# UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, DC 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 September 30, 2017

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission file number 001-36103



# **TECOGEN INC.**

(Exact name of Registrant as specified in its charter)

Delaware

(State or Other Jurisdiction of Incorporation or Organization)

45 First Avenue Waltham, Massachusetts (Address of Principal Executive Offices) 02451

04-3536131

(IRS Employer Identification No.)

(Zip Code)

Registrant's Telephone Number, Including Area Code: (781) 622-1120

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  $\boxtimes$  No  $\square$ 

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 (\$232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  $\blacksquare$  No  $\square$ 

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

Large accelerated filer  $\Box$ Accelerated filer  $\Box$ Non –accelerated filer  $\Box$ 

Smaller reporting company  $\boxtimes$ Emerging Growth company  $\boxtimes$ 

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.  $\Box$ 

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

Title of each class	Outstanding, October 31, 2017
Common Stock, \$0.001 par value	24,724,392

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References in this Form 10-Q to "we", "us", "our", the "Company" and "Tecogen" refers to Tecogen Inc. and its consolidated subsidiaries, unless otherwise noted.

## PART I - FINANCIAL INFORMATION Item 1 - Financial Statements

# CONDENSED CONSOLIDATED BALANCE SHEETS (unaudited)

	Sep	otember 30, 2017	December 31, 2016			
ASSETS						
Current assets:						
Cash and cash equivalents	\$	2,077,047	\$	3,721,765		
Accounts receivable, net		11,094,287		8,630,418		
Unbilled revenue		3,063,089		2,269,645		
Inventory, net		6,118,835		4,774,264		
Due from related party		496,655		260,988		
Prepaid and other current assets		742,701		401,876		
Total current assets		23,592,614		20,058,956		
Property, plant and equipment, net		15,502,974		517,143		
Intangible assets, net		2,430,178		1,065,967		
Excess of cost over fair value of net assets acquired		12,602,409				
Goodwill		40,870		40,870		
Other assets		2,462,870		2,058,425		
TOTAL ASSETS	\$	56,631,915	\$	23,741,361		
LIABILITIES AND STOCKHOLDERS' EQUITY						
Current liabilities:						
Accounts payable	\$	5,356,449	\$	3,367,481		
Accrued expenses	Ψ	1,676,307	Ψ	1,378,258		
Deferred revenue		1,477,124		876,765		
Loan due to related party		850,000		670,705		
Interest payable, related party		39,403				
Total current liabilities		9,399,283		5,622,504		
		9,399,283		5,022,504		
Long-term liabilities:		296 404		450 275		
Deferred revenue, net of current portion		386,494		459,275		
Senior convertible promissory note, related party		3,149,086		3,148,509		
Unfavorable contract liability		10,358,283				
Total liabilities		23,293,146		9,230,288		
Commitments and contingencies (Note 9)						
Stockholders' equity:						
Tecogen Inc. stockholders' equity:						
Common stock, \$0.001 par value; 100,000,000 shares authorized; 24,724,392 and 19,981,912 issued and outstanding at September 30,						
2017 and December 31, 2016, respectively		24,724		19,982		
Additional paid-in capital		56,081,026		37,334,773		
Accumulated other comprehensive loss-investment securities		(184,998)				
Accumulated deficit		(23,065,226)		(22,843,682		
Total Tecogen Inc. stockholders' equity		32,855,526		14,511,073		
Noncontrolling interest		483,243				
Total stockholders' equity		33,338,769		14,511,073		
Lotal stockholders' equity						

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

# CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (unaudited)

		Three Months Ended			
	S	eptember 30, 2017	S	September 30, 2016	
Revenues					
Products	\$	2,425,616	\$	2,850,901	
Services		4,519,467		3,765,554	
Energy production		1,556,115			
Total revenues		8,501,198		6,616,455	
Cost of sales					
Products		1,538,515		1,715,462	
Services		2,981,454		2,126,175	
Energy production		723,198	_	_	
Total cost of sales		5,243,167		3,841,637	
Gross profit		3,258,031		2,774,818	
Operating expenses					
General and administrative		2,427,352		2,003,838	
Selling		503,415		367,412	
Research and development		241,725		154,075	
Total operating expenses		3,172,492		2,525,325	
Income from operations		85,539		249,493	
Other income (expense)					
Interest and other income		14,849		3,914	
Interest expense		(45,242)		(45,539)	
Total other expense, net		(30,393)		(41,625)	
Consolidated net income		55,146		207,868	
Income attributable to the noncontrolling interest		(27,935)		_	
Net income attributable to Tecogen Inc.		27,211		207,868	
Other comprehensive income - unrealized gain on securities		39,361			
Comprehensive income	\$	66,572	\$	207,868	
Natinaoma par shara - basia	\$	0.00	\$	0.01	
Net income per share - basic	\$	0.00	\$	0.01	
Net income per share - diluted	\$		φ		
Weighted average shares outstanding - basic		24,720,613	_	19,640,812	
Weighted average shares outstanding - diluted		24,930,624	_	20,229,120	

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

# CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS (unaudited)

	Nine Mo	Nine Months Ended			
	September 30, 2017	S	September 30, 2016		
Revenues					
Products	\$ 8,349,159	\$	7,525,909		
Services	12,259,037	,	9,853,369		
Energy production	2,330,307	,			
Total revenues	22,938,503		17,379,278		
Cost of sales					
Products	5,261,245		5,035,230		
Services	7,464,193		5,746,992		
Energy production	1,053,741		—		
Total cost of sales	13,779,179	1	10,782,222		
Gross profit	9,159,324		6,597,056		
Operating expenses					
General and administrative	7,042,500	)	5,898,230		
Selling	1,558,378		1,217,533		
Research and development	641,064		524,696		
Total operating expenses	9,241,942		7,640,459		
Loss from operations	(82,618	5)	(1,043,403)		
Other income (expense)					
Interest and other income	21,033	,	9,575		
Interest expense	(115,026	5)	(131,973)		
Total other expense, net	(93,993	)	(122,398)		
Consolidated net loss	(176,611	)	(1,165,801)		
(Income) loss attributable to the noncontrolling interest	(44,933	)	64,962		
Net loss attributable to Tecogen Inc.	(221,544	-)	(1,100,839)		
Other comprehensive loss - unrealized loss on securities	(184,998	)	_		
Comprehensive loss	\$ (406,542	) \$	(1,100,839)		
Net loss per share - basic and diluted	\$ (0.01	) \$	(0.06)		
Weighted average shares outstanding - basic and diluted	22,643,406	<u> </u>	19,071,497		
weighten average shares outstanding - basic and unuted	22,043,400	_	17,0/1,49/		

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

# CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (unaudited)

	Nine Months Ended						
	Se	ptember 30, 2017	Sej	otember 30, 2016			
CASH FLOWS FROM OPERATING ACTIVITIES:							
Consolidated net loss	\$	(176,611)	\$	(1,165,801)			
Adjustments to reconcile net loss to net cash used in operating activities:							
Depreciation and amortization, net		402,939		198,766			
Provision (recovery) of inventory reserve		43,609		(90,000)			
Stock-based compensation		138,329		117,065			
Non-cash interest expense		577		37,923			
Loss on sale of assets		2,909		640			
Provision (recovery) for losses on accounts receivable		8,000		(6,000			
Changes in operating assets and liabilities, net of effects of acquisitions							
(Increase) decrease in:							
Short term investments		—		294,802			
Accounts receivable		(1,908,655)		(2,664,462			
Unbilled revenue		(776,365)		(1,024,276			
Inventory, net		(1,279,847)		714,896			
Due from related party		(236,971)		744,266			
Prepaid expenses and other current assets		(18,673)		(100,398			
Other non-current assets		(32,251)		_			
Increase (decrease) in:							
Accounts payable		1,641,206		(279,196			
Accrued expenses and other current liabilities		(233,824)		122,809			
Deferred revenue		407,379		184,103			
Interest payable, related party		21,378		—			
Net cash used in operating activities		(1,996,871)		(2,914,863			
CASH FLOWS FROM INVESTING ACTIVITIES:							
Purchases of property and equipment		(315,205)		(130,499			
Purchases of intangible assets		(34,551)		(71,223			
Cash acquired in acquisition		971,454		_			
Cash paid for investment in Ultra Emissions Technologies Ltd		—		(2,000,000			
Payment of stock issuance costs		(367,101)					
Distributions to noncontrolling interest		(31,362)		_			
Net cash provided by (used in) investing activities		223,235		(2,201,722			
CASH FLOWS FROM FINANCING ACTIVITIES:							
Proceeds from demand notes payable, related party				150,000			
Payment of stock issuance costs				(28,548			
Proceeds from debt issuance costs				(2,034			
Proceeds from the exercise of stock options		128,918		312,698			
Proceeds from exercise of warrants				2,700,000			
Net cash provided by financing activities		128,918		3,132,116			
Net decrease in cash and cash equivalents		(1,644,718)		(1,984,469			
Cash and cash equivalents, beginning of the period		3,721,765		5,486,526			
Cash and cash equivalents, end of the period	\$	2,077,047	\$	3,502,057			

# Supplemental disclosures of cash flows information:

Cash paid for interest	\$ 95,550	\$ 94,049
Exchange of stock for non-controlling interest in Ilios	\$ _	\$ 330,852
Issuance of stock to acquire American DG Energy	\$ 18,745,007	\$ 
Issuance of Tecogen stock options in exchange for American DG Energy options	\$ 114,896	\$ 

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

## Note 1. Description of Business and Basis of Presentation

## Description of business

Tecogen Inc., or the Company, we, our or us produces commercial and industrial, natural-gas-fueled engine-driven, combined heat and power (CHP) products that reduce energy costs, decrease greenhouse gas emissions and alleviate congestion on the national power grid. The Company's products supply electric power or mechanical power for cooling, while heat from the engine is recovered and purposefully used at a facility. The Company also installs, owns, operates and maintains complete energy systems and other complementary systems at customer sites and sells electricity, hot water, heat and cooling energy under long-term contracts at prices guaranteed to the customer to be below conventional utility rates.

The majority of the Company's customers are located in regions with the highest utility rates, typically California, the Midwest and the Northeast. The Company's common stock is listed on NASDAQ under the ticker symbol TGEN.

On May 18, 2017, the Company acquired 100% of the outstanding common stock of American DG Energy Inc., formerly a related entity, in a stock-for-stock merger (see Note 3. "Acquisition of American DG Energy Inc.").

## Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles for interim financial information and with the instructions to Form 10-Q and Article 8 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. In the opinion of management, all adjustments considered necessary for a fair presentation have been included. Operating results for the nine months ended September 30, 2017 are not necessarily indicative of the results that may be expected for the year ending December 31, 2017.

The condensed consolidated balance sheet at December 31, 2016 has been derived from the audited consolidated financial statements at that date but does not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements.

For further information, refer to the consolidated financial statements and footnotes thereto included in Tecogen Inc.'s Annual Report on Form 10-K and American DG Energy Inc.'s Annual Report on Form 10-K for the year ended December 31, 2016.

There have been no significant changes in accounting principles, practices or methods for making estimates.

The accompanying unaudited condensed consolidated financial statements include the accounts of the Company and entities in which it has a controlling financial interest. Those entities include the Company's wholly-owned subsidiaries American DG Energy Inc. and Ilios Inc. and a joint venture, American DG New York, LLC, in which American DG Energy Inc. holds a 51.0% interest. Investments in partnerships and companies in which the Company does not have a controlling financial interest but where we have significant influence are accounted for under the equity method. Any intercompany transactions have been eliminated in consolidation.

The Company's operations are comprised of two business segments. Our Products and Services segment designs, manufactures and sells industrial and commercial cogeneration systems as described above. Our Energy Production segment sells energy in the form of electricity, heat, hot water and cooling to our customers under long-term sales agreements.

#### Reclassification

Certain prior period amounts have been reclassified to conform with current year presentation.

#### Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

## Income Taxes

The provisions for income taxes in the accompanying unaudited consolidated statements of operations differ from that which would be expected by applying the federal statutory tax rate primarily due to losses for which no benefit is recognized.

## Significant New Accounting Standards or Updates Not Yet Effective

<u>Revenue Recognition</u> In May 2014, the Financial Accounting Standards Board ("FASB") issued an accounting standard update related to revenue from contracts with customers, which, along with amendments issued in 2015 and 2016, will supersede

nearly all current U.S. GAAP guidance on this topic and eliminate industry-specific guidance. The underlying principle is to recognize revenue when promised goods or services are transferred to customers in an amount that reflects the consideration that is expected to be received for those goods or services. This accounting standard update, as amended, will be effective for the Company beginning in the first quarter of fiscal 2018. The new revenue standard may be applied retrospectively to each prior period presented or retrospectively with the cumulative effect recognized in retained earnings as of the date of adoption ("modified retrospective basis"). The Company expects to adopt this accounting standard update on a modified retrospective basis in the first quarter of fiscal 2018, and has engaged an outside expert to assist with the evaluation of the impact of this accounting standard update on its consolidated financial statements and its implementation.

<u>Leases</u> In February 2016, the FASB issued an accounting standard update related to leases requiring lessees to recognize operating and financing lease liabilities on the balance sheet, as well as corresponding right-of-use assets. The new lease standard also makes some changes to lessor accounting and aligns key aspects of the lessor accounting model with the revenue recognition standard. In addition, disclosures will be required to enable users of financial statements to assess the amount, timing, and uncertainty of cash flows arising from leases. The accounting standard update will be effective for the Company beginning in the first quarter of fiscal 2019 on a modified retrospective basis, and early adoption is permitted. The Company is currently evaluating the impact of this accounting standard update on its consolidated financial statements.

### Note 2. Income (Loss) Per Common Share

Basic and diluted income (loss) per share for the three and nine months ended September 30, 2017 and 2016, respectively, were as follows:

	Т	Three months ended September 30,			1	Nine months en 30	d September	
		2017		2016		2017		2016
Net income (loss) attributable to stockholders	\$	27,211	\$	207,868	\$	(221,544)	\$	(1,100,839)
Weighted average shares outstanding - Basic		24,720,613		19,640,812		22,643,406		19,071,497
Basic income (loss) per share	\$	0.00	\$	0.01	\$	(0.01)	\$	(0.06)
Weighted average shares outstanding - Diluted		24,930,624		20,229,120		22,643,406		19,071,497
Diluted income (loss) per share		\$0.00		\$0.01	\$	(0.01)	\$	(0.06)
Anti-dilutive shares underlying stock options outstanding						235,736		1,130,158
Anti-dilutive convertible debentures						889,830		889,830
Anti-dilutive warrants outstanding						250,000		250,000

## Note 3. Acquisition of American DG Energy Inc.

On May 18, 2017, we completed our acquisition, by means of a stock-for-stock merger, of 100% of the outstanding common shares of American DG Energy Inc. ("American DG Energy" or "ADGE"), a company which installs, owns, operates and maintains complete distributed generation of electricity systems, or DG systems or energy systems, and other complementary systems at customer sites and sells electricity, hot water, heat and cooling energy under long-term contracts at prices guaranteed to the customer to be below conventional utility rates, by means of a merger of one of our wholly owned subsidiaries with and into ADGE such that ADGE became a wholly owned subsidiary of Tecogen. We acquired ADGE to, among other reasons, expand our product offerings and benefit directly from the long-term contracted revenue streams generated by these installations. We gained control of ADGE on May 18, 2017 by issuing common stock to the prior stockholders of ADGE.

We have included the financial results of ADGE in our condensed consolidated financial statements from the date of acquisition. For the three and nine months ended September 30, 2017, ADGE contributed \$1,556,115 and \$2,330,307 to our total revenues and \$832,917 and \$1,276,566 to our gross profit, respectively.

Acquisition related costs included in general and administrative expenses totaled \$37,445 and \$374,042, respectively for the three and nine months ended September 30, 2017. Stock issuance related costs totaling \$367,101 were netted against additional paid in capital during the nine months ended September 30, 2017.

The merger is intended to qualify for federal income tax purposes as a tax-free reorganization under the provisions of Section 368(a) of the Internal Revenue Code of 1986. Subject to the terms and conditions of the merger agreement, at the

closing of the merger, each outstanding share of ADGE common stock was converted into the right to receive approximately 0.092 shares of common stock of Tecogen (the "Exchange Ratio").

Also in connection with the merger, Tecogen, at the effective time of the merger, assumed the (a) outstanding stock options of ADGE and (b) outstanding warrants to purchase common stock of ADGE, each as adjusted pursuant to the Exchange Ratio and subject to the terms of the merger agreement.

The fair value of the 4,662,937 shares of common stock issued as part of the consideration for the acquisition was determined based on the closing market price of Tecogen's stock on the date of acquisition. Additionally, as there is no required service condition in the assumed equity-based awards, 100% of the estimated fair value of the replacement equity-based awards at the date of the merger is considered attributable to pre-combination service and accordingly is included in the consideration.

The following table summarizes the consideration paid for ADGE and the amounts of the assets acquired and liabilities assumed recognized at the acquisition date, as well as the fair value at the acquisition date of the noncontrolling interest in American DG New York, LLC, a consolidated subsidiary of ADGE.

Consideration	
Tecogen common stock - 4,662,937 shares	\$ 18,745,007
Assumed fully vested equity awards	114,896
	\$ 18,859,903
Recognized amounts of identifiable assets acquired and liabilities assumed	
Financial assets	\$ 1,551,590
Inventory	108,333
Prepaid and other current assets	358,628
Property, plant and equipment	15,430,250
Investment securities	519,568
Identifiable intangibles assets	1,456,166
Financial liabilities	(1,857,859)
Unfavorable contract liability	(10,838,571)
Other liabilities	(939)
Total identifiable net assets	 6,727,166
Noncontrolling interest in American DG New York, LLC	(469,672)
Excess of cost over fair value of net assets acquired	12,602,409
	\$ 18,859,903

Amounts recognized in respect of inventory, property, plant and equipment, identifiable intangible assets, unfavorable contract liability and noncontrolling interest are provisional, pending completion of the necessary valuations and analysis.

Excess of cost over fair value of net assets acquired of \$12.6 million arising from the acquisition is primarily attributable to the going concern element of ADGE's business, including its assembled workforce and the long-term contractual nature of its business, as well as expected cost synergies from the merger related primarily to the elimination of administrative overhead and duplicative personnel. None of the excess purchase price over net assets acquired recognized is expected to be deductible for income tax purposes.

Identified intangible assets and the unfavorable contract liability, both of which relate to existing customer contracts, and the estimated amortization are more fully described in Note 5, "Intangible Assets and Liabilities Other Than Goodwill and Excess of Cost Over Fair Value of Net Assets Acquired".

The fair value of the noncontrolling interest in American DG New York, LLC, a consolidated subsidiary of ADGE, was estimated using the income approach. This fair value measurement is based on significant inputs that are not observable in the market and thus represents a fair value measurement categorized within level 3 of the fair value hierarchy described in ASC Section 820-10-35. Key assumptions include a discount rate of 5.61% and the run out of existing contracts at current levels of profitability.

## **Unaudited Pro Forma Financial Information**

The unaudited pro forma financial information in the table below summarizes the combined results of operations for Tecogen and ADGE as though the companies were combined as of the beginning of fiscal 2016. The pro forma financial information for all periods presented also includes the business combination accounting effects resulting from the acquisition including amortization charges and credits from acquired intangible assets and liabilities (certain of which are preliminary), and depreciation adjustments related to fair value as though the aforementioned companies were combined as of the beginning of fiscal 2016. The pro forma financial information as presented below is for informational purposes only and is not indicative of the results of operations that would have been achieved if the acquisition had taken place at the beginning of fiscal 2016.

	Nine months ended September 30,					
	2017					
Total revenues	\$	25,030,586	\$	21,240,102		
Net income (loss)		(998,323)		(2,236,396)		
Basic earnings (loss) per share		(0.04)		(0.09)		
Diluted earnings (loss) per share		(0.04)		(0.09)		

One-time acquisition-related expenses related to the merger incurred during the three-month and nine-month periods ended September 30, 2017 are not included in the unaudited pro forma financial information as they are not expected to have a continuing impact on the consolidated results.

The unaudited pro forma financial information does not include the revenues or results of operations of a subsidiary previously owned and consolidated by American DG Energy as that subsidiary was disposed of in 2016 prior to the acquisition by Tecogen and was considered to be a discontinued operation by American DG Energy. Additionally, the unaudited pro forma financial information does not include a gain recognized on deconsolidation of that same subsidiary by American DG Energy and an amount of interest cost related to American DG Energy's long-term debt which was extinguished contemporaneously with the disposition of the subsidiary.

## Note 4. Property, Plant and Equipment

Property, plant and equipment at September 30, 2017 and December 31, 2016 consisted of the following:

	Estimated Useful Life (in Years)			December 31, 2016
Energy systems	1 - 15 years	\$	12,823,745	\$ —
Machinery and equipment	5 - 7 years		1,127,264	1,009,893
Furniture and fixtures	5 years		103,971	141,874
Computer software	3 - 5 years		196,417	102,415
Leasehold improvements	*		440,519	437,341
			14,691,916	1,691,523
Less - accumulated depreciation and amortization			(2,017,401)	(1,174,380)
			12,674,515	517,143
Construction in progress			2,828,459	
		\$	15,502,974	\$ 517,143

\* Lesser of estimated useful life of asset or lease term

Depreciation and amortization expense on property and equipment for the three and nine months ended September 30, 2017 and 2016 was \$425,911 and \$751,960, and \$42,084 and \$125,255, respectively.

## Note 5. Intangible Assets and Liabilities Other Than Goodwill and Excess of Cost Over Fair Value of Net Assets Acquired

As of September 30, 2017 and December 31, 2016 the Company had the following amounts related to intangible assets and liabilities other than goodwill and excess of cost over fair value of net assets acquired:

		September 30, 2017					December 31, 2016						
	_	Accumulated					Accumulated						
Intangible assets		Cost	Amortization			Total		Cost		mortization		Total	
Product certifications	\$	602,202	\$	(272,503)	\$	329,699	\$	544,651	\$	(233,992)	\$	310,659	
Patents		656,105		(146,983)		509,122		681,155		(123,012)		558,143	
Developed technology		240,000		(72,000)		168,000		240,000		(60,000)		180,000	
Trademarks		19,215		—		19,215		17,165		_		17,165	
Favorable contract asset		1,456,166		(52,024)		1,404,142		_		_		—	
	\$	2,973,688	\$	(543,510)	\$	2,430,178	\$	1,482,971	\$	(417,004)	\$	1,065,967	
Intangible liability													
Unfavorable contract liability	\$	10,838,571	\$	(480,288)	\$	10,358,283	\$	_	\$		\$	_	

The aggregate amortization expense related to intangible assets and liabilities exclusive of contract related intangibles for the nine months ended September 30, 2017 and 2016 was \$74,482 and \$73,511, respectively. The net credit to cost of sales related to the amortization of contract related intangible assets and liabilities for the nine months ended September 30, 2017 and 2016 was \$428,264 and \$-0-, respectively.

## Contract Assets and Liabilities

The favorable contract asset and unfavorable contract liability in the foregoing table represent the estimated fair value of American DG Energy's customer contracts (both positive for favorable contracts and negative for unfavorable contracts) which were acquired by the Company on May 18, 2017 (see Note 3. "Acquisition of American DG Energy Inc."). These contracts are long-term and provide customers with an alternative source of electrical power in addition to that provided by the local power utility, at rates that are lower than local utilities. This alternative electrical power is typically produced by ADGE owned, operated and maintained natural gas powered systems installed at the customers' sites, with ADGE bearing all costs of operation and maintenance. In addition to the alternative source of electrical power provided by ADGE's systems, customers can opt to add and take advantage of the heat generated in the electrical production process in the form of hot water and/or space heating. Pricing to the customer for electrical power produced and supplied by ADGE under the contracts is under a fixed formula which requires the customer to pay for the kilowatts of electrical power provided at a fixed percentage discount to the local utility's electric rate for that period. As a result, as utility rates for electrical power change, the amount ADGE is able to charge the customer under the contract also changes. There has been a sharp decrease in electric rates over the past several years, subsequent to the vast majority of customer contract dates, causing the billable value of the electrical power generated by ADGE's systems to decrease, resulting in a deterioration of expected profitability. As of the date of acquisition, utility electric rates were significantly below the level anticipated at the time the fixed percentage discounts contained in the vast majority of ADGE's customer contracts were contracted for, thus these contract terms, although they produce cash flow, were considered to be off market in the vast majority of ADGE's customer contracts. Additionally, the demand and volume of kilowatts produced and billed for vary by contract and by period and in certain instances have been significantly below what was originally expected such that had it been known at the time the contract(s) were negotiated, it would have influenced ADGE's determination of the level of the fixed percentage discount in those contracts.

The determination of fair value requires development of an estimate of the price at which an orderly transaction to sell the asset or to transfer the liability would take place between market participants at the measurement date under current market conditions. Contracts are considered to be assets or liabilities by virtue of the rights and obligations inherent in the contract terms. Typically, contracts with terms considered to be at market are considered to have no fair value as in order to be entitled to the rights under the contract performance must occur for which a market rate of return is earned due to the at market terms. The fair value of a contract is primarily a measurement of its off market terms. The obligation to perform under a contract with terms that are unfavorable to market results in a liability to the extent its terms are off market. The resulting liability is an estimate of the price that would need to be paid to a willing market participant to assume the obligations under the contract in order for them to receive a market rate of return for their remaining performance obligation under the contract. The exact

opposite holds true in instances where the terms of a contract are considered to be favorable to market. In that case an asset would exist as an estimate of the price that would be received from a willing market participant in order to be entitled to the rights under the contract.

In determining the estimate of fair value of ADGE's customer contracts, the measure of at market, and thus the baseline to measure the amount related to any of the off market terms or conditions with respect to the contracts, was considered best determined, given the nature of the services provided under the contracts, by utilizing a benchmark level of margin, in this case 35% of revenue which is consistent with the average return on revenue of US investor owned public utilities. It is believed that a market participant would have utilized a similar margin in arriving at a buy price for the contract(s).

Amortization of intangibles including contract related amounts is calculated using the straight line method over the remaining useful life or contract term. Aggregate future amortization over the next five years is estimated to be as follows:

Year 1	\$ (993,749)
Year 2	(911,514)
Year 3	(847,307)
Year 4	(858,084)
Year 5	(840,273)

## Note 6. Goodwill and Excess of Cost Over Fair Value of Net Assets Acquired

Changes in the carrying amount of goodwill and excess of cost over fair value of net assets acquired were as follows:

			Excess of cost over fair			
			value of net assets			
	C	loodwill		acquired		
Balance at December 31, 2016	\$	40,870	\$	—		
Acquisitions				12,602,409		
Balance at September 30, 2017	\$	40,870	\$	12,602,409		

Excess of cost over fair value of net assets acquired at September 30, 2017 has not as of yet been allocated to the respective segments pending completion of the necessary analysis.

## Note 7. Stock-Based Compensation

#### Stock-Based Compensation

The Company adopted the 2006 Stock Option and Incentive Plan, or the Plan, under which the Board of Directors may grant incentive or non-qualified stock options and stock grants to key employees, directors, advisors and consultants of the Company. The Plan was amended at various dates by the Board of Directors to increase the reserved shares of common stock issuable under the Plan to 3,838,750 as of September 30, 2017, or the Amended Plan.

Stock options vest based upon the terms within the individual option grants, with an acceleration of the unvested portion of such options upon a change in control event, as defined in the Amended Plan. The options are not transferable except by will or domestic relations order. The option price per share under the Amended Plan cannot be less than the fair market value of the underlying shares on the date of the grant. The number of shares remaining available for future issuance under the Amended Plan as of September 30, 2017 was 2,250,536.

Common Stock Options	Number of Options	Exercise Price Per Share	Weighted Average Exercise Price		Average		Aggregate Intrinsic Value
Outstanding, December 31, 2016	1,117,918	\$0.79-\$5.39	\$	3.10	5.00 years	\$	1,415,150
Granted	45,000	\$3.22-\$3.72		3.35			
Assumed in merger	156,124	\$3.15-\$30.33 —	-	10.35			
Exercised	(79,543)	\$0.79-\$2.00		1.62			
Canceled and forfeited	(106,112)	\$2.60-\$30.33		9.67			
Outstanding, September 30, 2017	1,133,387	\$0.79-\$25.11	\$	3.62	5.25 years	\$	484,535
Exercisable, September 30, 2017	883,631		\$	3.42		\$	201,957
Vested and expected to vest, September 30, 2017	1,095,925		\$	3.59		\$	605,063

Stock option activity for the nine months ended September 30, 2017 was as follows:

Consolidated stock-based compensation expense for the nine months ended September 30, 2017 and 2016 was \$138,329 and \$117,065, respectively. No tax benefit was recognized related to the stock-based compensation recorded during the periods.

## Note 8. Fair Value Measurements

The fair value topic of the FASB Accounting Standards Codification defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The accounting guidance also establishes a fair value hierarchy which requires an entity to maximize the use of observable inputs, where available, and minimize the use of unobservable inputs when measuring fair value. There are three levels of inputs that may be used to measure fair value:

Level 1 - Unadjusted quoted prices in active markets for identical assets or liabilities. The Company currently does not have any Level 1 financial assets or liabilities.

*Level 2* - Observable inputs other than quoted prices included in Level 1. Level 2 inputs include quoted prices for identical assets or liabilities in non-active markets, quoted prices for similar assets or liabilities in active markets and inputs other than quoted prices that are observable for substantially the full term of the asset or liability.

Level 3 - Unobservable inputs reflecting management's own assumptions about the input used in pricing the asset or liability.

The following table presents the asset reported in the consolidated balance sheet measured at its fair value on a recurring basis as of September 30, 2017 by level within the fair value hierarchy.

<u>September 30, 2017</u>		Quoted prices in active markets for identical assets	Significant other observable inputs	Significant unobservable inputs		
	Total	Level 1	Level 2	Level 3	]	Fotal gains (losses)
Recurring fair value measurements						
Available-for-sale equity securities						
EuroSite Power Inc.	\$ 334,570	\$	\$ —	\$ 334,570	\$	(184,998)
Total recurring fair value measurements	\$ 334,570	\$ —	\$ —	\$ 334,570	\$	(184,998)

The Company utilizes a Level 3 category fair value measurement to value its investment in EuroSite Power as an available-forsale security at period end. That measurement is determined by management based on the lowest closing sales price in a 15 day trading period prior to period end.

The following table summarizes changes in level 3 assets which are comprised of available-for-sale securities for the period:

Fair value at acquisition on May 18, 2017	\$ 519,568
Unrealized loss recognized in other comprehensive loss	 (184,998)
Fair value at September 30, 2017	\$ 334,570

#### Note 9. Commitments and Contingencies

The Company guarantees certain obligations of a former subsidiary of American DG Energy, EuroSite Power Inc. These guarantees include a payment performance guarantee in respect of collateralized equipment financing loans, with a remaining principal amount outstanding subject to the guarantee at September 30, 2017 of approximately \$301,000 due ratably in equal installments through September 2021, and certain guarantees of performance in respect of certain customer contracts. Based on current conditions, the Company does not believe there to be any amounts probable of payment by the Company under any of the guarantees and has estimated the value associated with the non-contingent aspect of the guarantees is approximately \$10,000 which is recorded as liability in the accompanying financial statements.

### Legal Proceedings

Tecogen is not currently a party to any material litigation arising from its operations, and it is not aware of any pending or threatened litigation against it relating to its operations that could have a material adverse effect on its business, operating results or financial condition. However, it is or has been a party to a claim in the Superior Court of the Commonwealth of Massachusetts and named as a defendant in a case in the United States District Court for the District of Massachusetts, described below, related to the Merger.

## Massachusetts Superior Court Action

On or about February 6, 2017, ADGE, John Hatsopoulos, George N. Hatsopoulos, Charles T. Maxwell, Deanna M. Petersen, Christine Klaskin, John Rowe, Joan Giacinti, Elias Samaras, Tecogen, and Merger Sub were served with a Verified Complaint by William C. May ("May"), individually and on behalf of the other shareholders of ADGE as a class. The action was commenced in the Business Litigation Session of the Superior Court of the Commonwealth of Massachusetts, Civil Action No. 17-0390. The complaint alleged class action claims arising out of the proposed Merger. On May 31, 2017, May voluntarily dismissed the action and consolidated his claims with the pending federal action in the United States District Court for the District of Massachusetts. If the complaint in the federal court is dismissed, it is possible that May or another plaintiff will recommence an action in state court with similar claims to those asserted by May.

## United States District Court Action

On or about February 15, 2017, a lawsuit was filed in the United States District Court for the District of Massachusetts by Lee Vardakas ("Vardakas"), individually and on behalf of other stockholders of ADGE, naming ADGE, John N. Hatsopoulos, George N. Hatsopoulos, Benjamin Locke, Charles T. Maxwell, Deanne M. Petersen, Christine M. Klaskin, John Rowe, Joan Giacinti, Elias Samaras, Tecogen., Merger Sub., and Cassel Salpeter and Co., LLC, as defendants. The action is captioned *Vardakas v. American DG Energy, Inc.*, Case No. 17-CV-10247(LTS). At the time Vardakas commenced the action, his complaint challenged the proposed Merger between Tecogen and ADGE.

## On May 18, 2017, ADGE's and Tecogen's shareholders approved the Merger.

Following the consummation of the Merger (and the appointment of May, from the Massachusetts Superior Court Action, as lead plaintiff), Vardakas filed an Amended Class Action Complaint (the "Amended Complaint"). The Amended Complaint discontinued the claims against Cassel Salpeter & Co., LLC but asserted against the remaining defendants claims under Section 14(a) of the Securities Exchange Act of 1934 (the "Exchange Act") and SEC Rule 14a-9; claims against certain defendants for control person liability under § 20(a) of the Exchange Act (collectively, the "Federal Securities Law Claims"); and common law claims for breach of fiduciary duty and aiding and abetting (the "State Law Claims"). The Federal Securities Law Claims allege, in substance, that defendants made material nondisclosure in the proxy statement about the process leading to the Merger and about the fairness opinion relied upon by ADGE's Board of Directors in recommending the Merger to shareholders. The State Law Claims assert, in substance, that defendants breached their fiduciary duties in negotiating and approving the Merger, which, plaintiff claims, deprived ADGE's nonaffiliated shareholders of fair value for their shares.

On July 19, 2017, defendants moved to dismiss the Amended Complaint. In their motion papers, defendants contend that the Federal Securities Law Claims are not sufficiently pleaded and fail to state a viable claim. Defendants also assert that

if the Federal Securities Law Claims are dismissed, the district court must also dismiss the State Law Claims because it would lack subject matter jurisdiction. The parties are awaiting a decision from the court.

The Company believes that the lawsuit is without merit and intends to defend vigorously. The Amended Complaint does not specify the amount of damages claimed and the likelihood of an unfavorable outcome is not reasonably estimable.

#### Note 10. Related Party Transactions

The Company has two affiliated companies, namely Ultra Emissions Technologies Ltd, and TTcogen LLC. These companies are related because either several of the major stockholders of those companies have a significant ownership position in the Company or they are joint ventures between Tecogen and other parties.

In January of 2017, prior to its acquisition of American DG Energy, the Company purchased a large quantity of used equipment from American DG Energy for approximately \$985,000. Tecogen plans to sell this equipment to specific customers in the coming quarters.

In connection with the acquisition of American DG Energy, the Company assumed a loan from John N. Hatsopoulos, the Company's Co-Chief Executive Officer and a Company Director. The loan is in the amount of \$850,000 and bears interest at 6%, payable quarterly, and matures and becomes due and payable on May 25, 2018.

#### Ultra Emissions Technologies Ltd.

On December 28, 2015, the Company entered into a joint venture agreement relating to the formation of a joint venture company (the "JV") organized to develop and commercialize Tecogen's patented technology ("Ultera® Technology") designed to reduce harmful emissions generated by engines using fossil fuels. The joint venture company, called Ultra Emissions Technologies Limited, was organized under the laws of the Island of Jersey, Channel Islands.

The Company received a 50% equity interest in the JV in exchange for a fully paid-up worldwide license to use Tecogen's Ultera emissions control technology in the field of mobile vehicles burning fossil fuels. The other half of the joint venture equity interests were purchased for \$3,000,000 by a small group of offshore investors. Warrants to purchase additional equity securities in the JV were granted to all parties pro rata. If the venture is not successful, all licensed intellectual property rights will revert to Tecogen.

On August 2, 2016, Tecogen exercised 2,000,000 warrants (the "Ultratek Warrants"), in the JV, at \$1.00 per share, for an aggregate amount of \$2 million. The funds used to exercise the Ultratek Warrants were acquired by the Company from the holders of certain Company warrants (the "Tecogen Warrant Holders"), when they partially exercised their Tecogen warrants (the "Tecogen Warrants"), in July of 2016. The Tecogen Warrant Holders exercised a total of 675,000 Tecogen Warrants with a \$4.00 exercise price, resulting in cash proceeds of \$2,700,000 to the Company, which the Company then used in part to invest in the JV. An additional \$8,500,000 was raised from other outside investors for a total equity investment in the JV to date of \$13,500,000. Due to this investment, Tecogen's ownership has decreased to 43%.

The JV is expected to have losses as it performs the necessary research and development with the Ultera technology. The Company accounts for its interest in the JV using the equity method. Income and losses will be recorded consistent with an agreement between the JV shareholders as to how income and losses will be allocated. These allocations are consistent with the allocation of cash distributions and liquidating distributions of the JV. The shareholder agreement calls for Tecogen's investment to be returned before any other shareholder if the venture does not achieve commercialization. As a result, as of September 30, 2017, Tecogen has not recorded any of the losses of the JV as the cumulative losses of the JV have not exceeded the other owners' investments to date. As of September 30, 2017, \$94,777 is due to Tecogen from Ultratek.

## TTcogen LLC

On May 19, 2016, the Company along with Tedom a.s., a corporation incorporated in the Czech Republic and a European combined heat and power product manufacture ("Tedom"), entered into a joint venture, where the Company will hold a 50% participating interest and the remaining 50% interest will be with Tedom. As part of the joint venture, the parties agreed to create a Delaware limited liability company, TTcogen LLC ("TTcogen"), to carry out the business of the venture. Tedom granted TTcogen the sole and exclusive right to market, sell, offer for sale, and distribute certain products as agreed to by the parties throughout the United States. The product offerings of the joint venture expand the current Tecogen product offerings to the MicroCHP of 35kW to large 4,000kW plants. Tecogen agreed to refer all appropriate sale leads to TTcogen regarding the products agreed to by the parties and Tecogen shall have the first right to repair and maintain the products sold by TTcogen.

The Company accounts for its interest in TTcogen's operations using equity method accounting. Any initial operating losses of TTcogen are to be borne and funded by Tedom. To the extent any such losses are borne and funded solely by Tedom, the

Company will not recognize any portion of such losses given the Company does not guarantee the obligations of the joint venture nor is it committed to provide funding to the joint venture. As of period ending September 30, 2017, \$391,618 is due to Tecogen from TTcogen.

On September 22, 2017, the Company provided written notice to Tedom and Tedom USA Inc., a Delaware subsidiary of Tedom ("Tedom USA") in exercise of its rights under the Join Venture Agreement dated May 19, 2016 ("JVA") and its corresponding LLC Operating Agreement ("LLC Operating Agreement"), of the immediate termination of the JVA and LLC Operating Agreement. This notice begins the dissolution process under the LLC Operating Agreement. The termination notice was the result of a material and incurable breach of certain provisions thereunder by Tedom and/or Tedom USA. The Company intends to work together with Tedom to come to an amicable decision to create a new path forward for TTcogen and the relationship between the Company and Tedom and/or facilitate an amicable wind up of TTcogen's affairs as provided for in the LLC Operating Agreement and in accordance with the terms therewith.

## Note 11. Segments

As of September 30, 2017, the Company was organized into two operating divisions through which senior management evaluates the Company's business. These divisions, as described in more detail in Note 1, are organized around the products and services provided to customers and represent the Company's reportable segments. Prior to the acquisition of ADGE (see Note 3. "Acquisition of American DG Energy Inc."), the Company's operations were comprised of a single segment. The following table presents information by reportable segment for the three months ended September 30, 2017 and 2016 and the nine months ended September 30, 2017 and 2016:

	]	Products and Services	Ene	rgy Production	Corporate, other and elimination (1)			Total
Three months ended September 30, 2017								
Revenue - external customers	\$	6,945,083	\$	1,556,115	\$		\$	8,501,198
Intersegment revenue		250,525				(250,525)		_
Total revenue		7,195,608		1,556,115		(250,525)		8,501,19
Gross profit		2,425,114		832,917		—		3,258,03
Identifiable assets		19,179,530		16,028,115		21,424,270	_	56,631,91
Three months ended September 30, 2016								
Revenue - external customers	\$	6,616,455	\$		\$	_	\$	6,616,45
Intersegment revenue								
Total revenue		6,616,455	_	_	_	—		6,616,45
Gross profit		2,774,818		_				2,774,81
Identifiable assets		15,112,139				8,078,531		23,190,670
Nine months ended September 30, 2017								
Revenue - external customers	\$	20,608,196	\$	2,330,307	\$	_	\$	22,938,50
Intersegment revenue		442,343		—		(442,343)		_
Total revenue		21,050,539		2,330,307		(442,343)		22,938,50
Gross profit		7,882,758		1,276,566				9,159,324
Identifiable assets		19,179,530		16,028,115		21,424,270		56,631,91
Nine months ended September 30, 2016								
Revenue - external customers	\$	17,379,278	\$	_	\$	_	\$	17,379,27
Intersegment revenue		_		_				
Total revenue		17,379,278						17,379,27
Gross profit		6,597,056		_				6,597,05
Identifiable assets		15,112,139				8,078,531		23,190,67

(1) Corporate, intersegment revenue, other and elimination includes various corporate assets. Excess of cost over fair value of net assets acquired at September 30, 2017 has not as of yet been allocated to the respective segments pending completion of the necessary analysis.

#### Note 12. Subsequent Events

By unanimous written consent on October 24, 2017, the shareholders of Tecogen Inc.'s (the "Company") joint venture, Ultra Emissions Technologies S.ar.L, ("Ultratek"), voted to dissolve Ultratek, thus terminating the joint venture agreement dated December 28, 2015 and the license agreement between the Company and Ultratek, dated December 28, 2015. This joint venture agreement and license agreement is described in its entirety on the Company's Form 8-K that was filed with the Securities and Exchange Commission on December 31, 2015.

Pursuant to the unanimous shareholder consent dissolving Ultratek, the Company will be receiving its full \$2,000,000 investment into Ultratek back upon the completion of the liquidation process. Further, upon termination of the license agreement all intellectual property immediately reverts back to the Company. The Company has also agreed to purchase all of the assets of Ultratek upon dissolution, including new intellectual property that Ultratek developed, for a total purchase price of \$400,000.

The Company has evaluated subsequent events through the date of this filing and determined that no additional subsequent events occurred that would require recognition in the consolidated financial statements or disclosure in the notes thereto.

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

Forward-looking statements are made throughout this Management's Discussion and Analysis of Financial Condition and Results of Operations. Any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. Without limiting the foregoing, the words "believes," "anticipates," "plans," "expects," "seeks," "estimates" and similar expressions are intended to identify forward-looking statements. Such forward-looking statements include, among other things, statements regarding our current and future cash requirements, our expectations regarding suppliers of cogeneration units, and statements regarding potential financing activities in the future. While the Company may elect to update forward-looking statements in the future, it specifically disclaims any obligation to do so, even if the Company's estimates change, and readers should not rely on those forward-looking statements as representing the Company's views as of any date subsequent to the date of the filing of this Quarterly Report. There are a number of important factors that could cause the actual results of the Company to differ materially from those indicated by such forward-looking statements, including those detailed under the heading "Risk Factors" in this Quarterly Report.

#### Overview

Tecogen Inc., or the Company, or Tecogen, designs, manufactures and sells industrial and commercial cogeneration systems that produce combinations of electricity, hot water and air conditioning using automotive engines that have been specially adapted to run on natural gas. In some cases, our customers may choose to have the Company engineer and install the system for them rather than simply purchase the cogeneration and/or chiller units, which we refer to as "turnkey" projects. Cogeneration systems are efficient because in addition to supplying mechanical energy to power electric generators or compressors – displacing utility supplied electricity – they provide opportunity for the facility to incorporate the engine's waste heat into onsite processes such as space and portable water heating. We produce standardized, modular, small-scale products, with a limited number of product configurations that are adaptable to multiple applications. We refer to these combined heat and power products as CHP (electricity plus heat) and MCHP (mechanical power plus heat).

With the acquisition of American DG Energy Inc., or American DG or ADGE, on May 18, 2017, we now also sell energy in the form of electricity, heat, hot water and cooling to our customers under long-term energy sales agreements (with a standard term of 10 to 15 years). Our typical sales model is to own and install energy systems in our customers' buildings and sell the energy produced by those systems back to the customers at a cost set by a negotiated formula in our customer contracts. Each month we obtain readings from our energy meters to determine the amount of energy produced for each customer. We use a contractually defined formula to multiply these readings by the appropriate published price of energy (electricity, natural gas or oil) from each customer's local energy utility, to derive the value of our monthly energy sale, which includes a negotiated discount. Our revenues per customer on a monthly basis vary based on the amount of energy produced by our energy systems and the published price of energy (electricity, natural gas or oil) from our customers' local energy utility that month. Our revenues commence as new energy systems become operational. As of September 30, 2017, we had 93 energy systems operational.

The Company's operations are comprised of two business segments. Our Products and Services segment ("Segment 1") designs, manufactures and sells industrial and commercial cogeneration systems as described above. Our Energy Production segment ("Segment 2") sells energy in the form of electricity, heat, hot water and cooling to our customers under long-term sales agreements.

In addition to being a smaller reporting company, Tecogen is an emerging growth company as that term is defined in the Jumpstart Our Business Startups Act of 2012 (JOBS Act).

#### **Results of Operations**

Third Quarter of 2017 Compared to Third Quarter of 2016

Revenues

Total revenues in the third quarter of 2017 were \$8,501,198 compared to \$6,616,455 for the same period in 2016, an increase of \$1,884,743 or 28.5%.

Segment 1 - Product and Services

Product revenues in the third quarter of 2017 were \$2,425,616 compared to \$2,850,901 for the same period in 2016, a decrease of \$425,285 or 14.9%. This decrease was the aggregate of a decrease in cogeneration sales of \$797,528 and an increase in chiller and heat pump sales of \$372,243. Service revenues in the third quarter of 2017 were \$4,519,467 compared to \$3,765,554 for the same period in 2016, an increase of \$753,913 or 20.0%. This increase in the third quarter is due to an increase in installation activity of \$757,554 and a decrease of \$3,641 in service contract revenues.

## Segment 2 - Energy Production

Energy production revenues in the third quarter of 2017 were \$1,556,115, which represents energy revenues earned for the entire quarter as American DG Energy was acquired during Q2 2017.

#### Cost of Sales

Cost of sales in the third quarter of 2017 was \$5,243,167 compared to \$3,841,637 for the same period in 2016, an increase of \$1,401,530, or 36.5%.

## Segment 1 - Product and Services

Cost of sales for product and services in the third quarter of 2017 was \$4,519,969 compared to \$3,841,637 for the same period in 2016, an increase of \$678,332 or 17.7%. During the third quarter our overall gross margin was 34.9% compared to 41.9% for the same period in 2016, a decrease of 16.7%. This decrease is due to a change in product mix.

## Segment 2 - Energy Production

Cost of sales for energy production in the third quarter of 2017 was \$723,198 which represents the cost associated with energy revenues earned during the quarter. During this period our gross margin for energy production was 53.5%.

### **Operating Expenses**

General and administrative expenses consist of executive staff, accounting and legal expenses, office space, general insurance and other administrative expenses. General and administrative expenses in the quarter ending September 30, 2017 were \$2,427,352 compared to \$2,003,838 for the same period in 2016, an increase of \$423,514 or 21.1%. The increase was due to increased costs from the addition of American DG Energy's operations.

Selling expenses consist of sales staff, commissions, marketing, travel and other selling related expenses. Selling expenses for the third quarter of 2017 were \$503,415 compared to \$367,412 for the same period in 2016, an increase of \$136,003 or 37.0%. This difference is due to a larger sales force and increased public relations and trade show costs.

Research and development expenses consist of engineering and technical staff, materials, outside consulting and other related expenses. Research and development expenses in the quarter ending September 30, 2017 were \$241,725 compared to \$154,075 for the same period in 2016, an increase of \$87,650 or 56.9%. This increase was due to the Company's cost sharing in connection with a research and development grant, which pertains to the potential commercialization of the Company's Ultera emissions technology for certain non-stationary applications.

#### Income from Operations

Income from operations for the third quarter of 2017 was \$85,539 compared to \$249,493 for the same period in 2016, a decrease of \$163,954. The decrease was a result of lower margins due to change in product mix. Income for the third quarter of 2017 included one-time merger related expenses of \$37,445 and depreciation and amortization expense on the energy producing sites of \$160,061.

## Other Income (Expense), net

Other expense, net for the three months ended September 30, 2017 was \$30,393 compared to \$41,625 for the same period in 2016. Other income (expense) includes interest and other income of \$14,849, and interest expense on notes payable of \$45,242 for the third quarter of 2017. For the same period in 2016, interest and other income was \$3,914 and interest expense was \$45,539.

## Noncontrolling Interest

The income attributable to the noncontrolling interest was \$27,935 for the three months ended September 30, 2017 which represents the noncontrolling interest portion of American DG Energy's 51% owned subsidiary, ADGNY, LLC.

## Net Income Attributable to Tecogen Inc.

Net income attributable to Tecogen for the three months ended September 30, 2017 was \$27,211 compared to \$207,868 for the same period in 2016, a decrease of \$180,657, year over year. The decrease was the result of a change in product mix.

## Other Comprehensive Income

The unrealized gain on securities of \$39,361 for the third quarter of 2017 represents a market fluctuation impacting the fair value of American DG Energy's remaining common stock ownership in its former partially owned subsidiary, EuroSite Power Inc. as of September 30, 2017.

## First Nine Months of 2017 Compared to First Nine Months of 2016

#### Revenues

Total revenues for the first nine months of 2017 were \$22,938,503 compared to \$17,379,278 for the same period in 2016, an increase of \$5,559,225 or 32.0%.

## Segment 1 - Product and Services

Product revenues in the first nine months of 2017 were \$8,349,159 compared to \$7,525,909 for the same period in 2016, an increase of \$823,250 or 10.9%. This increase was the net of an increase in cogeneration sales of \$648,863 and an increase in chiller and heat pump sales of \$174,387. Service revenues for the first nine months of 2017 were \$12,259,037 compared to \$9,853,369 for the same period in 2016, an increase of \$2,405,668 or 24.4%. This increase in the first nine months of 2017 is due to an increase in installation activity of \$2,095,758 and an increase of \$309,910 in service contract revenues.

## Segment 2 - Energy Production

Energy production revenues in the first nine months of 2017 were \$2,330,307, which represents energy revenues earned from May 19, 2017, the date after acquisition of American DG Energy through September 30, 2017.

## Cost of Sales

Cost of sales for the first nine months of 2017 was \$13,779,179 compared to \$10,782,222 for the same period in 2016, an increase of \$2,996,957, or 27.8%.

#### Segment 1 - Product and Services

Cost of sales for product and services in the first nine months of 2017 was \$12,725,438 compared to \$10,782,222 for the same period in 2016, an increase of \$1,943,216 or 18.0%. During the first nine months of 2017, our product and services gross margin was 38.3% compared to 38.0% for the same period in 2016, a 0.8% improvement. The increase in margin was a result of material cost savings in production and ongoing product development. Product gross margin for the first nine months of 2017 was 37.0% compared to 33.1% for the same period in 2016, a 11.8% improvement. Service gross margin for the first nine months of 2017 was 39.1% compared to 41.7%, a decrease of 6.2% due to normal fluctuations in cost.

### Segment 2 - Energy Production

Cost of sales for energy production in the first nine months of 2017 was \$1,053,741 which represents the cost associated with energy revenues earned from May 19, 2017, the date after acquisition of American DG Energy through September 30, 2017; this represents approximately 42% of the second quarter's revenue plus the entire third quarter's revenue for American DG Energy. During this period our gross margin for energy production was 54.8%; higher than expected, due to seasonality and a retroactive rate change which reduced fuel costs.

#### **Operating Expenses**

General and administrative expenses consist of executive staff, accounting and legal expenses, office space, general insurance and other administrative expenses. General and administrative expenses for the nine months ended September 30, 2017 were \$7,042,500 compared to \$5,898,230 for the same period in 2016, an increase of \$1,144,270 or 19.4%. The increase was mainly due to a combination of costs incurred in connection with the merger and related litigation as well as increased costs from the addition of American DG Energy's operations.

Selling expenses consist of sales staff, commissions, marketing, travel and other selling related expenses. Selling expenses for the nine months ended September 30, 2017 were \$1,558,378 compared to \$1,217,533 for the same period in 2016, an increase of \$340,845 or 28.0%. This difference is due to the mix of in-house sales versus representation commissions and increased public relations and trade show costs.

Research and development expenses consist of engineering and technical staff, materials, outside consulting and other related expenses. Research and development expenses for the nine months ended September 30, 2017 were \$641,064 compared to \$524,696 for the same period in 2016, an increase of \$116,368 or 22.2%. This increase was due to the Company's cost sharing in connection with a research and development grant in process.

#### Loss from Operations

Loss from operations for the nine months ended September 30, 2017 was \$82,618 compared to a loss of \$1,043,403 for the same period in 2016, an improvement of \$960,785. The improvement was due to increased product and services revenues, as well as the addition of our energy production revenue stream. The loss for the nine months ended September 30, 2017 included one-time merger related expenses of \$156,298 and depreciation and amortization expense of \$402,939.

#### Other Income (Expense), net

Other expense, net for the nine months ended September 30, 2017 was \$93,993 compared to \$122,398 for the same period in 2016. Other income (expense) includes interest and other income of \$21,033, and interest expense on notes payable of \$115,026 for the nine months ended September 30, 2017. For the same period in 2016, interest and other income was \$9,575 and interest expense was \$131,973.

#### Noncontrolling Interest

The income attributable to the noncontrolling interest was \$44,933 for the nine months ended September 30, 2017 which represents the noncontrolling interest portion of American DG Energy's 51% owned subsidiary, ADGNY, LLC. For the same period in 2016, the loss attributable to the noncontrolling interest was \$64,962 which was the result of Tecogen's ownership in its former partially owned subsidiary Ilios Inc.

#### Net Loss Attributable to Tecogen Inc.

Net loss attributable to Tecogen for the nine months ended September 30, 2017 was \$221,544 compared to a loss of \$1,100,839 for the same period in 2016, an improvement of \$879,295. The improvement was the result of the Company's merger with American DG Energy in addition to 10.9% growth in product revenue and 24.4% growth in services revenue.

## Other Comprehensive Loss

The unrealized loss on securities of \$184,998 for the nine months ended September 30, 2017 represents the market fluctuation impacting the fair value of American DG Energy's remaining common stock ownership in its former partially owned subsidiary, EuroSite Power Inc. as of September 30, 2017.

## Liquidity and Capital Resources

Consolidated working capital at September 30, 2017 was \$14,193,331 compared to \$14,436,452 at December 31, 2016, a decrease of \$243,121. Included in working capital were cash and cash equivalents of \$2,077,047 at September 30, 2017, compared to \$3,721,765 in cash and cash equivalents at December 31, 2016, a decrease of \$1,644,718. The decrease in working capital and cash was the result of longer collection periods and pre-buying for production.

Cash used in operating activities for the nine months ended September 30, 2017 was \$1,996,871 compared to \$2,914,863 for the same period in 2016. Our accounts receivable balance increased to \$11,094,287 at September 30, 2017 compared to \$8,630,418 at December 31, 2016, using \$1,908,655 of cash due to timing of billing, shipments, and collections. In addition, amounts due from related parties increased by \$236,971 using cash due to timing of billing and collections. Our inventory increased to \$6,118,835 as of September 30, 2017 compared to \$4,774,264 as of December 31, 2016, an increase of \$1,344,571. This increase is due to increased product sales as well as the purchase of used equipment from American DG. Although lowering inventory is a goal, management expects inventory to vary significantly based on production and customer delivery requirements.

As of September 30, 2017, the Company's backlog of product and installation projects, excluding service contracts, was \$14.5 million, consisting of \$11.5 million of purchase orders received by us and \$3.0 million of projects in which the customer's internal approval process is complete, financial resources have been allocated and the customer has made a firm verbal commitment that the order is in the process of execution. Backlog at the beginning of any period is not necessarily indicative of future performance. Our presentation of backlog may differ from other companies in our industry.

Accounts payable increased to \$5,356,449 as of September 30, 2017 from \$3,367,481 at December 31, 2016, including \$369,913 from the ADGE acquisition, providing \$1,641,206, in cash flow from operations. Accrued expenses increased to \$1,676,307 as of September 30, 2017, including \$531,617 from the ADGE acquisition, from \$1,378,258 as of December 31, 2016, providing \$233,824 of cash from operations. The Company expects accounts payable and accrued expenses to fluctuate with routine changes in operations.

During the first nine months of 2017, our investing activities provided \$223,235 of cash and included the acquisition of American DG Energy cash through merger of \$971,454, offset by purchases of property and equipment of \$315,205, expenditures related to intangible assets of \$34,551 and cash paid for certain expenses associated with the merger of \$367,101.

During the first nine months of 2017, our financing activities included \$128,918 in proceeds from the exercise of stock options.

#### **Significant Accounting Policies and Critical Estimates**

The Company's, and it's now wholly-owned subsidiary, American DG Energy Inc.'s significant accounting policies are discussed in the Notes to their respective Consolidated Financial Statements in their Annual Reports on Form 10-K. The accounting policies and estimates that can have a significant impact upon the operating results, financial position and footnote disclosures of the Company are described in the above notes and in the respective Annual Reports.

## Significant New Accounting Standards or Updates Not Yet Effective

See Note 1, Description of Business and Basis of Presentation, to the Condensed Consolidated Financial Statements included elsewhere in this Quarterly Report on Form 10-Q.

## Seasonality

We expect that the majority of our heating systems sales will be in the winter and the majority of our chilling systems sales will be in the summer. Unreasonable weather may therefore have an effect on our revenues throughout the year. Our cogeneration and chiller system sales are not generally affected by the seasons, although customer goals will be to have chillers installed and running in the spring. Our service team does experience higher demand in the warmer months when cooling is required. These units are generally shut down in the winter and started up again in the spring. This "busy season" for the service team generally runs from May through the end of September.

#### **Off-Balance Sheet Arrangements**

Currently, we do not have any material off-balance sheet arrangements, including any outstanding derivative financial instruments, off-balance sheet guarantees, interest rate swap transactions or foreign currency contracts. We do not engage in trading activities involving non-exchange traded contracts.

## Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Not applicable.

## Item 4. Controls and Procedures.

#### Management's Evaluation of Disclosure Controls and Procedures:

The Company maintains "disclosure controls and procedures," as such term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, that are designed to provide reasonable assurance that information required to be disclosed by the Company in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms, and that such information is accumulated and communicated to the Company's management, including our principal executive officers and principal financial and accounting officer, as appropriate, to allow timely decisions regarding required disclosure.

Our disclosure controls and procedures are designed to provide reasonable assurance that the control system's objectives will be met. Our management, including our Co-Chief Executive Officers and Chief Accounting Officer, after evaluating the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report, have concluded that our disclosure controls and procedures were not effective due to material weaknesses with respect to a small number of individuals dealing with general controls over information technology and inadequate controls over revenue recognition with respect to the Company's recently acquired subsidiary, American DG Energy Inc. Management will continue to evaluate the above weaknesses. The Company is taking certain steps to remediate the weaknesses as resources become available.

## Changes in Internal Control over Financial Reporting:

During the second and third quarters of 2017 and in connection with the acquisition of American DG Energy Inc. the Company augmented its capabilities with respect to application and implementation of generally accepted accounting principles as it relates to complex transactions and the related financial reporting requirements through modifications to financial management including a new Chief Accounting Officer. Such modifications also included securing timely access to and involvement of individuals with a high level of training and expertise with respect to complex accounting and financial reporting matters.

## **PART II - OTHER INFORMATION**

#### **Item 1. Legal Proceedings**

#### Massachusetts Superior Court Action

On or about February 6, 2017, ADGE, John Hatsopoulos, George N. Hatsopoulos, Charles T. Maxwell, Deanna M. Petersen, Christine Klaskin, John Rowe, Joan Giacinti, Elias Samaras, Tecogen, and Merger Sub were served with a Verified Complaint by William C. May ("May"), individually and on behalf of the other shareholders of ADGE as a class. The action was commenced in the Business Litigation Session of the Superior Court of the Commonwealth of Massachusetts, Civil Action No. 17-0390. The complaint alleged class action claims arising out of the proposed Merger, as described in Note 3. On May 31, 2017, May voluntarily dismissed the action and consolidated his claims with the pending federal action in the United States District Court for the District of Massachusetts. If the complaint in the federal court is dismissed, it is possible that May or another plaintiff will recommence an action in state court with similar claims to those asserted by May.

## United States District Court Action

On or about February 15, 2017, a lawsuit was filed in the United States District Court for the District of Massachusetts by Lee Vardakas ("Vardakas"), individually and on behalf of other stockholders of ADGE, naming ADGE, John N. Hatsopoulos, George N. Hatsopoulos, Benjamin Locke, Charles T. Maxwell, Deanne M. Petersen, Christine M. Klaskin, John Rowe, Joan Giacinti, Elias Samaras, Tecogen., Merger Sub., and Cassel Salpeter and Co., LLC, as defendants. The action is captioned Vardakas v. American DG Energy, Inc., Case No. 17-CV-10247(LTS). At the time Vardakas commenced the action, his complaint challenged the proposed Merger between Tecogen and ADGE.

On May 18, 2017, ADGE's and Tecogen's shareholders approved the Merger.

Following the consummation of the Merger (and the appointment of May, from the Massachusetts Superior Court Action, as lead plaintiff), Vardakas filed an Amended Class Action Complaint (the "Amended Complaint"). The Amended Complaint discontinued the claims against Cassel Salpeter & Co., LLC but asserted against the remaining defendants claims under Section 14(a) of the Securities Exchange Act of 1934 (the "Exchange Act") and SEC Rule 14a-9; claims against certain defendants for control person liability under § 20(a) of the Exchange Act (collectively, the "Federal Securities Law Claims"); and common law claims for breach of fiduciary duty and aiding and abetting (the "State Law Claims"). The Federal Securities Law Claims allege, in substance, that defendants made material nondisclosure in the proxy statement about the process leading to the Merger and about the fairness opinion relied upon by ADGE's Board of Directors in recommending the Merger to shareholders. The State Law Claims assert, in substance, that defendants breached their fiduciary duties in negotiating and approving the Merger, which, plaintiff claims, deprived ADGE's non-affiliated shareholders of fair value for their shares.

On July 19, 2017, defendants moved to dismiss the Amended Complaint. In their motion papers, defendants contend that the Federal Securities Law Claims are not sufficiently pleaded and fail to state a viable claim. Defendants also assert that if the Federal Securities Law Claims are dismissed, the district court must also dismiss the State Law Claims because it would lack subject matter jurisdiction. The parties are awaiting a decision from the court.

The Company believes that the lawsuit is without merit and intends to defend vigorously. The Amended Complaint does not specify the amount of damages claimed and the likelihood of an unfavorable outcome is not reasonably estimable.

Except as set forth above, as of the date of this filing the Company is currently not a party to any legal or administrative proceedings material to the Company's financial statements and is not aware of any pending or threatened legal or administrative proceeding that is material to the Company's financial statement.

#### Item 1A. Risk Factors

Our business, operations and the Company face many risks. In connection with the Company's acquisition of ADGE on May 18, 2017, there were changes to these risk. To reflect this change, the Company is amending its list of risk factors discussed in its Annual Report on Form 10-K for the fiscal year ended December 31, 2016 by adding the risk factors listed below. In addition to the risk factors and other information set forth in this report, you should carefully consider the factors discussed under "Risk Factors" in our Annual Report on Form 10-K for our fiscal year ended December 31, 2016. The risks described below may not be the only risks we face as a result of acquiring ADGE. Additional risks that we do not yet know of, or that we currently think are immaterial, may also impair our business operations or financial results. If any of the events or circumstances described in the following risks occur, our business, financial condition or results of operations could suffer and the trading price of our common stock could decline. Investors and prospective investors should consider the following risks and the information contained under the heading "Cautionary Note Concerning Forward-Looking Statements" before deciding whether to invest in our securities.

In addition to the risk factors and other information set forth in this report, you should carefully consider the factors discussed under "Risk Factors" in our Annual Report on Form 10-K for our fiscal year ended December 31, 2016. The risks discussed in our Annual Report on Form 10-K could materially affect our business, financial condition and future results. The risks described in our Annual Report on Form 10-K are not the only risks facing us. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially and adversely affect our business, financial condition or operating results.

# 1. Through ADGE, we may be exposed to substantial liability claims if we fail to fulfill our obligations to our customers or our on-site equipment malfunctions.

Through ADGE, we enter into contracts with large commercial and not-for-profit customers under which we assume responsibility for meeting a portion of the customers' building energy demand and equipment installation. We may be exposed

to substantial liability claims if we fail to fulfill our obligations to customers or if the equipment malfunctions. There can be no assurance that we will not be vulnerable to claims by customers and by third parties that are beyond any contractual protections that we are able to negotiate. As a result, liability claims could cause us significant financial harm.

### 2. Expiring ADGE customer contracts may lead to decreases in revenue and increases in expenses.

This decrease in energy revenue will be due to less energy billing. Expiring customer contracts can also lead to an increase in expenses because we will have to remove the equipment at the customer location. We will remove the equipment at our own expense and are obligated to do so at the end of the customer contract. Each year, a portion of our customers contracts expire and need to be renewed or replaced. We may not be able to renew or extend contracts with existing customers or obtain replacement contracts at attractive rates or for the same term as the expiring contracts.

## 3. ADGE revenue from energy billing is partly dependent on the weather and increased temperatures could reduce our revenue.

In warmer months the customers are not using as much thermal energy as they do not have as much of a demand to heat their locations. Due to the demand being lower in warmer months we may not be able to bill for thermal energy and in turn may have a decrease in revenue.

# 4. The reduction, elimination or expiration of government subsidies and economic incentives for applications of our equipment could reduce demand for our equipment and harm our business.

The market for cogeneration equipment depends in part on the availability and size of government and economic incentives that vary by geographic market. Because our customers' sales are typically into geographic areas with such incentives, elimination or expiration of government subsidies and economic incentives for cogeneration equipment may negatively affect the competitiveness of equipment relative to other sources of electricity, heating, and cooling equipment, and could harm or halt the growth of the cogeneration industry and our business. In particular, the Company depends on the New York State Energy Development Authority CHP Program (PON 2568) and the New Jersey Smart Start Combined Heat and Power Incentive.

These government incentives expire, phase out over time, terminate upon the exhaustion of the allocated funding, require renewal by the applicable authority or are being changed by governments due to changing market circumstances or changes to national, state or local energy policy.

Competing sources of electricity, heating, and cooling equipment may successfully lobby for changes in the relevant legislation in their markets that are harmful to the cogeneration industry. Reductions in, or eliminations or expirations of, governmental incentives in regions that we focus our sales efforts could result in decreased demand for and lower revenue from cogeneration equipment there, which would adversely affect the Company. In addition, our ability to successfully penetrate new geographic markets may depend on new geographic areas adopting and maintaining incentives to promote cogeneration, to the extent such incentives are not currently in place. Additionally, electric utility companies may establish pricing structures or interconnection requirements that could adversely affect our sales and be harmful to cogeneration.

# Item 6. Exhibits

Exhibit No.	Description of Exhibit
2.1	Agreement and Plan of Merger, dated November 1, 2016, among the Company, Tecogen, Inc. and Tecogen.ADGE
2.1	Acquisition Corp. <sup>(q)</sup>
2.2	Amendment 1 to the Agreement and Plan of Merger, dated as of March 23, 2017, by and among registrant,
2.2	American DG Energy Inc. and Tecogen. ADGE Acquisition Corp. <sup>(r)</sup>
3.1	Amended and Restated Certificate of Incorporation. <sup>(a)</sup>
3.2	Amended and Restated Bylaws. <sup>(a)</sup>
4.1	Specimen Stock Certificate of Tecogen, Inc. (a)
4.2	Form of Restricted Stock Purchase Agreement. <sup>(b)</sup>
4.3+	Form of Stock Option Agreement. <sup>(a)</sup>
4.5	Warrant to Subscribe for Shares between Ultra Emissions Technology, Ltd and registrant. <sup>(m)</sup>
4.6	Tecogen Ultratek Warrant signed August 2, 2016.0
10.1	Form of Line of Credit Agreement Between American DG Energy and Mr. John Hatsopoulos, dated December 22, 2016. <sup>(p)</sup>
10.8	Second Amendment to Lease between Atlantic-Waltham Investment II, LLC dated Jan 16, 2013.(a)
10.21	Senior Convertible Promissory Note, dated December 23, 2013, by Tecogen Inc. in favor of Michaelson Capital Special Finance Fund LP. <sup>(a)</sup>
10.26	Tecogen 2006 Stock Incentive Plan, as amended on January 24, 2014 with stockholder approval on July 15, 2014. <sup>(e)</sup>
10.27	Non-Revolving Line of Credit Agreement between the Company and John N. Hatsopoulos, dated June 15, 2015. <sup>(e)</sup>
10.31	Joint Venture Shareholder Agreement between Tecogen Inc. and Ultra Emissions Technology Limited, dated December 28, 2015. <sup>(n)</sup>
10.32	License Agreement between Tecogen Inc. and Ultra Emissions Technology Limited, dated December 28, 2015. (n)
10.33	Form of Subscription Agreement between Tecogen and the several investors purchasing shares of Tecogen Common Stock and Warrants, dated December 28, 2015. <sup>(n)</sup>
10.34	Form of Warrants issued pursuant to the Subscription Agreement described in Exhibit 10.33 hereto. <sup>(n)</sup>
10.35	Form of Share Exchange Agreement between Tecogen and certain shareholders of Ilios Inc., dated April 11, 2016 and April 13, 2016. <sup>(o)</sup>
10.36	Amendment No. 1 to the Senior Convertible Promissory Note effective April 1, 2016. <sup>(g)</sup>
10.37	Tedom Joint Venture Agreement dated May 19, 2016. <sup>(h)</sup>
10.38	Tedom Joint Venture LLC Agreement dated May 19, 2016. (h)
10.39	Form of a Warrant Amendment dated June 27, 2016. <sup>(i)</sup>
10.40 +	Employment Agreement dated December 1, 2016 between registrant and David A. Garrison. (1)
31.1*	Rule 13a-14(a) Certification of Co-Chief Executive Officer
31.2*	Rule 13a-14(a) Certification of Co-Chief Executive Officer
31.3*	Rule 13a-14(a) Certification of Chief Accounting Officer
32.1*	Section 1350 Certifications of Co-Chief Executive Officers and Chief Accounting Officer
101.INS**	XBRL Instance Document
101.SCH**	XBRL Taxonomy Extension Schema
100.CAL**	XBRL Taxonomy Extension Calculation Linkbase
100.DEF**	XBRL Taxonomy Extension Definition Linkbase
101.LAB**	XBRL Taxonomy Extension Label Linkbase
101.PRE**	XBRL Taxonomy Extension Presentation Linkbase
*	Filed herewith
**	

\*\* Furnished herewith

+ Compensatory plan or

arrangement

(a) incorporated by reference from the Company's Registration Statement on Form S-1/A (Registration No. 333-193791), filed with the SEC on June 27, 2014.



- (b) incorporated by reference from the Company's Registration Statement on Form S-1 (Registration No. 333-178697), originally filed with the SEC on December 22, 2011.
- (c) incorporated by reference from the Company's 10-Q Report for the period ending June 30, 2014, originally filed with the SEC on August 14, 2014.
- <sup>(d)</sup> incorporated by reference from the Company's form 8-K Report originally filed with the SEC on August 6, 2015.
- (e) incorporated by reference from the Company's 10-Q Report for the period ending June 30, 2015, originally filed with the SEC on August 6, 2015.
- <sup>(f)</sup> incorporated by reference from the Company's form 8-K Report originally filed with the SEC on August 13, 2015.
- (g) incorporated by reference from the Company's form 8-K Reports originally filed with the SEC on April 15, 2015.
- (h) incorporated by reference from the Company's form 8-K Reports originally filed with the SEC on May 24, 2016.
- (i) incorporated by reference from the Company's form 8-K Reports originally filed with the SEC on June 30, 2016.
- <sup>(1)</sup> incorporated by reference from the Company's form 8-K Reports originally filed with the SEC on August 8, 2016.
- (k) incorporated by reference from the Company's Registration Statement on Form S-4 (Registration No. 333-215231), as amended, originally filed with the SEC on December 21, 2016.
- <sup>(1)</sup> incorporated by reference from the Company's form 8-K Reports originally filed with the SEC on December 2, 2016.
- <sup>(m)</sup> Incorporated by reference to the registrant's Annual Report on Form 10-K, as filed with the SEC on March 29, 2016.
- <sup>(n)</sup> Incorporated by reference from the Company's form 8-K Reports originally filed with the SEC on December 31, 2015.
- <sup>(0)</sup> Incorporated by reference from the Company's form 8-K Reports originally filed with the SEC on April 15, 2016.
- <sup>(p)</sup> Incorporated by reference from American DG Energy's form 8-K Reports originally filed with the SEC on December 28, 2016.
- (q) incorporated by reference from the Company's form 8-K Reports originally filed with the SEC on November 2, 2016.
- (r) incorporated by reference from the Company's form 8-K Reports originally filed with the SEC on March 24, 2017.

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, on November 9, 2017.

TECOGEN INC. (Registrant)

By: /s/ John N. Hatsopoulos

Co-Chief Executive Officer (Principal Executive Officer)

By: /s/ Benjamin M. Locke Co-Chief Executive Officer (Principal Executive Officer)

By: /s/ Bonnie J. Brown Chief Accounting Officer, Treasurer and Secretary (Principal Accounting Officer)

## TECOGEN INC. CERTIFICATION REQUIRED BY EXCHANGE ACT RULES 13a-14(a) and 15d-14(a), AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, John N. Hatsopoulos, certify that:

- 1. I have reviewed this Quarterly Report on Form 10-Q of Tecogen Inc.;
- 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.
- 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.

Date: November 9, 2017

<u>/s/ John N. Hatsopoulos</u> John N. Hatsopoulos Co-Chief Executive Officer

## TECOGEN INC. CERTIFICATION REQUIRED BY EXCHANGE ACT RULES 13a-14(a) and 15d-14(a), AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

## I, Benjamin M. Locke, certify that:

- 1. I have reviewed this Quarterly Report on Form 10-Q of Tecogen Inc.;
- 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;
  - 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.
- 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.

Date: November 9, 2017

<u>/s/ Benjamin M. Locke</u> Benjamin M. Locke Co-Chief Executive Officer

## TECOGEN INC. CERTIFICATION REQUIRED BY EXCHANGE ACT RULES 13a-14(a) and 15d-14(a), AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

## I, Bonnie J. Brown, certify that:

- 1. I have reviewed this Quarterly Report on Form 10-Q of Tecogen 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.
- 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.

Date: November 9, 2017

<u>/s/ Bonnie J. Brown</u> Bonnie J. Brown Principal Financial & Accounting Officer

## TECOGEN INC. CERTIFICATION REQUIRED BY EXCHANGE ACT RULES 13a-14(b) and 15d-14(b), AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Each of, John N. Hatsopoulos, Co-Chief Executive Officer, Benjamin M. Locke, Co-Chief Executive Officer, and Bonnie J. Brown, Chief Accounting Officer, of Tecogen Inc., or the Company, certify, pursuant to Section 1350, Chapter 63 of Title 18, United States Code that, to his knowledge:

- 1. The Quarterly Report on Form 10-Q of the Company for the quarter ended September 30, 2017 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78 m or 780(d)); and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 9, 2017

<u>/s/ John N. Hatsopoulos</u> John N. Hatsopoulos Co-Chief Executive Officer

<u>/s/ Benjamin M. Locke</u> Benjamin M. Locke Co-Chief Executive Officer

<u>/s/ Bonnie J. Brown</u> Bonnie J. Brown Principal Financial & Accounting Officer