the three- and six-month periods ended June 30, 2018 and December 31, 2017.

The amount of revenue recognized in the three- and six-month periods ending June 30, 2018 that was included in the opening contract liability balance was \$0.3 million and \$0.6 million, respectively. The difference between the opening and closing balances of the Company's contract liabilities was the result of a timing difference between the Company's performance and the customers' prepayments. The increased receivables balance was due to higher sales in the first half of 2018 compared to the fourth quarter of 2017. Generally, receivables balances are lower at year-end than at other times of the year.

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 measurement in Topic 606. At contract inception, the Company assesses the products and services promised in its contracts with customers. The Company then identifies performance obligations to transfer distinct products or services to the customer. In order to identify performance obligations, the Company considers all of the products or services promised in the contract regardless of whether they are explicitly stated or are implied by customary business practices.

The Company's performance obligations are satisfied at a point in time or over time as work progresses. Revenue from products and services transferred to customers at a single point in time accounted for 97.3% and 97.4% of net sales for the three- and six-month periods ended June 30, 2018, respectively. The majority of the Company's revenue recognized at a point in time is for the sale of municipal and flow instrumentation products. Revenue from these contracts is recognized when the customer is able to direct the use of and obtain substantially all of the benefits from the product which generally coincides with title transfer during the shipping process.

Revenue from services transferred to customers over time accounted for 2.7% and 2.6% of sales of net sales for the three- and six-month periods ended June 30, 2018, respectively. The majority of the Company's revenue that is recognized over time relates to the BEACON AMA software as a service.

As of June 30, 2018, the Company had entered into contracts where there were unsatisfied performance obligations. For contracts recorded as long-term liabilities, \$10.8 million was the aggregate amount of the transaction price allocated to performance obligations that were unsatisfied or partially unsatisfied as of the end of the reporting period. The Company estimates that revenue recognized from satisfying those performance obligations will be approximately \$1.2 million for the remainder of 2018, \$2.5 million in each year from 2019 through 2021 and \$2.1 million in 2022.

Significant Judgments

The Company records revenue for BEACON AMA services over time as the customer benefits from the data that is provided through the Company's software. Control of an asset is therefore transferred to the customer over time, and the Company will recognize revenue for Beacon AMA services as service units are used by the customer.

Revenue is recorded for various ancillary services, such as project management and training, over time as the customer benefits from the services provided. The majority of this revenue will be recognized equally throughout the contract period as the customer receives benefits from the Company's promise to provide such services. If the service is not provided evenly over the contract period, revenue will be recognized by the associated input/output method that best measures the progress towards contract completion.

The Company also has contracts that include both the sale and installation of flow meters as performance obligations. In those cases, the Company records revenue for installed flow meters at the point in time when the flow meters have been accepted by the customer. The customer cannot control the use of and obtain substantially all of the benefits from the equipment until the customer has accepted the installed product. Therefore, for both the flow meter and the related installation, the Company has concluded that control is transferred to the customer upon customer acceptance of the installed flow meters. In addition, the Company has a variety of ancillary revenue streams which are minor. The types and composition of the Company's revenue streams did not materially change during the three- and six-month periods ended June 30, 2018 from year end 2017.

Certain customers may receive cash-based incentives or credits, which are accounted for as variable consideration. Variable consideration in contracts for the three- and six-month periods ended June 30, 2018 was insignificant .

Transaction Price Allocation

The transaction price for a contract is allocated to each distinct performance obligation and recognized as revenue when, or as, each performance obligation is satisfied. For contracts with multiple performance obligations, the Company allocates the contract's transaction price to each performance obligation using the best estimate of the standalone selling price of each distinct good or service in a contract. The primary method used to estimate standalone selling price is the observable price when the good or service is sold separately in similar circumstances and to similar customers. If standalone selling price is not directly observable, it is estimated using either a market adjustment or cost plus margin approach.

Contract Costs

The recording of assets recognized from the costs to obtain and fulfill customer contracts primarily relate to the deferral of sales commissions on the Company's BEACON AMA software arrangements. The Company's costs incurred to obtain or fulfill a contract with a customer are amortized over the period of benefit of the related revenue. The Company expenses any costs incurred immediately when the amortization period would be one year or less. These costs are recorded within selling, engineering and administration expenses.

Practical Expedients

For the three- and six-month periods ended June 30, 2018, the Company elected the following practical expedients:

In accordance with Subtopic 340-40 "Other Assets and Deferred Costs - Contracts with Customers," the Company elected to expense the incremental costs of obtaining a contract when the amortization period for such contracts would have been one year or less. The Company does not disclose the value of unsatisfied performance obligations for contracts with an original expected length of one year or less and contracts for which we recognize revenue at the amount to which we have the right to invoice for services performed.

The Company has made an accounting policy election to exclude all taxes by governmental authorities from the measurement of the transaction price.

Item 2 Management's Discussion and Analysis of Financial Condition and Results of Operations

Business Description and Overview

Badger Meter is an innovator in flow measurement, control and communication solutions, serving water utilities, municipalities, and commercial and industrial customers worldwide. The Company's products measure water, oil, chemicals and other fluids, and are known for accuracy, long-lasting durability and for providing and communicating valuable and timely measurement data. The Company's product lines fall into two categories: sales of water meters and related technologies to municipal water utilities (municipal water) and sales of meters to various industries for water and other fluids (flow instrumentation). The Company estimates that over 85% of its products are used in water applications when both categories are grouped together.

Municipal water, the largest category by sales volume, includes mechanical and ultrasonic (electronic) water meters and related technologies and services used by municipal water utilities as the basis for generating water and wastewater revenues. The key market for the Company's municipal water meter products is North America, primarily the United States, because most of the Company's meters are designed and manufactured to conform to standards promulgated by the American Water Works Association. The majority of water meters sold by the Company continue to be mechanical in nature. In recent years, the Company has made inroads in selling ultrasonic water meters. The development of smaller diameter ultrasonic water meters combined with advanced radio technology now provides the Company with the opportunity to sell into other geographical markets, for example Europe, the Middle East and South America. In the municipal water category, sales of water meters and related technologies and services are also commonly referred to as residential or commercial water meter sales, the latter referring to larger sizes of water meters.

Flow instrumentation includes meters and valves sold worldwide to measure and control materials flowing through a pipe or pipeline including water, air, steam, oil, and other liquids and gases. These products are used in a variety of applications, primarily into the following industries: water/wastewater; heating, ventilating and air conditioning (HVAC); oil and gas; chemical and petrochemical; test and measurement; automotive aftermarket; and the concrete construction process. Furthermore, the Company's flow instrumentation technologies are sold to original equipment manufacturers as the primary flow measurement device within a product or system.

Residential and commercial water meters are generally classified as either manually read meters or remotely read meters via radio technology. A manually read meter consists of a water meter and a register that provides a visual totalized meter reading. Meters equipped with radio technology (endpoints) receive flow measurement data from encoder registers attached to the water meter, which is encrypted and transmitted via radio frequency to a receiver that collects and formats the data appropriately for water utility billing systems. These remotely read, or mobile, systems are either automatic meter reading (AMR) systems, where a vehicle equipped for meter reading purposes, including a radio receiver, computer and reading software, collects the data from utilities' meters; or fixed network advanced metering infrastructure (AMI) systems, where data is gathered utilizing a network of permanent data collectors or gateway receivers that are always active or listening for the radio transmission from the utilities' meters. AMI systems eliminate the need for utility personnel to drive through service territories to collect data from the meters. These systems provide the utilities with more frequent and diverse data from their meters at specified intervals.

The ORION® family of radio endpoints provides water utilities with a range of industry-leading options for meter reading. These include ORION Migratable (ME) for mobile meter reading, ORION (SE) for traditional fixed network applications, and ORION Cellular for infrastructure-free fixed network meter reading. ORION Migratable makes the migration to fixed network easier for utilities that prefer to start with mobile reading and later adopt fixed network communications, allowing utilities to choose a solution for their current needs and be positioned for their future operational changes. ORION Cellular eliminates the need for utility-owned fixed network infrastructure, allows for rapid deployment and decreases ongoing maintenance.

Critical to the water metering ecosystem is information and analytics. The Company's BEACON AMA Managed Solution is the latest in metering technology. BEACON AMA combines the BEACON analytical software suite with proven ORION technologies using two-way fixed and cellular networks in a managed solution, improving utilities' visibility of their water consumption and eliminating the need for costly utility-managed infrastructure.

The BEACON AMA secure, cloud-hosted software suite includes a customizable dashboard, the ability to establish alerts for specific conditions, and consumer engagement tools that allow end water customers to view and manage their water usage activity. Benefits to the utility include improved customer service, increased visibility through faster leak detection, the ability to promote and quantify the effects of its water conservation efforts, and easier compliance reporting.

The Company's net sales and corresponding net earnings depend on unit volume and product mix, with the Company generally earning higher margins on meters equipped with radio technology. The Company's proprietary radio products generally result in higher margins than the remarketed, non-proprietary technology products. The Company also sells registers and endpoints separately to customers who wish to upgrade their existing meters in the field.

Water meter replacement and the adoption and deployment of new technology comprise the majority of water meter product sales, including radio products. To a much lesser extent, housing starts also contribute to the new product sales base. Over the last decade, there has been a growing trend in the conversion from manually read water meters to radio technology. This conversion rate is accelerating and contributes to an increased water meter and radio solutions base of business. The Company estimates that approximately 55% to 60% of water meters installed in the United States have been converted to a radio solutions technology. The Company's strategy is to fulfill customers' metering expectations and requirements with its proprietary meter reading systems or other systems available through its alliance partners in the marketplace.

Flow instrumentation products serve flow measurement and control applications across a broad industrial spectrum, occasionally leveraging the same technologies used in the municipal water category. Specialized communication protocols that control the entire flow measurement process and mandatory certifications drive these markets. The Company's specific flow measurement and control applications and technologies serve the flow measurement market through both customized and standard flow instrumentation solutions.

Industries today face accelerating demands to contain costs, reduce product variability, and meet ever-changing safety, regulatory and sustainability requirements. To address these challenges, customers must reap more value from every component in their systems. This system-wide scrutiny has heightened the focus on flow instrumentation in industrial process, manufacturing, commercial fluid, building automation, and precision engineering applications where flow measurement and control are critical.

An industry leader in both mechanical and electrical flow metering technologies, the Company offers one of the broadest flow measurement, control and communication portfolios in the market. The portfolio carries respected brand names including Recordall®, E-Series, ORION, Hedland®, Dynasonics®, Blancett®, and Research Control®, and includes eight of the ten major flow meter technologies. Customers rely on the Company for application-specific solutions that deliver accurate, timely and dependable flow data and control essential for product quality, cost control, safer operations, regulatory compliance, and more sustainable operations.

Business Trends

Increasingly, the electric utility industry relies on AMI technology for two-way communication to monitor and control electrical devices at the customer's site. Although the Company does not sell products for electric market applications, the trend toward AMI affects the markets in which the Company does participate, particularly for those customers in the water utility market that are interested in more frequent and diverse data collection. Specifically, AMI and AMA technologies enable water utilities to capture readings from each meter at more frequent and variable intervals. Similar to the electric utility industry's conversion to solid-state meters in recent years, the water utility industry is beginning the conversion from mechanical to ultrasonic meters. Ultrasonic water metering has lower barriers to entry, which could affect the competitive landscape for the water meter market in North America.

The Company sells its technology solutions to meet customer requirements. Since the technology products have comparable margins, any change in the mix between AMR, AMI or AMA is not expected to have a significant impact on the Company's net sales related to meter reading technology.

There are approximately 52,000 water utilities in the United States and the Company estimates that approximately 55% to 60% of them have converted to a radio solutions technology. With the BEACON AMA managed solution and its wide breadth of water meters, the Company believes it is well positioned to meet customers' future needs.

In the global market, companies need to comply with increasing regulations requiring companies to better manage critical resources, monitor their use of hazardous materials, and reduce exhaust gases. Some customers measure fluids to identify leaks and/or misappropriation for cost control or add measurement points to help automate manufacturing. Other customers employ measurement to comply with government mandates and laws. The Company provides technology to measure water, hydrocarbon-based fluids, chemicals, gases and steams.

Flow measurements are critical to provide a baseline and quantify reductions as customers attempt to reduce consumption. Once water usage is better understood, a strategy for water-use reduction can be developed with specific water-reduction initiatives targeted to those areas where water reduction is most viable. With the Company's technology, customers have found costly leaks, pinpointed equipment in need of repair, and identified areas for process improvements.

Acquisitions

On April 2, 2018, the Company acquired 100% of the outstanding stock of Innovative Metering Solutions, Inc. ("IMS") of Odessa, Florida, which was one of the Company's distributors serving Florida.

The total purchase consideration was approximately \$12.0 million, which included \$7.7 million in cash, a \$0.3 million working capital adjustment, a balance sheet holdback of \$0.7 million and settlement of \$3.3 million of pre-existing Company receivables. The working capital adjustment was settled in the second quarter of 2018 and the balance sheet holdback has been included as a payable on the Company's consolidated balance sheet. The Company's preliminary allocation of the purchase price at June 30, 2018 included \$3.8 million of receivables, \$0.8 million of inventories, \$0.1 million of machinery and equipment, \$3.6 million of intangibles and \$3.7 million of goodwill. The intangible assets acquired are customer relationships with an estimated average useful life of 10 years. The preliminary allocation of the purchase price to the assets acquired was based upon the estimated fair values at the date of acquisition. As of June 30, 2018, the Company had not completed its analysis for estimating the fair value of the assets acquired. This acquisition is further described in Note 5 "Acquisitions" in the Notes to Consolidated Condensed Financial Statements.

On November 1, 2017, the Company acquired certain assets of Utility Metering Services, Inc.'s business Carolina Meter & Supply ("Carolina Meter") of Wilmington, North Carolina, which was one of the Company's distributors serving North Carolina, South Carolina and Virginia.

The total purchase consideration for the Carolina Meter assets was \$6.2 million, which included \$2.0 million in cash and settlement of \$4.2 million of pre-existing Company receivables. The Company's preliminary allocation of the purchase price at December 31, 2017 included \$0.6 million of receivables, \$0.3 million of inventories, \$3.3 million of intangibles and \$2.0 million of goodwill. The intangible assets acquired are primarily customer relationships with an estimated average useful life of 12 years. The preliminary allocation of the purchase price to the assets acquired was based upon the estimated fair values at the date of acquisition. As of June 30, 2018, the Company has not completed its analysis for estimating the fair value of the assets acquired. This acquisition is further described in Note 5 "Acquisitions" in the Notes to Consolidated Condensed Financial Statements.

On May 1, 2017, the Company acquired 100% of the outstanding common stock of D-Flow Technology AB ("D-Flow") of Luleå, Sweden. The D-Flow acquisition facilitates the continued advancement of the existing E-Series ultrasonic product line while also adding a technology center for the Company.

The purchase price was approximately \$23.2 million in cash, plus a small working capital adjustment. The purchase price included \$5.4 million in payments that are anticipated to be made in 2018 which are recorded in payables and other current liabilities on the Consolidated Balance Sheets at March 31, 2018. The Company's preliminary allocation of the purchase price included approximately \$0.3 million in receivables, \$0.6 million of inventories, \$0.2 million in machinery and equipment, \$10.9 million of intangibles and \$16.1 million of goodwill. The Company also assumed \$4.9 million of liabilities as part of the acquisition. As of March 31, 2018, the Company completed its analysis for estimating the fair value of the assets acquired and liabilities assumed with no additional adjustments. This acquisition is further described in Note 5 "Acquisitions" in the Notes to Consolidated Condensed Financial Statements.

Revenue and Product Mix

As the industry continues to evolve, the Company has been vigilant in anticipating and exceeding customer expectations. In 2011, the Company introduced AMA as a hardware and software solution for water and gas utilities, and then in early 2014 launched its new BEACON AMA system, as a managed solution, which it believes will help maintain the Company's position as a market leader. Since its inception, sales of BEACON AMA have continued to grow with large cities and private water utilities selecting BEACON AMA and the Company's industry-leading water meters.

The Company continues to seek opportunities for additional revenue enhancement. For instance, the Company is periodically asked to oversee and perform field installation of its products for certain customers. The Company assumes the role of general contractor, hiring installation subcontractors and supervising their work. The Company also supports its product and technology sales with the sale of extended service programs that provide additional services beyond the standard warranty. In recent years, the Company has sold ORION radio technology to natural gas utilities for installation on their gas meters. Most recently, the introduction of the BEACON AMA system opens the door to "software as a service" revenues. Revenues from such products and services are not yet significant and the Company is uncertain of the potential growth achievable for such products and services in future periods.

Results of Operations - Three Months Ended June 30, 2018

The Company's net sales for the three months ended June 30, 2018 increased \$9.4 million, or 9.0%, to \$113.6 million compared to \$104.2 million during the same period in 2017.

Municipal water sales represented 77.5% of sales in the second quarter of 2018 compared to 76.8% in the second quarter of 2017. These sales increased \$7.9 million, or 9.9%, to \$88.0 million in the second quarter of 2018 from \$80.1 million in the second quarter of 2017. The increase was due to higher prices and increased domestic volumes sold of newer technologies in meters and related radios as well as higher service revenue. Higher international sales also contributed to the increase, particularly in the Middle East.

Flow instrumentation products represented 22.5% of sales for the three months ended June 30, 2018 compared to 23.2% during the same period in 2017. These sales increased \$1.5 million, or 6.2%, to \$25.6 million from \$24.1 million in the same period last year. The increase was due to the continued rebound in the oil and gas market and other targeted markets served.

While the gross margin increased as a result of the higher sales, the gross margin as a percentage of sales was 36.5% in the second quarter of 2018 compared to 39.4% in the second quarter of 2017. The decline in the percentage was due to higher material costs, particularly brass expenses, and higher health care costs. In addition, there was a greater mix of lower margin project work accepted based on future anticipated higher margin projects.

Selling, engineering and administration expenses for the three months ended June 30, 2018 increased \$1.0 million, or 4.1%, to \$25.2 from \$24.2 million in the second quarter of 2017. Higher healthcare and sales commission costs, as well as higher research and development expenses contributed to the increase, which also included the additional staffing from recent acquisitions. To some degree, lower overall employee incentives offset the higher costs.

Operating earnings for the second quarter of 2018 decreased \$0.5 million, or 3.0%, to \$16.3 million compared to \$16.8 million in the same period in 2017. The decrease was due to the impact of the higher selling, engineering and administration expenses, offset somewhat by higher gross margin.

Other pension and postretirement costs were \$8.0 million compared to \$0.2 million in the second quarter of 2017. The second quarter of 2018 includes a settlement charge of \$8.2 million made in connection with the first phase of the previously planned termination of the Company's pension plan. Initial distributions were made from the plan in the second quarter resulting in this non-cash charge. Final distributions are expected to be made in the third quarter of 2018 which will result in an additional settlement charge, currently estimated to be \$10.5 million.

The provision for income taxes as a percentage of earnings before income taxes for the second quarter of 2018 was 22.2% compared to 35.5% in the second quarter of 2017. Interim provisions are tied to an estimate of the overall annual rate that can vary due to state taxes, the relationship of foreign and domestic earnings and other credits available. The decrease between years was due primarily to the lower Federal tax rate, which declined from 35% in 2017 to 21% in 2018.

As a result of the above-mentioned items, net earnings for the three months ended June 30, 2018 were \$6.2 million, or \$0.21 per diluted share, compared to \$10.6 million, or \$0.36 per diluted share, for the same period in 2017.

Results of Operations - Six Months Ended June 30, 2018

The Company's net sales for the six months ended June 30, 2018 increased \$12.9 million, or 6.3%, to \$218.7 million compared to \$205.8 million during the same period in 2017.

Municipal water sales represented 77.0% of sales for the first six months of 2018, the same as the first six months of 2017. These sales increased \$10.2 million, or 6.4%, to \$168.5 million from \$158.3 million in 2017 and were driven by higher prices and increased domestic volumes sold of newer technologies in meters and related radios as well as higher service revenue. Higher international sales also contributed to the increase, particularly in the Middle East. Offsetting this somewhat were lower volumes of commercial meters sold.

Flow instrumentation products represented 23.0% of sales for the six months ended June 30, 2018, the same as the first six months of 2017. These sales increased \$2.7 million, or 5.7%, to \$50.2 million for the first six months in 2018 compared to \$47.5 million in the same period last year due to higher sales into the oil and gas market as well as other targeted markets.

Gross margin as a percentage of sales was 35.8% for the first six months of 2018 compared to 38.7% in the same period in 2017. The decrease was due to higher brass and health care costs and the negative impact of mix on plant utilization. In addition, there was a greater mix of lower margin project work accepted based on future anticipated higher margin projects.

Selling, engineering and administration expenses for the six months ended June 30, 2018 increased \$2.6 million, or 5.3%, to \$51.9 million from \$49.3 million in the same period in 2017. Higher healthcare, sales commission and research and development expenses contributed to the increase in addition the additional staffing from recent acquisitions and normal inflationary increases. To some degree, lower overall employee incentives offset the higher costs.

Operating earnings for the first six months of 2018 decreased \$4.1 million, or 13.5%, to \$26.3 million compared to \$30.4 million in the same period in 2017 as the result of the lower gross margins and higher selling, engineering and administration expenses.

Other pension and postretirement costs were \$8.0 million for the first six months of 2018 compared to \$0.3 million in the same period in 2017. Included in the amount for 2018 was a settlement charge of \$8.2 million made in connection with the first phase of the previously planned termination of the Company's pension plan. Initial distributions were made from the plan in the second quarter resulting in this non-cash charge. Final distributions are expected to be made in the third quarter of 2018 which will result in an additional settlement charge, currently estimated to be \$10.5 million.

The provision for income taxes as a percentage of earnings before income taxes for the first six months of 2018 was 22.2% compared to 34.9% for the same period in 2017. Interim provisions are tied to an estimate of the overall annual rate that can vary due to state taxes, the relationship of foreign and domestic earnings and production credits available. The decrease between years was due almost entirely to the lower Federal tax rate, which declined from 35% in 2017 to 21% in 2018.

As a result of the above-mentioned items, net earnings for the six months ended June 30, 2017 were \$13.7 million, or \$0.47 per diluted share, compared to \$19.4 million, or \$0.67 per diluted share, for the same period in 2017.

Liquidity and Capital Resources

The main sources of liquidity for the Company are cash from operations and borrowing capacity. Cash provided by operations was \$25.2 million for the first six months of 2018 compared to \$37.3 million through the first six months of 2017. Last year's amount was favorably impacted by a decrease in inventory balances which did not recur this year. This, along with higher receivable balances are the primary reasons for the decline.

Receivables increased from \$58.2 million at December 31, 2017 to \$65.3 million at June 30, 2018. Generally, receivable balances are lower at year-end than at other times of the year due to seasonality in the Company's business. The Company believes its net receivables balance is fully collectible.

Inventories at June 30, 2018 were \$85.7 million, only a slight change from \$85.2 million at December 31, 2017. These balances fluctuate from time to time due to the level of sales and the timing of inventory purchases.

Net property, plant and equipment decreased slightly from \$93.6 million at December 31, 2017 to \$92.7 million at June 30, 2018. This was the net effect of depreciation expense, offset somewhat by \$5.2 million of capital expenditures in the first six months of 2018.

Intangible assets decreased to \$59.1 million at June 30, 2018 from \$59.3 million at December 31, 2017 due to normal amortization expense, offset by an increase of \$3.7 million related to the acquisition of IMS. The acquisition was also the main reason for the increase in goodwill from \$67.4 million on December 31, 2017 to \$71.1 million on June 30, 2018.

Short-term debt at June 30, 2018 decreased to \$42.4 million from \$44.6 million at December 31, 2017 due to the timing of cash needs.

Payables and other current liabilities of \$28.1 million at June 30, 2018 decreased from \$28.6 million at December 31, 2017. These balances were impacted by the timing of purchases and payments.

Accrued compensation and employee benefits decreased to \$9.6 million at June 30, 2018 from \$15.5 million at December 31, 2017 due to payments made in the first two quarters of 2018 related to 2017 earned employee incentives, offset somewhat by provisions made for 2018 employee incentives earned to date.

Income and other taxes payable increased to \$1.4 million at June 30, 2018 from \$1.1 million at December 31, 2017. The change was the net impact of the lower Federal tax rate for 2018 and the timing of actual tax payments.

Other long-term liabilities increased to \$13.7 million compared to \$4.1 million on December 31, 2017. The increase was due primarily to higher deferred revenue associated with the Beacon AMA offering.

The overall increase in total shareholders' equity from \$277.5 million at December 31, 2017 to \$288.5 million at June 30, 2018 was the net effect of net earnings and stock options exercised, offset by dividends paid and repurchased stock.

The Company's financial condition remains strong. In June 2018, the Company amended its May 2012 credit agreement with its primary lender to extend until September 2021 the \$125.0 million line of credit that supports commercial paper (up to \$70.0 million) and includes \$5.0 million of a Euro line of credit. While the facility is unsecured, there are a number of financial covenants with which the Company must comply, and the Company was in compliance as of June 30, 2018. The Company believes that its operating cash flows, available borrowing capacity, and its ability to raise capital provide adequate resources to fund ongoing operating requirements, future capital expenditures and the development of new products. The Company continues to take advantage of its local commercial paper market and carefully monitors the current borrowing market. The Company had \$90.7 million of unused credit lines available at June 30, 2018.

Other Matters

The Company is subject to contingencies related to environmental laws and regulations. A future change in circumstances with respect to these specific matters or with respect to sites formerly or currently owned or operated by the Company, off-site disposal locations used by the Company, and property owned by third parties that is near such sites, could result in future costs to the Company and such amounts could be material. Expenditures for compliance with environmental control provisions and regulations during 2017 and the first half of 2018 were not material.

See the “Special Note Regarding Forward Looking Statements” at the front of this Quarterly Report on Form 10-Q and Part I, Item 1A “Risk Factors” in the Company’s Annual Report on Form 10-K for the year ended December 31, 2017 for a discussion of risks and uncertainties that could impact the Company’s financial performance and results of operations.

Off-Balance Sheet Arrangements and Contractual Obligations

The Company’s off-balance sheet arrangements and contractual obligations are discussed in Part II, Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” under the headings “Off-Balance Sheet Arrangements” and “Contractual Obligations” in the Company’s Annual Report on Form 10-K for the year ended December 31, 2017 and have not materially changed since that report was filed unless otherwise indicated in this Form 10-Q.

Item 3 Quantitative and Qualitative Disclosures about Market Risk

The Company’s quantitative and qualitative disclosures about market risk are included in Part II, Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” under the heading “Market Risks” in the Company’s Annual Report on Form 10-K for the year ended December 31, 2017 and have not materially changed since that report was filed.

Item 4 Controls and Procedures

Evaluation of Disclosure Controls and Procedures

In accordance with Rule 13a-15(b) of the Securities Exchange Act of 1934 (the “Exchange Act”), the Company’s management evaluated, with the participation of the Company’s Chairman and Chief Executive Officer and the Company’s Senior Vice President - Finance, Chief Financial Officer and Treasurer, the effectiveness of the design and operation of the Company’s disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of the end of the quarter ended June 30, 2018. Based upon their evaluation of these disclosure controls and procedures, the Company’s Chairman and Chief Executive Officer and the Company’s Senior Vice President - Finance, Chief Financial Officer and Treasurer concluded that, as of the date of such evaluation, the Company’s disclosure controls and procedures were effective.

Changes in Internal Control over Financial Reporting

There was no change in the Company’s internal control over financial reporting that occurred during the quarter ended June 30, 2018 that has materially affected, or is reasonably likely to materially affect, the Company’s internal control over financial reporting.

Part II – Other Information**Item 6 Exhibits****EXHIBIT INDEX**

Exhibit No.	Description
4	Fourth Amendment to Credit Agreement dated June 15, 2018, related to the Loan Agreement dated May 23, 2012 between Badger Meter, Inc. and BMO Harris Bank NA for Badger Meter, Inc.'s credit agreement.
31.1	Certification by the Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification by the Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32	Certification of Periodic Financial Report by the Chief Executive Officer and Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101	The following materials from the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018 formatted in Extensible Business Reporting Language (XBRL): (i) the Consolidated Condensed Balance Sheets, (ii) the Consolidated Statements of Operations, (iii) the Consolidated Statements of Comprehensive Income, (iv) the Consolidated Condensed Statements of Cash Flows, (v) Notes to Unaudited Consolidated Condensed Financial Statements, tagged as blocks of text and (vi) document and entity information.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

BADGER METER, INC.

Dated: July 25, 2018

By	<u>/s/ Richard A. Meeusen</u> Richard A. Meeusen Chairman and Chief Executive Officer
By	<u>/s/ Richard E. Johnson</u> Richard E. Johnson Senior Vice President – Finance, Chief Financial Officer and Treasurer
By	<u>/s/ Beverly L. P. Smiley</u> Beverly L. P. Smiley Vice President – Controller

FOURTH AMENDMENT TO CREDIT AGREEMENT

THIS FOURTH AMENDMENT TO CREDIT AGREEMENT ("Amendment") is made and entered into effective as of June 15, 2018, by and between BADGER METER, INC., a Wisconsin corporation (the "Borrower"), and BMO HARRIS BANK N.A. (the "Bank").

RECITAL

WHEREAS, the Borrower and the Bank are parties to that certain Credit Agreement dated as of May 23, 2012, as amended (the "Credit Agreement"); and

WHEREAS, the Borrower and the Bank desire to make certain amendments to the Credit Agreement pursuant to the terms and conditions hereof.

AGREEMENTS

NOW, THEREFORE, in consideration of the premises and mutual agreements contained herein, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. Defined Terms. All capitalized terms not otherwise defined herein shall have the meanings assigned to such terms in the Credit Agreement.

2. Amendment of Section 1.1. Section 1.1 of the Credit Agreement is hereby amended by amending the following definitions:

"LIBOR Index Rate" means the one-month London Interbank Offered Rate (LIBOR) as reported on the applicable Bloomberg screen page (or such other commercially available source providing such quotations as may be designated by the Bank from time to time) on the first day of each month (or, if such date is not a bank business day, on the immediately prior bank business day), unless such rate is no longer available or published, in which case such rate shall be at a comparable index rate selected by the Bank with notice to the Borrower, provided that in no event shall the "LIBOR Rate" be less than 0.0%.

"Termination Date" shall mean, (a) with respect to the Revolving Loans, September 30, 2021, and (b) with respect to the Foreign Currency Revolving Loans, September 30, 2021, or such earlier date on which the Commitments shall be terminated pursuant to the terms hereto.

3. Representations and Warranties of the Borrower. In order to induce the Bank to enter into this Amendment and in recognition of the fact that the Bank is acting in reliance thereupon, the Borrower represents and warrants to the Bank as follows:

- (a) The Borrower has the power and authority to enter into, deliver and issue this Amendment and to continue to borrow under the Agreement, as amended hereby. Each of the Credit Agreement, as amended hereby, and this Amendment when duly executed on behalf of the Borrower, constitutes the legal, valid and binding obligation of the Borrower enforceable against the Borrower in accordance with its respective terms.
- (b) The execution and delivery of this Amendment and the prospective borrowing and performance by the Borrower of its obligations under the Credit Agreement, as amended hereby, have been authorized by all necessary action on the part of the Borrower.
- (c) The representations and warranties of the Borrower contained in the Credit Agreement are true and correct in all material respects as of the date of this Amendment as though made on and as of the date of this Amendment, except to the extent such representations or warranties relate to any earlier date in which case such representations and warranties shall continue to be true and correct in all material respects as of such date.
- (d) As of the date of this Amendment, no Default or Event of Default has occurred and is continuing.

4. Miscellaneous.

- (a) Each reference in the Credit Agreement to "this Agreement" and each reference in each of the Related Documents to the "Credit Agreement" shall be deemed a reference to the Credit Agreement, as further amended by this Amendment.
- (b) The Borrower shall pay or reimburse the Bank for its expenses, including reasonable attorneys' fees and expenses, incurred in connection with the Credit Agreement and this Amendment for the preparation, examination and approval of documents in connection therewith or herewith, the preparation hereof and expenses incurred in connection therewith or herewith.
- (c) This Amendment is being delivered and is intended to be performed in the State of Wisconsin and shall be construed and enforced in accordance with the laws of that state without regard for the principles of conflicts of laws.
- (d) Except as expressly modified or amended herein, the Agreement shall continue in effect and shall continue to bind the parties hereto. This Amendment is limited to the terms and conditions hereof and shall not constitute a modification, acceptance or waiver of any other provision of the Agreement.
- (e) This Amendment may be signed in any number of counterparts with the same effect as if the signatures thereto and hereto were upon the same instrument.

IN WITNESS WHEREOF, the parties hereto have executed this Fourth Amendment to Credit Agreement effective as of the date first written above.

BADGER METER, INC.

By: /s/ Richard E. Johnson
Name: Richard E. Johnson
Title: Sr. VP-Finance, CFO & Treasurer

By: /s/ William R.A. Bergum
Name: William R.A. Bergum
Title: VP- General Counsel & Secretary

BMO HARRIS BANK N.A.

By: /s/ David C. Doran
Name: David C. Doran
Title: Senior Vice President

**Certification of Chairman and Chief Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act and Rule 13a-14(a)
or 15d-14(a) under the Securities Exchange Act of 1934**

I, Richard A. Meeusen, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Badger Meter, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: July 25, 2018

By /s/ Richard A. Meeusen

Richard A. Meeusen

Chairman and Chief Executive Officer

**Certification of Senior Vice President - Finance, Chief Financial Officer and Treasurer
Pursuant to Section 302 of the Sarbanes-Oxley Act and Rule 13a-14(a)
or 15d-14(a) under the Securities Exchange Act of 1934**

I, Richard E. Johnson, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Badger Meter, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: July 25, 2018

By /s/ Richard E. Johnson

Richard E. Johnson

Senior Vice President - Finance, Chief Financial Officer
and Treasurer

Written Statement of the Chief Executive Officer and Chief Financial Officer**Pursuant to 18 U.S.C. §1350**

Solely for the purpose of complying with 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, we, the undersigned Chief Executive Officer and Chief Financial Officer of Badger Meter, Inc., a Wisconsin corporation (the “Company”), hereby certify, based on our knowledge, that the Quarterly Report on Form 10-Q of the Company for the quarter ended June 30, 2018 (the “Report”) fully complies with the requirements of Section 13 (a) or 15 (d) of the Securities Exchange Act of 1934 and that information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: July 25, 2018

By /s/ Richard A. Meeusen

Richard A. Meeusen

Chairman and Chief Executive Officer

By /s/ Richard E. Johnson

Richard E. Johnson

Senior Vice President - Finance, Chief Financial Officer
and Treasurer