Genie Energy Ltd.
Form 10-K
March 16, 2018

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

Annual report pursuant to section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2017,

or

Transition report pursuant to section 13 or 15(d) of the Securities Exchange Act of 1934.

Commission File Number: 1-35327

Genie Energy Ltd.

(Exact name of registrant as specified in its charter)

Delaware	45-2069276
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

520 Broad Street, Newark, New Jersey 07102

(Address of principal executive offices, zip code)

(973) 438-3500

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Class B common stock, par value $.01 per share	New York Stock Exchange
Series 2012-A Preferred stock, par value $.01 per share	New York Stock Exchange

Securities registered pursuant to section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 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 No

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

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

Large accelerated filer	Accelerated filer
Non-accelerated filer	Smaller reporting company
	Emerging growth company

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

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

The aggregate market value of the voting and non-voting stock held by non-affiliates of the registrant, based on the closing price on June 30, 2017 (the last business day of the registrant’s most recently completed second fiscal quarter) of the Class B common stock of $7.62 per share, as reported on the New York Stock Exchange, was approximately $122 million.

As of March 13, 2018, the registrant had outstanding 23,294,886 shares of Class B common stock and 1,574,326 shares of Class A common stock. Excluded from these numbers are 330,915 shares of Class B common stock held in treasury by Genie Energy Ltd.

DOCUMENTS INCORPORATED BY REFERENCE

The definitive proxy statement relating to the registrant’s Annual Meeting of Stockholders, to be held May 7, 2018, is incorporated by reference into Part III of this Form 10-K to the extent described therein.

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Part I

As used in this Annual Report, unless the context otherwise requires, the terms “the Company,” “Genie,” “we,” “us,” and “our” refer to Genie Energy Ltd., a Delaware corporation, and its subsidiaries, collectively.

Item 1. Business.

BUSINESS OVERVIEW

Genie Energy Ltd. is comprised of GRE, which owns and operates retail energy providers, or REPs, including IDT Energy, Inc., or IDT Energy, Residents Energy, LLC, or Residents Energy, Town Square Energy, or TSE, and Mirabito Natural Gas, or Mirabito, and also offers energy brokerage and advisory services through its Genie Retail Energy Services and Diversegy divisions. Its REP businesses resell electricity and natural gas to residential and small business customers primarily in the Eastern United States. Through a joint venture, GRE has begun serving customers in Great Britain.

The Company also is comprised of Genie Oil and Gas, Inc., (GOGAS), an oil and gas exploration company with contracted drilling services as well. GOGAS’ four exploration projects are inactive. GOGAS also holds a 100% interest in Atid, an early stage drilling services company operating in Israel.

CORPORATE STRUCTURE

Genie Energy Ltd., a Delaware corporation, owns 99.3% of its subsidiary, Genie Energy International Corporation, or GEIC, which owns 100% of GRE, and 92% of GOGAS. GOGAS holds an 86.1% interest in Afek, an oil and gas exploration project in Northern Israel, whose operations have been suspended. GOGAS also holds controlling interests in other inactive oil and gas projects.

GRE has outstanding deferred stock units granted to officers and employees that represent an interest of 1.25 % of the equity of GRE.

REPORTABLE SEGMENTS

We have three reportable business segments: Genie Retail Energy, Afek Oil and Gas, Ltd., and Genie Oil and Gas. Our reportable segments are distinguished by types of service, customers and methods used to provide their services. Financial information by segment and geographic areas is presented in "Note 18 — Business Segment Information" in the Notes to our Consolidated Financial Statements in this Annual Report.

GENERAL BUSINESS INFORMATION

Our main offices are located at 520 Broad Street, Newark, New Jersey 07102. Our telephone number is (973) 438-3500 and our web site is *www.genie.com*.

We make available free of charge through the investor relations page of our web site (*http://genie.com/investors/sec-filings/*) our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to these reports, and all beneficial ownership reports on Forms 3, 4 and 5 filed by directors, officers and beneficial owners of more than 10% of our equity as soon as reasonably practicable after such material is electronically filed with the Securities and Exchange Commission. We have adopted a Code of Business Conduct and Ethics for all of our employees, including our principal executive officer and principal financial officer. Copies of our Code of Business Conduct and Ethics are available on our web site.

Our web site (*www.genie.com*) and the information contained therein or incorporated therein are not incorporated into this Annual Report on Form 10-K or our other filings with the Securities and Exchange Commission.

KEY EVENTS IN OUR HISTORY

In November 2004, IDT Corporation, or IDT, our former corporate parent, launched a retail energy provider business in New York State under the brand name IDT Energy.

In October 2011, we were spun-off by IDT and became an independent public company listed on the New York Stock Exchange.

In December 2013, GRE acquired Dallas-based Diversegy, LLC, a retail energy advisory and brokerage company that serves commercial and industrial customers throughout the United States.

In November 2016, Genie Retail Energy purchased Retail Energy Holdings, LLC, which operates REPs under the brand name Town Square Energy. The acquisition added 48,000 residential customer equivalents, or RCEs, and expanded GRE’s serviceable markets into Connecticut, Massachusetts, New Hampshire, Rhode Island and new territories in Ohio.

In August 2017, GRE acquired Mirabito Natural Gas, a commercial supplier located in Florida. The acquisition added 11,000 RCEs and expanded GRE’s serviceable markets into Florida.

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RECENT DEVELOPMENTS

In November 2017, Afek suspended its exploratory drilling program in Northern Israel after the preliminary analysis of the results from its completed wells did not identify commercially producible quantities of oil or natural gas.

In December 2017. Orbit Energy, a joint venture of GRE and Energy Global Investments, began to sign up customers in Great Britain’s deregulated electricity and gas markets.

Dividends

We pay a quarterly dividend on both of our common and preferred stock. The aggregate dividends paid in the year ended December 31, 2017 on our Class A and Class B common stock (the “Common Stock”) was $7.4 million, as follows:

On March 24, 2017, we paid a quarterly Base Dividend of $0.075 per share on our Common Stock for the fourth quarter of 2016 to stockholders of record at the close of business on March 20, 2017.

On May 29, 2017, we paid a quarterly Base Dividend of $0.075 per share on our Common Stock for the first quarter of 2017 to stockholders of record at the close of business on May 15, 2017.

On August 25, 2017, we paid a quarterly Base Dividend of $0.075 per share on our Common Stock for the second quarter of 2017 to stockholders of record at the close of business on August 15, 2017.

On November 17, 2017, we paid a quarterly Base Dividend of $0.075 per share on our Common Stock for the third quarter of 2017 to stockholders of record at the close of business on November 13, 2017.

On March 7, 2018, our Board of Directors declared a quarterly dividend of $0.075 per share on our Class A common stock and Class B common stock for the fourth quarter of 2017 to stockholders of record as of the close of business on March 19, 2018. The dividend will be paid on March 23, 2018.

The aggregate dividends paid in the year ended December 31, 2017 on our Preferred Stock was $1.5 million, as follows:

On February 16, 2017, we paid a quarterly Base Dividend of $0.1594 per share on our Preferred Stock for the fourth quarter of 2015 to stockholders of record at the close of business on February 6, 2017 of our Preferred Stock.

On May 16, 2017, we paid a quarterly Base Dividend of $0.1594 per share on the Preferred Stock for the first a quarter of 2016 to stockholders of record at the close of business on May 4, 2017 of our Preferred Stock.

On August 15, 2017, we paid a quarterly Base Dividend of $0.1594 per share on the Preferred Stock for the second quarter of 2016 to stockholders of record at the close of business on August 4, 2017 of our Preferred Stock.

On November 15, 2017, we paid a quarterly Base Dividend of $0.1594 per share on the Preferred Stock for the third quarter of 2016 to stockholders of record as of the close of business on November 1, 2017.

On February 15, 2018, we paid a quarterly Base Dividend of $0.1594 per share on the Preferred Stock for the fourth quarter of 2017 to stockholders of record at the close of business on February 6, 2018 in the aggregate amount of $0.4 million.

Genie Retail Energy

Genie Retail Energy is comprised of REPs and related businesses. GRE’s REP businesses purchase electricity and natural gas on the wholesale markets and resell these commodities to their residential and business customers. The positive difference between the net sales price of electricity and natural gas sold to its customers and the cost of their electricity and natural gas supplies and related costs are the REP businesses’ gross profits.

GRE’s REP businesses operate in certain utility territories within the deregulated retail energy markets of twelve states in the Eastern and Midwestern US: Connecticut, Delaware, Illinois, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Florida and Rhode Island, as well as in Washington, D.C.

GRE’s US REP businesses operate under several brand names including IDT Energy, Residents Energy, Town Square Energy and Mirabito. Their diverse offerings, in both the electricity and natural gas markets include, variable rate offerings, fixed rate offerings, and green renewable offerings.

As part of our ongoing business development efforts, we seek out new opportunities in domestic and international jurisdictions, however, there are no assurances we will be successful in launching any such operations.

Historically, GRE's REP businesses have expanded organically – adding new customers through customer acquisition programs at a rate faster than customers lost through attrition or churn. New customers are generally acquired through a combination of marketing and sales channels including door-to-door solicitation, telemarketing, online and digital marketing, direct mail, and by competitive bidding for exclusive contracts awarded by certain municipalities that, when authorized by state laws, award participating residents' electricity supply to a single supplier.

Customer churn is a significant factor in the REP business, with monthly churn rates for GRE's REPs averaging between four and eight percent per month. Customer churn tends to decrease when commodity prices fall, when weather-driven consumption decreases, when the price to REP customers decreases relative to competitors including the incumbent utility provider, or when the REPs incentivize customer tenure. Customer churn tends to increase when commodity prices rise, when weather driven consumption increases or spikes, or when the price to REP customers increases relative to the prices charged by competitors including incumbent utility providers. Newly acquired customers have higher rates of churn than longer-term customers.

GRE also operates several smaller non-REP businesses under its Genie Retail Energy Services (GRES) division, including Diversegy and Genie Solar Energy. Diversegy operates as an energy broker and advisor to industrial, commercial and municipal customers across deregulated energy markets in the United States. Diversegy's customers are typically not served by GRE REPs.

Genie Solar Energy operates as a provider of end-to-end solar solutions primarily for commercial customers in five states – Massachusetts, New Hampshire, New Jersey, New York and Pennsylvania.

In November 2016, GRE closed on the acquisition of Retail Energy Holdings, LLC (REH), a privately held retail electricity provider operating under the Town Square Energy brand. The acquisition added approximately 48,000 RCEs to GRE's customer base. Town Square Energy, operates in eight Eastern states and its licenses and customer base expanded GRE's geographic footprint to four new states – New Hampshire, Rhode Island, Massachusetts and Connecticut – and provided additional electricity customers in New Jersey, Maryland, Ohio and Pennsylvania.

On July 17, 2017, a Company subsidiary entered into a definitive agreement with Energy Global Investments Pty Ltd ("EGC") to launch a joint venture to offer electricity and natural gas service to residential and small business customers in the United Kingdom under the brand Orbit Energy. In December 2017, Orbit commenced initial customer acquisition in the UK under the mandated three-month Controlled Market Entry framework in which new entrants can acquire a limited number of customers in a test environment.

On August 10, 2017, GRE acquired Mirabito Natural Gas, a Ft. Lauderdale, Florida-based natural gas supplier, from Angus Partners, LLC (“Angus”). Mirabito serves commercial and government customers throughout Florida.

For the past two years, GRE’s REP businesses expanded to new markets both to accelerate growth of our customer base and to reduce operational and regulatory risk associated with heavy geographical concentration.

GRE’s revenue has comprised 100% of our total consolidated revenue since our inception. In 2017, GRE generated revenue of $264 million comprised of $222 million from sales of electricity, $40 million from sales of natural gas, and other revenue of $2 million, as compared with revenue of $212 million in 2016, comprised of $179 million from the sales of electricity, $31 million from the sales of natural gas and other revenue of $2 million. Electricity sales have become a more significant portion of GRE’s business in recent years.

GRE’s REP operations are seasonal. Approximately 45% and 43% of our natural gas revenues in 2017 and 2016, respectively, were generated during the first quarter, when the demand for heating peaks. Although the demand for electricity is not as seasonal as natural gas, approximately 30% and 31% of total revenues from electricity sales in 2017 and 2016 were generated in the third quarter when the demand for cooling peeks.

Variations in weather can significantly impact GRE’s operations. For example, unusually sustained cold weather in the first quarter of 2014 drove increased demand creating a “polar vortex” that was characterized by extraordinarily large spikes in the prices of wholesale electricity and natural gas in markets where GRE’s REPs and other retail providers purchase their supply.

REP Industry Overview

Retail energy providers (REPs) operate in deregulated retail energy markets in the US and overseas. REPs purchase electricity and natural gas on the wholesale markets and resell the commodities to their customers, who may include homeowners, renters and small to mid-sized commercial and governmental operations and institutions. Generally, incumbent local utilities continue to handle electricity and natural gas distribution, billing, and collections. The utilities remit the proceeds collected for the commodity supply portion of their bills less certain fees to the REPs.

REPs generally have no significant fixed assets and low levels of capital expenditure. Their cost of revenues is incurred to purchase electricity and natural gas in their respective wholesale markets and other factors. Selling, general and administrative expenses are primarily related to customer acquisition, customer retention, billing and purchase of receivables, or POR, fees paid to the utilities, and program management.

As of December 31, 2017, there were thirty states in which there is some level of energy deregulation. We currently market in all the states where there is residential deregulation covering both electricity and natural gas. We are in the process of applying for licenses or setting up operations in two additional states and are constantly evaluating entrance into new markets. Internationally, many of the most heavily populated countries in western Europe, are deregulated. In addition, Japan and other Asian countries have recently deregulated residential energy markets as well.

Customers; Marketing

The services of GRE’s REPs - IDT Energy, Residents Energy, Town Square Energy and Mirabito - are made available to customers under several offerings with distinct terms and conditions. The majority of our customer base is enrolled in variable rate programs via automatically renewing or month-to-month agreements, which enable us to recover our wholesale costs for electricity and natural gas through adjustments to the rates charged to our customers. The frequency and degree of these rate adjustments is determined by GRE, and is not restricted by regulation.

As of December 31, 2017, customers on variable rate products constituted 61% of the electric load, with the balance from customers on fixed rate agreements. For our variable rate product, the amount we charge to our customers reflects the underlying commodity cost plus a markup. During times of decreasing or stable costs, we typically experience lower rates of churn than when costs are increasing.

Variable rate products are available to all customers in all states served by GRE’s REPs except for Connecticut. Likewise, Renewable (Green) energy supply options exist in all markets served by GRE’s REPs. Renewable (Green) Electricity supply is 100% matched with renewable energy certificates that reflect the generation of electricity from sources such as hydro-electric wind, solar and biomass.

The electricity and natural gas we sell through all of our offerings are metered and delivered to customers by the local utilities. The utilities also provide billing and collection services for the majority of our customers. For a small number of direct bill customers, we perform our own billing and collection. Additionally, GRE’s REPs’ receivables are, in many states, purchased by the utilities in whose areas we operate for a percentage of their face value (over the course of 2017, the associated cost was approximately 1.4% of revenue) in exchange for the utility receiving a first priority lien in the customer receivable without recourse against the REP.

GRE's REPs market their energy services primarily through direct marketing methods, including door-to-door sales, outbound telemarketing direct mail and internet signup. As of December 31, 2017, GRE serviced 412,000 meters (307,000 electric and 105,000 natural gas), as compared to 412,000 meters (296,000 electric and 116,000 natural gas) as of December 31, 2016.

GRE seeks to acquire profitable customers in low-risk markets, specifically where the utilities have adopted a portfolio of REP-friendly, regulatory-driven programs. Among these programs is purchase of receivables (POR) programs. Under POR programs, utilities are contractually obligated to purchase customer receivables at pre-determined and fixed discounts. Utilities also offer consolidated billing as part of the POR program. Through consolidated billing, the utilities retain the responsibility for billing the individual customer and the subsequent collection of the remittances. There are markets in which we operate that the utilities engage in consolidated billing on behalf of REP's but are not obligated to guarantee the receivables.

Utilities in Connecticut, Delaware, Ohio, New York, Pennsylvania, Illinois, Washington, D.C., Massachusetts and Maryland offer POR programs, without recourse, that permit customers with past-due balances to remain in the POR and consolidated bill programs. However, utilities in New Jersey generally do not permit customers with past-due balances beyond 120 days to enroll or remain in their POR programs, which means that after a certain amount of time (determined based on the specific commodity), the REP becomes responsible for the billing and collection of the commodity portion of the future invoices for its delinquent customers. Utilities in New Hampshire and Rhode Island do not offer POR but they do offer consolidated billing. In Florida, there is no POR and we bill customers directly.

Additionally, GRE targets markets in which we can procure energy in an efficient and transparent manner. We seek to purchase wholesale energy where there is a real-time market that reflects a fair price for the commodity for all participants. This allows GRE to reflect a true market cost base and adjust its rates to its variable rate customers taking into account prevailing market rates.

We regularly monitor other deregulated or deregulating markets to determine if they are appropriate for entry, and may initiate the licensing process in a selected region to facilitate entry into the region contingent upon favorable deregulatory developments.

Acquisition and Management of Gas and Electric Supply

Since 2009, certain of GRE's REPs have been party to a Preferred Supplier Agreement with BP Energy Company, or BP. The agreement allows for purchases of electricity and natural gas for customers focused in areas where the utilities have POR programs. Under the arrangement, those REPs purchase electricity and natural gas from BP at market rate plus a fee. The obligations to BP are secured by a first security interest in deposits or receivables from utilities in connection with their purchase of the REPs' customer's receivables under the applicable POR program, and in any cash deposits or letters of credit posted in connection with any collateral accounts with BP. The agreement with BP has been amended to cover the territories in which we operate. The agreement was modified and extended on November 19, 2015, and is scheduled to terminate on November 30, 2019. Our ability to purchase electricity and natural gas under this agreement is subject to satisfaction of certain conditions including the maintenance of certain covenants.

GRE is required to meet certain minimum green energy supply criteria in some of the markets in which it operates. We meet those thresholds by acquiring renewable energy certificates, or REC's. In addition, GRE offers green or other renewable energy products to its customers in all of the territories in which we operate. GRE acquires green renewable energy conversion rights or attributes and REC's to satisfy the load requirements for these customers.

GRE does not own electrical power generation, transmission, or distribution facilities, or natural gas production, pipeline or distribution facilities. GRE's REPs currently contract with Dominion Transmission, Inc., National Fuel Supply, Williams Gas Pipeline and Texas Eastern Transmission and others for natural gas pipeline, storage and transportation services, and utilizes the New York Independent System Operator, Inc., or NYISO, and PJM Interconnection, LLC, or PJM, for electric transmission and distribution. NYISO operates the high-voltage electric transmission network in New York State, and administers and monitors New York's wholesale electricity markets. PJM is a regional transmission organization that coordinates the movement of wholesale electricity in all or parts of thirteen states (including New Jersey, Pennsylvania, Maryland and Illinois) and the District of Columbia.

For risk management purposes, GRE's REPs utilize forward physical delivery contracts for a portion of their purchases of electricity and natural gas, which are defined as commodity derivative contracts. In addition, GRE's REPs enter into put and call options as hedges against unfavorable fluctuations in market prices of electricity and natural gas.

The ISOs perform real-time load balancing for each of the electrical power grids in which GRE REPs operate. Similarly, load balancing is performed by the utilities or local distribution company, or LDC, for each of the natural gas markets in which GRE operates. Load balancing ensures that the amount of electricity and natural gas that GRE's REPs purchase is equal to the amount necessary to service its customers' demands at any specific point in time. GRE's REPs are charged or credited for balancing the electricity and natural gas purchased and sold for their account by their suppliers and the LDCs. GRE's REPs manage the differences between the actual electricity and natural gas demands of their customers and their bulk or block purchases by buying and selling in the spot market, and through monthly cash settlements and/or adjustments to future deliveries in accordance with the load balancing performed by utilities, LDCs, and/or ISOs.

Competition

As an operator of REPs, GRE competes with the local utility companies in each of the markets in which it provides services and with many other licensed REPs. In some markets, competitor REPs are affiliated with local utilities. GRE also competes with several large vertically integrated energy companies. Competition with the utilities and REPs impacts GRE's gross margins, customer acquisition rates and exposes GRE to customer churn.

REPs and utilities offering fixed rate products or guaranteed pricing often are unable to change their sell rates offered to customers in response to underlying commodity price volatility. In a downward moving commodity cost environment, variable rate REPs typically become more competitive as they benefit from the lag that utilities experience in reducing their sell rate to reflect the lower commodity costs, and they may benefit from decreases in margin pressure, improvements in the customer acquisition environment, and lower rates of churn. In a rising commodity cost environment, REPs that offer variable rate products, and reflect real-time commodity costs, will typically become less competitive with fixed rate providers, experience increased margin pressure, a more challenging customer acquisition environment and higher rates of customer churn.

Increasing our market share depends in part on our ability to persuade more customers to switch from other providers to one of our REPs at a higher rate than our customers churn to other providers. Moreover, local utilities and some REPs may have certain advantages such as name recognition, financial strength and long-standing relationships with customers. Persuading potential customers to switch to GRE requires significant marketing and sales operations.

Regulation

REPs such as ours must be licensed in each state and utility service territory in which they operate. Each is subject to the rules and regulations governing the operations of REPs in each jurisdiction.

Although the rates charged by GRE’s REPs are not regulated in the same way as the rates of utility companies, the manner in which the REPs market to potential customers, and the relationships between the REPs and their customers, are heavily regulated. GRE’s REPs must also comply with various quarterly and/or annual reporting requirements in order to maintain their eligibility to provide service. In certain jurisdictions the REPs are required to publish product offers with the applicable regulatory commissions, or in the public domain, generally on a website established for such purpose. In addition to the regulations that govern the relationships between GRE’s REPs and their customers, GRE’s REPs also maintain specific Terms & Conditions or Terms of Service for each product in each jurisdiction that customers must agree to be bound by.

Due to dramatic increases in wholesale electricity costs that occurred during the “polar vortex” of the winter of 2014, the retail electricity prices that GRE’s REPs and many other variable rate electricity suppliers charged to their customers increased sharply. These retail electricity price increases resulted in large numbers of complaints, regulatory actions, and calls for legislation, regulation and litigation. GRE’s subsidiary, IDT Energy, paid approximately $5 million in rebates to affected customers in the year ended December 31, 2014. These events adversely affected GRE’s REPs customer churn, gross margins and results of operations.

As discussed more fully below in Item 3 “Legal Proceedings” in this Annual Report, IDT Energy reached a settlement with the Pennsylvania Attorney General’s Office and the Acting Consumer Advocate terminating litigation with no admission of liability or finding of wrongdoing by IDT Energy.

New York Public Service Commission Orders

On February 23, 2016, the New York Public Service Commission, or PSC, issued an order that sought to impose significant new restrictions on REPs operating in New York, including those owned by GRE. The restrictions described in the PSC’s order, which were to become effective March 4, 2016, would have required that all electricity and natural gas offerings offered by REPs to residential and small business customers include an annual guarantee of savings compared to the price charged by the relevant incumbent utility or, for electricity offerings, provide at least 30% of the supply from renewable sources. Customers not enrolled in a compliant program would be relinquished back to the local utility at the end of their contract period or, for variable price customers operating on month to month agreements, at the end of the current monthly billing cycle.

On March 4, 2016, a group of parties from the REP industry sought and won a temporary restraining order to stay implementation of the most restrictive portions of the PSC’s order pending a court hearing on those parties’ motion for a preliminary injunction. On July 25, 2016, the New York State Supreme Court, County of Albany, entered a decision and order granting the Petitioners’ petition, vacated provisions 1 through 3 of the Order, which outlined the proposed rule changes referenced above, and remitted the matter to the PSC for further proceedings consistent with the Court’s order. As a result of the litigation, in December 2016 the PSC opened an Evidentiary Proceeding to assess the condition of the REP market in New York and determine a path for the future of the market.

After submission of written testimony by numerous parties over the course of a year, in December 2017, the PSC held a ten-day evidentiary hearing in its offices in Albany. The parties now have an opportunity to submit post-hearing briefs. It is expected to be several more months before the PSC takes any definitive action. The Company is evaluating the potential impact of any new order from the PSC that would follow from the evidentiary process, while preparing to operate in compliance with any new requirements that may be imposed. Depending on the final language of any new order, as well as the Company's ability to modify its relationships with its New York customers, an order could have a substantial impact upon the operations of GRE's REPs in New York. As of December 31, 2017, New York represented 36% of GRE's total meters served and 28% of the total residential customer equivalents ("RCEs") of GRE's customer base.

On July 14, 2016, and September 19, 2016, the PSC issued orders restricting REPs, including those owned by GRE, from serving customers enrolled in New York's utility low-income assistance programs. Representatives of the REP industry challenged the ruling in New York State Supreme Court, Albany County, and, on September 27, 2016, the Court issued an order temporarily restraining the PSC from implementing the July and September orders. On December 16, 2016, the PSC issued an order (the "2016 Order") prohibiting REP service to customers enrolled in New York's utility low-income assistance programs. After an agreed-upon stay of the 2016 Order, on July 5, 2017, the New York State Supreme Court, Albany County, denied interested parties' efforts to invalidate the 2016 Order. Several REPs have appealed the Supreme Court's decision to the Appellate Division, Third Department. That court stayed implementation of the Order for a period of time, but later lifted the stay pending resolution of the appeal.

In a related action, several customers impacted by the 2016 Order filed a putative class action in the United States District Court for the Northern District of New York, challenging the Order. Temporary stays of the 2016 Order entered in connection with this action have expired, and REPs are now required to return service of their current low-income customers to the relevant local incumbent utility on the modified schedule set forth in the PSC's 2016 Order. GRE is complying with the NY PSC's low-income order and has begun the transfer of customers as required. The order will require GRE's REPs to transfer customer accounts comprising approximately 21,000 meters, representing 12,000 RCEs, to their respective incumbent utilities during the first half of 2018. As of December 31, 2017, GRE's REPs operate in eight utility territories in New York, six utility territories in New Jersey, nine utility territories in Pennsylvania, four utility territories in Maryland, six utility territories in Ohio, five utility territories in Massachusetts, two utility territories in New Hampshire, two in Connecticut, one in Rhode Island, one in Washington, D.C. two in Illinois. The State of New York, the Commonwealth of Pennsylvania, the State of New Jersey, the State of Maryland, the State of Illinois, the District of Columbia, the State of Ohio, the State of New Hampshire, the State of Rhode Island, the State of Connecticut, the Commonwealth of Massachusetts, the federal government, and related public service/utility commissions, among others, establish the rules and regulations for our REP operations. Orbit Energy, our joint venture based in London, has begun acquiring customers in England, Scotland and Wales.

Like all operators of REPs, GRE is affected by the actions of governmental agencies, mostly on the state level, by the respective state Public Service/Utility Commissions, and other organizations (such as NYISO and PJM) and indirectly by the Federal Energy Regulatory Commission, or FERC. Regulations applicable to electricity and natural gas have undergone substantial change over the past several years as a result of restructuring initiatives at both the state and federal levels. We may be subject to new laws, orders or regulations or the revision or interpretation of existing laws, orders or regulations.

As of December 31, 2017, Diversegy operated nationwide in all deregulated markets as a broker of electricity and as a gas broker.

Employees

As of March 1, 2018, GRE employed 178 full time employees, 69 of whom are located in the Jamestown, New York office, of which approximately 90% are affiliated with our customer care center, 52 of whom are located in our New Jersey office, 10 of whom are located in our Arizona office and 47 of whom are located in the Florida office performing customer acquisition and support.

Genie Oil and Gas, Inc.

Genie Oil and Gas (GOGAS) is an oil and gas exploration company. GOGAS currently holds an 86.1% interest in Afek, an inactive oil and gas exploration project which operated in the southern portion of the Golan Heights in Northern Israel and a 100% interest in Atid Oil & Gas, a contract drilling services company in Israel. In addition, GOGAS holds controlling interests in three inactive or disbanded oil shale projects in Mongolia, Colorado and Israel.

Afek Oil and Gas Ltd.

In April 2013, the Government of Israel finalized the award to Afek of an exclusive three-year petroleum exploration license covering 396.5 square kilometers in the southern portion of the Golan Heights. The license was subsequently extended to April 2018.

In February 2015, Afek began drilling its first exploratory well in Northern Israel's Golan Heights. Afek completed drilling five wells in the Southern portion of its license area. In addition, Afek has undertaken well flow tests in multiple target zones within two of the completed wells. The results of the exploration program in this portion of the license area confirmed the presence of significant hydrocarbons in the basin, but the Afek concluded that the resource was likely not commercially viable given current and forecasted market conditions and other constraints, and that the greatest potential for commercial development lies in an area further north within the license area than any of the five completed exploratory wells.

In 2017, Afek turned its operational focus to the Northern region of its license area. The data analyzed suggested that the Southern block resources may extend Northward at depths potentially sufficient to have induced a greater level of maturation of the resource. To validate this hypothesis, in 2017, Afek drilled an exploratory well a site in the Northern portion of its license area. The company announced in November 2017 that the preliminary analysis of results from its completed Ness 10 exploratory well in Northern Israel suggests that the well's target zone does not contain commercially producible quantities of oil or natural gas and that it was suspending drilling operations pending further analysis.

In light of the analysis received, Afek determined that, based on current information, it did not have a clear path to demonstrate probable or possible reserves in the license area over the next 12 to 18 months. Since there was substantial doubt regarding the economic viability of the well, in the three months ended December 31, 2017, Afek wrote off the $6.5 million of capitalized exploration costs incurred. At this time, no further exploration activity is contemplated.

Atid

In January 2017, we established Atid Drilling Ltd., (Atid), an on-shore drilling services venture based in Israel. Atid will serve as the primary drilling contractor for any future Afek drilling activities, and opportunistically pursue drilling opportunities for clients in a variety of fields including oil and gas exploration, water resource development and mineral exploration. Atid purchased a drilling rig and associated drilling equipment in 2017. The rig had successfully drilled five exploratory oil and gas wells in the Golan Heights for Afek over the past two years and completed a water well.

Intellectual Property

We rely on a combination of patents, copyrights, trademarks, domain name registrations and trade secret laws in the United States and other jurisdictions and contractual restrictions to protect our intellectual property rights and our brand names. All of our employees sign confidentiality agreements. These agreements provide that the employee may not use or disclose our confidential information except as expressly permitted in connection with the performance of his or her duties for us, or in other limited circumstances. These agreements also state that, to the extent rights in any invention conceived of by the employee while employed by us do not vest in us automatically by operation of law, the employee is required to assign his or her rights to us.

Employees

As of March 1, 2018, GOGAS employed 10 employees. Afek and Atid also retain the services of a number of professional consultants, including geologists, hydrologists, drilling and completions engineers, process engineers, environmental experts, permitting consultants, energy experts, legal, and land designation and acquisition consultants.

Item 1A. Risk Factors.

RISK FACTORS

Our business, operating results or financial condition could be materially adversely affected by any of the following risks as well as the other risks highlighted elsewhere in this document, particularly the discussions about regulation, competition and intellectual property. The trading price of our Class B common stock and Series 2012-A Preferred Stock could decline due to any of these risks.

Risks Related to Genie Retail Energy

The REP business is highly competitive, and we may be forced to reduce prices or incur additional costs.

GRE's REP businesses face substantial competition both from the traditional incumbent utilities as well as from other REPs, including REP affiliates of the incumbent utilities in specific territories. As a result, we may be forced to reduce prices, incur increased costs or lose market share and cannot always pass along increases in commodity costs to customers. We compete on the basis of provision of services, customer service and price. Present or future competitors may have greater financial, technical or other resources which could put us at a disadvantage. Additionally, our experience has shown that utilities do not change their sell rates offered to customers immediately in response to increased prices for the underlying commodities.

Conversely, in a downward moving commodity cost environment, GRE's REPs variable rate plans may benefit from the lag that utilities experience in reducing their sell rate to reflect the lower cost base in the commodity markets, and may reflect commodity costs decreases in their offerings and rates.

Increasing our market share depends in part on our ability to persuade more customers to switch to GRE's services than those that churn from us to other providers or back to the local utility. Moreover, local utilities and some REPs may have certain advantages such as name recognition, financial strength and long-standing relationships with customers. Persuading potential customers to switch to GRE's REPs requires significant marketing and sales operations. If GRE is not successful in convincing customers to switch, our REP businesses, results of operations and financial condition will all be adversely affected.

Our current strategy is based on current regulatory conditions and assumptions, which could change or prove to be incorrect.

Regulation over the electricity and natural gas markets has been in flux at the state and federal levels. In particular, any changes adopted by the FERC, or changes in state or federal laws or regulations (including greenhouse gas laws) may affect the prices at which GRE purchases electricity or natural gas for its customers. While we endeavor to pass along increases in energy costs to our customers pursuant to our variable rate customer offerings, we may not always be able to do so due to competitive market forces and the risk of losing our customer base.

On February 23, 2016, the New York PSC issued an order that sought to impose significant new restrictions on REPs operating in New York, including those owned by GRE. The restrictions described in the PSC's order, which were to become effective March 4, 2016, would require that all REPs' electricity and natural gas offerings to residential and small business customers include an annual guarantee of savings compared to the price charged by the relevant incumbent utility or, for electricity offerings, provide at least 30% of the supply from renewable sources. Customers not enrolled in a compliant program would be relinquished back to the local utility at the end of their contract period or, for variable price customers operating on month to month agreements, at the end of the current monthly billing cycle.

On March 4, 2016, a group of parties from the REP industry sought and won a temporary restraining order to stay implementation of the most restrictive portions of the PSC's order pending a court hearing on those parties' motion for a preliminary injunction. On July 25, 2016, the New York State Supreme Court, County of Albany, entered a decision and order granting the Petitioners' petition, vacated provisions 1 through 3 of the Order, which outlined the proposed rule changes referenced above, and remitted the matter to the PSC for further proceedings consistent with the Court's order.

In December 2017, the PSC held an evidentiary hearing to assess the retail energy market in New York. That process is continuing and is expected to last for at least several more months. We are evaluating the potential impact of any new order from the PSC that would follow from the evidentiary process, while preparing to operate in compliance with any new requirements that may be imposed. Depending on the final language of any new order, as well as our ability to modify our relationships with our New York customers, an order could have a substantial impact upon the operations of GRE's REPs in New York. At December 31, 2017, New York represented 36% of GRE's total meters served and 28% of the total RCEs of GRE's customer base.

On July 14, 2016, and September 19, 2016, the PSC issued orders restricting REPs, including those owned by GRE, from serving customers enrolled in New York's utility low-income assistance programs. Representatives of the REP industry challenged the ruling in New York State Supreme Court, Albany County, and, on September 27, 2016, the Court issued an order temporarily restraining the PSC from implementing the July and September orders. On December 16, 2016, the PSC issued the 2016 Order prohibiting REP service to customers enrolled in New York's utility low-income assistance programs. After an agreed-upon stay of the 2016 Order, on July 5, 2017, the New York State Supreme Court, Albany County, denied interested parties' efforts to invalidate the 2016 Order. Several REPs have appealed the Supreme Court's decision to the Appellate Division, Third Department. That court stayed implementation of the Order for a period of time, but later lifted the stay pending resolution of the appeal.

In a related action, several customers impacted by the 2016 Order filed a putative class action in the United States District Court for the Northern District of New York, challenging the Order. Temporary stays of the 2016 Order entered in connection with this action have expired, and REPs are now required to return service of their current low-income customers to the relevant local incumbent utility on the modified schedule set forth in the PSC's 2016 Order. GRE's REPs are complying with the 2016 Order and have begun the transfer of customers as required. The 2016 Order will require GRE's REPs to transfer customer accounts comprising approximately 21,000 meters, representing 12,000 RCEs, to their respective incumbent utilities during the first half of 2018.

Legislators and regulators may enact or modify laws or regulation to prevent the repetition of price spikes experienced in prior periods or address customer complaints that have come to light in connection with those events. Potential regulatory and/or legislative changes may impact our ability to use our established sales and marketing channels. Any changes in these factors, or any significant changes in industry development, could have an adverse effect on our revenues, profitability and growth or threaten the viability of our current business model.

Fixed Rate Products or Guaranteed Pricing Programs could result in losses or decreased profits if GRE fails to estimate commodity prices accurately.

REPs and utilities offering fixed rate products or guaranteed pricing often are unable to change their sell rates offered to customers in response to volatility in the prices of the underlying commodities or changes in the regulatory environment. In times of high commodity prices, these fixed rate programs expose us to the risk that we will incur significant unforeseen costs in performing the contracts. GRE's meters enrolled in offerings with fixed rate characteristics constituted approximately 39% of GRE's electric load during December 2017.

However, it is difficult to predict future commodity costs. Any shortfalls resulting from the risks associated with fixed-price programs will reduce our working capital and profitability. Our inability to accurately estimate the cost of providing services under these programs could have an adverse effect on our profitability and cash flows.

GRE's growth depends in part on its ability to enter new markets.

New markets for our business are determined based on many factors, which include the regulatory environment, as well as GRE's REP businesses ability to procure energy in an efficient and transparent manner. We seek to purchase wholesale energy where there is a real time market that reflects a fair price for the commodity for all participants. Once new markets are determined to be suitable for GRE's REP businesses, we will expend substantial efforts to obtain necessary licenses and will incur significant customer acquisition costs and there can be no assurance that we will be successful in new markets. Furthermore, there are regulatory differences between the markets that we currently operate in and new markets, including, but not limited to, exposure to credit risk, additional churn caused by tariff requirements, rate-setting requirements and incremental billing costs. A failure to identify, become licensed in, and enter new territories may have a material negative impact on our growth, financial condition and results of operations.

The Company is subject to laws and regulations worldwide, changes to which could increase the Company's costs and individually or in the aggregate adversely affect the Company's business.

As the Company is expanding its operations geographically, including operations in international jurisdictions, the Company is subject to laws and regulations affecting its domestic and international operations in a number of areas. These U.S. and foreign laws and regulations affect the Company's activities including, but not limited to, our pricing structure and marketing activities.

Compliance with these laws, regulations and similar requirements may be onerous and expensive, and they may be inconsistent from jurisdiction to jurisdiction, further increasing the cost of compliance and doing business. Any such costs, which may rise in the future as a result of changes in these laws and regulations or in their interpretation, could individually or in the aggregate make the Company's products and services less attractive to the Company's customers, delay the introduction of new products in one or more regions, or cause the Company to change or limit its business practices. The Company has implemented policies and procedures designed to ensure compliance with applicable laws and regulations, but there can be no assurance that the Company's employees, contractors, or agents will not violate such laws and regulations or the Company's policies and procedures.

The Company's business is subject to the risks of international operations.

As the Company grows its international operations, it may derive a significant portion of its revenue and earnings from such operations. Compliance with applicable U.S. and foreign laws and regulations, such as import and export requirements, anti-corruption laws, tax laws, foreign exchange controls and cash repatriation restrictions, data privacy requirements, environmental laws, labor laws and anti-competition regulations, increases the costs of doing business in foreign jurisdictions. Although the Company has implemented policies and procedures to comply with these laws and regulations, a violation by the Company's employees, contractors, or agents could nevertheless occur. In some cases, compliance with the laws and regulations of one country could violate the laws and regulations of another country. Violations of these laws and regulations could materially adversely affect the Company's brand, international growth efforts and business.

The Company also could be significantly affected by other risks associated with international activities including, but not limited to, economic and labor conditions, increased duties, taxes and other costs and political instability. The Company is also exposed to credit and collectability risk on its trade receivables with customers in certain international markets. There can be no assurance the Company can effectively limit its credit risk and avoid losses.

Unfair business practices or other activities of REPs may adversely affect us.

Competitors in the highly competitive REP market have engaged in unfair business practices to sign up new customers. Competitors engaging in unfair business practices create an unfavorable impression about our industry on consumers, regulators or political bodies. Such unfair practices by other companies can adversely affect our ability to grow or maintain our customer base. The successes, failures or other activities of various REPs within the markets that we serve may impact how we are perceived in the market. Further, such practices can lead to regulatory action, such as the recent New York PSC Order, that can negatively impact us and the industry.

Demand for REP services and consumption by customers are significantly related to weather conditions.

Typically, colder winters and hotter summers create higher demand and consumption for natural gas and electricity, respectively. Milder than normal winters and/or summers may reduce the demand for our energy services, thus negatively impacting our financial results.

Unusual weather conditions may have significant direct and indirect impacts on GRE’s business and results of operations.

A confluence of issues in January and February 2014 associated with the 2013-2014 winter season’s polar vortex resulted in extraordinarily large spikes in the prices of wholesale electricity and natural gas in markets where GRE and other retail providers purchase their supply. Repeats of the circumstances or similar circumstances could similarly harm margins and profitability in the future, and we could find it necessary to take similar or other actions that would have a negative impact on our financial condition and results of operations.

Because our variable pricing plan resulted in increased prices charged to customers, we experienced an increase in customer churn as utilities and fixed price REPs appeared to have more attractive pricing, although those increased churn levels have peaked. A failure to mitigate an increase in churn could result in decreases in meters served and revenues.

The retail electricity price increases discussed above resulted in large numbers of customers filing informal and formal complaints to state utility commissions, state attorneys general and state legislators. IDT Energy was served with several thousand formal and informal customer complaints to state utility commission and state attorneys general related to the winter retail price increases. IDT Energy has responded to each customer complaint it has received and attempted to resolve each complaining customer’s concerns. GRE’s REPs also paid approximately $5 million in rebates to affected customers in the year ended December 31, 2014. IDT Energy was not under any obligation to provide such rebates and did so in order to mitigate the impact of the price increases on its customers notwithstanding that the underlying cause of the price increase was beyond GRE’s control.

If certain REPs, however, are determined to have acted in a manner that was harmful to customers, the entire industry can suffer due to the reputational harm.

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GRE is subject to litigation that may limit its operations.

In connection with the events described in the Risk Factor above entitled "*Unusual weather conditions may have significant direct and indirect impacts on GRE's business and results of operations*", IDT Energy has also been sued in separate putative class action suits in New York, New Jersey and Pennsylvania, partially related to the price increases during the winter of 2014. These matters are more fully discussed below in Item 3 "Legal Proceedings" in this Annual Report, including that IDT Energy reached a settlement with the Pennsylvania Attorney General's Office and the Acting Consumer Advocate terminating litigation with no admission of liability or finding of wrongdoing by IDT Energy.

IDT Energy does not believe that it was at fault or acted in any way improperly with respect to the events of winter 2014. However, we cannot predict the outcome of putative class action litigation or the impact on us of these or other actions, or whether there will be other impacts from the conditions that existed in winter 2014. Further, although we have taken action to insulate us and our customers from future similar events, we cannot assure that those actions will be effective and we will not be subject to class actions in the future.

Such class action lawsuits or other claims against us could have a material adverse impact on our financial condition, competitive position or results of operations.

Regulatory conditions can affect the amount of taxes and fees we need to pay and our pricing advantages.

We are subject to audits in various jurisdictions for various taxes, including income tax, utility excise tax and sales and use tax. Aggressive stances taken recently by regulators increase the likelihood of our having to pay additional taxes and fees in connection with these audits. In the future, we may seek to pass such charges along to our customers, which could have an adverse impact on our pricing advantages.

Commodity price volatility could have an adverse effect on our cost of revenues and our results of operations.

Volatility in the markets for certain commodities can have an adverse impact on our costs for the purchase of the electricity and natural gas that GRE sells to its customers. In our fixed or guaranteed price products, we cannot, and in our variable price products, due to customer or competitive factors, we may not always be able or choose to, pass along increases in costs to our customers. This would have an adverse impact on our margins and results of operations. Alternatively, volatility in pricing for GRE's electricity and natural gas related to the cost of the underlying commodities can lead to increased customer churn. In times of high commodity costs, our variable pricing model and commodity purchasing approach can lead to competitive disadvantages as we must pass along all or some portion of our increased costs to our customers.

We face risks that are beyond our control due to our reliance on third parties and our general reliance on the electrical power and transmission infrastructure within the United States.

Our ability to provide energy delivery and commodity services depends on the operations and facilities of third parties, including, among others, BP, NYISO and PJM. Our reliance on the electrical power generation and transmission infrastructure within the United States makes us vulnerable to large-scale power blackouts. The loss of use or destruction of third party facilities that are used to generate or transmit electricity due to extreme weather conditions, breakdowns, war, acts of terrorism or other occurrences could greatly reduce our potential earnings and cash flows.

The REP business, including our relationship with our suppliers, is dependent on access to capital and liquidity.

Our business involves entering into contracts to purchase large quantities of electricity and natural gas. Because of seasonal fluctuations, we are generally required to purchase electricity or natural gas in advance and finance that purchase until we can recover such amounts from revenues. Certain of GRE's REPs have a Preferred Supplier Agreement with BP pursuant to which we purchase electricity and natural gas at market rate plus a fee. The agreement was modified and extended on November 19, 2015, and is scheduled to terminate on November 30, 2019. In addition to other advantages of this agreement, we are only required to post security with BP. There can be no assurance that we will be able to maintain the required covenants, that BP will be able to maintain their required credit rating, or that the agreement will be renewed upon its expiration. In addition, the security requirements outside of the BP agreement may increase as we enter other markets. Difficulty in obtaining adequate credit and liquidity on commercially reasonable terms may adversely affect our business, prospects and financial conditions.

A revision to certain utility best practices and programs in which we participate and with which we comply could disrupt our operations and adversely affect our results and operations.

Certain retail access "best practices" and programs proposed and/or required by state regulators have been implemented by utilities in most of the service territories in which we operate. One such practice is participation in purchase of receivables programs under which certain utilities purchase customer receivables for approximately 98% of their face value in exchange for a first priority lien in the customer receivables without recourse against a REP. This program is a key to our control of bad debt risk in our REP business.

The REP business depends on maintaining the licenses in the states we operate and any loss of those licenses would adversely affect our business, prospects and financial conditions.

GRE's REP businesses require licenses from public utility commissions and other regulatory organizations to operate its business. Those agencies may impose various requirements to obtain or maintain licenses. Further, certain non-governmental organizations have been focusing on the REP industry and the treatment of customers by certain REPs. Any negative publicity regarding the REP industry in general and GRE in particular or any increase in customer complaints regarding GRE's REP businesses could negatively affect our relationship with the various commissions and regulatory agencies and could negatively impact our ability to obtain new licenses to expand operations or maintain the licenses currently held. In the aftermath of the polar vortex, several regulatory bodies adopted more aggressive policies toward REPs, including the action against IDT Energy in Pennsylvania described elsewhere in this Annual Report. Any loss of our REP licenses would cause a negative impact on our results of operations, financial condition and cash flow.

The REP business depends on the continuing efforts of our management team and our personnel with strong industry or operational knowledge and our efforts may be severely disrupted if we lose their services.

Our success depends on key members of our management team, the loss of whom could disrupt our business operation. Our business also requires a capable, well-trained workforce to operate effectively. There can be no assurance that we will be able to retain our qualified personnel, the loss of whom may adversely affect our business, prospects and financial conditions.

We could be harmed by network disruptions, security breaches, or other significant disruptions or failures of our IT infrastructure and related systems.

To be successful, we need to continue to have available a high capacity, reliable and secure network. We face the risk, as does any company, of a security breach, whether through cyber-attack, malware, computer viruses, sabotage, or other significant disruption of our IT infrastructure and related systems. We face a risk of a security breach or disruption from unauthorized access to our proprietary or classified information on our systems. Certain of our personnel operate in jurisdictions that could be a target for cyber-attacks. The secure maintenance and transmission of our information is a critical element of our operations. Our information technology and other systems that maintain and transmit our information, or those of service providers or business partners, may be compromised by a malicious third party penetration of our network security, or that of a third party service provider or business partner, or impacted by advertent or inadvertent actions or inactions by our employees, or those of a third party service provider or business partner. As a result, our information may be lost, disclosed, accessed or taken without our consent.

Although we make significant efforts to maintain the security and integrity of these types of information and systems, there can be no assurance that our security efforts and measures will be effective or that attempted security breaches or disruptions would not be successful or damaging, especially in light of the growing sophistication of cyber-attacks and intrusions. We may be unable to anticipate all potential types of attacks or intrusions or to implement adequate security barriers or other preventative measures.

Network disruptions, security breaches and other significant failures of the above-described systems could (i) disrupt the proper functioning of these networks and systems, and therefore, our operations; (ii) result in the unauthorized access to, and destruction, loss, theft, misappropriation or release of our proprietary, confidential, sensitive or otherwise valuable information, including trade secrets, which others could use to compete against us or for disruptive, destructive or otherwise harmful purposes and outcomes; (iii) require significant management attention or financial resources to remedy the damages that result or to change our systems; or (iv) result in a loss of business, damage our reputation or expose us to litigation. Any or all of which could have a negative impact on our results of operations, financial condition and cash flows.

Our growth strategy depends, in part, on our acquiring complementary businesses and assets and expanding our existing operations, which we may be unable to do.

Our growth strategy is based, in part, on our ability to acquire businesses and assets that are complementary to our existing operations. We may also seek to acquire other businesses. The success of this acquisition strategy will depend, in part, on our ability to accomplish the following:

- identify suitable businesses or assets to buy;
- complete the purchase of those businesses on terms acceptable to us;
- complete the acquisition in the time frame we expect;
- improve the results of operations of the businesses that we buy and successfully integrate their operations into our own; and
- avoid or overcome any concerns expressed by regulators, including antitrust concerns.

There can be no assurance that we will be successful in pursuing any or all of these steps. Our failure to implement our acquisition strategy could have an adverse effect on other aspects of our business strategy and our business in general. We may not be able to find appropriate acquisition candidates, acquire those candidates that we find or integrate acquired businesses effectively or profitably.

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Risks Related to Genie Oil and Gas

We have no current production of oil and gas and we may never have any.

We do not have any current production of oil and gas. We cannot assure you that we will produce or market oil or gas at all or in commercially profitable quantities. Our ability to produce and market oil and gas may depend upon our ability to develop and operate our planned projects and facilities, which may be affected by events or conditions that impact the advancement, operation, cost or results of such projects or facilities, including:

Energy commodity prices relative to production costs;

The occurrence of unforeseen technical difficulties;

The outcome of negotiations with potential partners, governmental agencies, regulatory bodies, suppliers, customers or others;

Changes to existing legislation or regulation governing our current or planned operations;

Our ability to obtain all the necessary permits to operate our facilities;

Changes in operating conditions and costs, including costs of third-party equipment or services such as drilling and processing and access to power sources; and

Security concerns or acts of terrorism that threaten or disrupt the safe operation of our facilities.

Operating hazards and uninsured risks with respect to the contract drilling and oil and gas operations may have material adverse effects on our operations.

Our contract drilling and research, exploration and, if successful, development and production operations are subject to risks similar to those normally incident to the exploration for and the development and production of oil and gas, including blowouts, subsidence, uncontrollable flows of oil, gas or well fluids, fires, pollution and other environmental and operating risks. These hazards could result in substantial losses due to injury or loss of life, severe damage to or destruction of property and equipment, pollution and other environmental damage and suspension of operations. While as a matter of practice we have insurance against some or all of these risks, such insurance may not cover the particular hazard and may not be sufficient to cover all losses. The occurrence of a significant event adversely affecting any of our operations could have a material adverse effect on us, could materially affect our continued operations and could expose us to material liability.

Genie Oil and Gas' dependence on contractors, equipment and professional services that have limited availability could result in increased costs and possibly material delays in their respective work schedules.

The costs for our operations may be more expensive than planned or there could be delays in our operating plans. We may also incur delays in our drilling and operating schedule and we may not be able to meet our required work schedule. Similarly, some of the professional personnel we need for our planned operations are not available in the locations in which we operate or are not available on short notice for work in such location, and, therefore, we may need to use non-local contractors for various projects. Any or all of the factors specified above may result in increased costs and delays.

Genie Oil and Gas' success depends on the continuing efforts of key personnel and certain strategic partners, and our efforts may be severely disrupted if we lose their services.

Our future success depends, to a significant extent, on our ability to attract and retain qualified technical personnel, particularly those with expertise in the oil and gas industry. There is substantial competition for qualified technical personnel, and there can be no assurance that we will be able to attract or retain our qualified technical personnel. The unexpected loss of the services of one or more of these people, and the ability to find suitable replacements within a reasonable period of time thereafter, could have a material adverse effect on our operations.

Genie Oil and Gas is subject to regulatory, legal and political risks that may limit its operations.

Our operations and potential earnings may be affected from time to time in varying degree by regulatory, legal and political factors, including laws and regulations related to environmental or energy security matters, including those addressing alternative and renewable energy sources and the risks of global climate change and legal challenges. Such laws and regulations continue to increase in both number and complexity and affect our operations with respect to, among other things:

The discharge of pollutants into the environment;

The handling, use, storage, transportation, disposal and cleanup of hazardous materials and hazardous and nonhazardous wastes;

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The dismantlement, abandonment and restoration of our properties and facilities at the end of their useful lives;

Restrictions on exploration and production;

Loss of petroleum rights, including key leases, licenses or permits;

Tax or royalty increases, including retroactive claims;

Political instability, war or other conflicts in areas where we operate.

The oil and gas industry is subject to the general inherent industry and economic risks.

The oil and gas business is fundamentally a commodity business. This means that potential future commercial operations and earnings may be significantly affected by changes in oil and gas prices and by changes in margins on gasoline, natural gas and other refined products.

We may be exposed to infringement or misappropriation claims by third parties, which, if determined adversely to us, could cause us to lose significant rights and pay significant damage awards.

Our success depends, among other things, on our ability to use and develop our technology and know-how without infringing on the intellectual property rights of third parties. The validity and scope of claims relating to our technology involve complex scientific, legal and factual questions and analysis. It is therefore difficult to accurately predict whether or not a third party will assert that we are infringing on its intellectual property or whether it would prevail. Although we are not currently aware of any infringement or of any parties pursuing or intending to pursue infringement claims against us, we cannot assure you that we will not be subject to such claims in the future. Also, in many jurisdictions, patent applications remain confidential and are not published for some period after filing. Thus, we may be unaware of other parties’ pending patent applications that relate to our processes. While at present we are unaware of competing patent applications, such applications could potentially surface.

The defense and prosecution of intellectual property suits, patent opposition proceedings and related legal and administrative proceedings can be both costly and time consuming and may significantly divert the efforts and resources of our technical and management personnel. An adverse determination in any such litigation or proceedings to which we may become a party could subject us to significant liability to third parties, require us to seek licenses from third parties, to pay ongoing royalties, to redesign our products, or subject us to injunctions prohibiting the manufacture and sale of our products or the use of our technologies.

Risk Related to Our Financial Condition and Reporting

We identified material weaknesses in our internal control over financial reporting that were successfully remediated by December 31, 2017. If we fail to maintain proper and effective internal control over financial reporting, our ability to produce accurate and timely financial statements could be impaired and may lead investors and other users to lose confidence in our published financial data.

Maintaining effective internal control over financial reporting is necessary for us to produce reliable financial statements.

In evaluating the effectiveness of disclosure controls and procedures and our internal control over financial reporting as of March 31, 2017, June 30, 2017 and September 30, 2017, management concluded that a deficiency in the design and operating effectiveness of the Company's internal controls represented a material weakness in the Company's internal control over financial reporting and, therefore, that the Company did not maintain effective disclosure controls and procedures or internal control over financial reporting as of March 31, 2017, June 30, 2017 and September 30, 2017.

The unaudited consolidated statement of operations for the three months ended March 31, 2017 and June 30, 2017 have been restated to properly reflect the Company's revenues, cost of revenues, income from operations, net income and earnings per share for those three-month periods. Certain amounts recorded in the second quarter of 2017 should properly have been recorded in the first quarter.

In addition, in evaluating the effectiveness of our internal control over financial reporting as of December 31, 2013, management identified material weaknesses in our internal control over financial reporting and those material weaknesses were successfully remediated. In evaluating the effectiveness of our internal control over financial reporting as of September 30, 2016, management identified material weaknesses in our internal control over financial reporting and those material weaknesses were successfully remediated by December 31, 2016. Also, as of December 31, 2016, management review controls associated with the completeness and accuracy of computations relating to domestic and foreign income tax accounts and disclosures were not effective. This material weakness, plus the material weakness identified during the year ended December 31, 2017 described above were successfully remediated by December 31, 2017.

If additional material weaknesses or significant deficiencies in our internal control over financial reporting are discovered or occur in the future, our consolidated financial statements may contain material misstatements and we could be required to restate our financial results.

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The effects of the Tax Cuts and Jobs Act on our business have not yet been fully analyzed and could have an adverse effect on our business and financial position.

On December 22, 2017 the U.S. enacted the Tax Cuts and Jobs Act, which makes various changes to the U.S. tax code, including a reduction in the corporate tax rate from 35% to 21% effective January 1, 2018. We have not completed our accounting for the income tax effects of the enactment of the Tax Cuts and Jobs Act; however, we have made a reasonable estimate of the effect on our existing deferred tax assets and corresponding valuation allowance. At December 31, 2017, we adjusted our deferred income tax assets and related valuation allowance in equal and offsetting amounts to reflect the new rate. There was no impact to our provision for income taxes from this adjustment. We do not expect the enactment of the Tax Cuts and Jobs Act to have any other material impact on our consolidated financial statements. We are following Staff Accounting Bulletin No. 118, which provides guidance for situations where the accounting for the Tax Cuts and Jobs Act under ASC Topic 740 is incomplete.

Risks Related to Our Capital Structure

Holders of our Class B common stock and Series 2012-A Preferred Stock have significantly less voting power than holders of our Class A common stock.

Holders of our Class B common stock and Series 2012-A Preferred Stock are entitled to one-tenth of a vote per share on all matters on which our stockholders are entitled to vote, while holders of our Class A common stock are entitled to three votes per share. As a result, the ability of holders of our Class B common stock and Series 2012-A Preferred Stock to influence our management is limited.

Holders of our Series 2012-A Preferred Stock are entitled to an annual dividend and such payments may have a negative impact on our cash flow.

Holders of our Series 2012-A Preferred Stock are entitled to receive an annual dividend, payable quarterly in cash. The payment of such dividend could have a negative impact on our cash flow and cash balances. If dividends on any shares of the Series 2012-A Preferred Stock are in arrears for six or more quarters, whether or not consecutive, holders of the Series 2012-A Preferred Stock shall have the right to elect two (2) additional directors to serve on our Board, and this could have a negative impact on the market price of our equity securities.

We are controlled by our principal stockholder, which limits the ability of other stockholders to affect our management.

Howard S. Jonas, our Chairman of the Board, has voting power over 6,369,670 shares of our common stock (which includes 1,574,326 shares of our Class A common stock, which are convertible into shares of our Class B common stock on a 1-for-1 basis, and 4,795,344 shares of our Class B common stock), representing approximately 71% of the combined voting power of our outstanding capital stock, as of March 9, 2018. Mr. Jonas is able to control matters requiring approval by our stockholders, including the election of all of the directors and the approval of significant corporate matters, including any merger, consolidation or sale of all or substantially all of our assets. As a result, the ability of any of our other stockholders to influence our management is limited.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Our headquarters are located at 520 Broad St., Newark, New Jersey. Our lease for our office space at 520 Broad Street expires in April 2025 and is for 8,631 square feet and includes two parking spots per thousand square feet of space leased. The annual base rent is $198,513. We have the right to terminate the lease upon four months' notice and upon early termination Genie will pay a penalty equal to 25% of the portion of the rent due over the course of the remaining term. Upon expiration of the lease, we have the right to renew the lease for another 5 years on substantially the same terms, with a 2% increase in the rental payments.

GRE's Jamestown, New York offices are located at 3315 North Main Street where we lease approximately 12,000 square feet of space. GRE's Florida office is located in Holiday, Florida where we lease approximately 4,350 square feet. GRE's Arizona office is located in Chandler, Arizona where we lease approximately 3,300 square feet.

Item 3. Legal Proceedings.

On March 13, 2014, named plaintiff, Anthony Ferrare, commenced a putative class-action lawsuit against IDT Energy, Inc. in the Court of Common Pleas of Philadelphia County, Pennsylvania. The complaint was served on IDT Energy on July 16, 2014. The named plaintiff filed the suit on behalf of himself and other former and current electric customers of IDT Energy in Pennsylvania with variable rate plans, whom he contends were injured as a result of IDT Energy's allegedly unlawful sales and marketing practices. On August 7, 2014, IDT Energy removed the case to the

United States District Court for the Eastern District of Pennsylvania. On October 20, 2014, IDT Energy moved to stay or, alternatively, dismiss the complaint, as amended, by the named plaintiff. On November 10, 2014, the named plaintiff opposed IDT Energy's motion to dismiss and IDT Energy filed a reply memorandum of law in further support of its motion to dismiss. On June 10, 2015, the Court granted IDT Energy's motion to stay and denied its motion to dismiss without prejudice. The parties participated in mediation, and subsequently entered into a Settlement Agreement (see below), which received preliminary approval from the Court on October 16, 2017. The Settlement Agreement is subject to entry of a final order by the Court approving the Settlement Agreement. The Court has scheduled a hearing concerning final approval for April 9, 2018.

On July 2, 2014, named plaintiff, Louis McLaughlin, filed a putative class-action lawsuit against IDT Energy, Inc. in the United States District Court for the Eastern District of New York, contending that he and other class members were injured as a result of IDT Energy's allegedly unlawful sales and marketing practices. The named plaintiff filed the suit on behalf of himself and two subclasses: all IDT Energy customers who were charged a variable rate for their energy from July 2, 2008, and all IDT Energy customers who participated in IDT Energy's rebate program from July 2, 2008. On January 22, 2016, the named plaintiff filed an amended complaint on behalf of himself and all IDT Energy customers in New York State against IDT Energy, Inc., Genie Retail Energy, Genie Energy International Corporation, and Genie Energy Ltd. (collectively, "IDT Energy"). On February 22, 2016, IDT Energy moved to dismiss the amended complaint, and the named plaintiff opposed that motion. The parties participated in mediation, and subsequently entered into a Settlement Agreement (see below), which received preliminary approval from the Court on October 16, 2017. The Settlement Agreement is subject to entry of a final order by the Court approving the Settlement Agreement. The Court has scheduled a hearing concerning final approval for April 9, 2018.

On July 15, 2014, named plaintiff, Kimberly Aks, commenced a putative class-action lawsuit against IDT Energy, Inc. in New Jersey Superior Court, Essex County, contending that she and other class members were injured as a result of IDT Energy's alleged unlawful sales and marketing practices. The named plaintiff filed the suit on behalf of herself and all other New Jersey residents who were IDT Energy customers at any time between July 11, 2008 and the present. The parties were engaged in discovery prior to the mediation described below. On April 20, 2016, the named plaintiff filed an amended complaint on behalf of herself and all IDT Energy customers in New Jersey against IDT Energy, Inc., Genie Retail Energy, Genie Energy International Corporation and Genie Energy Ltd. On June 27, 2016, defendants Genie Retail Energy, Genie Energy International Corporation and Genie Energy Ltd. filed a motion to dismiss the amended complaint. On August 26, 2016, the named plaintiff opposed that motion and IDT Energy filed a reply memorandum of law in further support of its motion to dismiss. The Court granted the motion to dismiss, but the parties agreed to set aside that decision to give the plaintiff an opportunity to submit opposition papers that had not been considered by the Court in rendering its decision. The parties participated in mediation, and subsequently entered into a Settlement Agreement (see below), which received preliminary approval from the Court on October 16, 2017. The Settlement Agreement is subject to entry of a final order by the Court approving the Settlement Agreement. The Court has scheduled a hearing concerning final approval for April 9, 2018.

On July 5, 2017, the Company entered into a class action Settlement Agreement with the class action plaintiffs acting individually and on behalf of the entire class, in the lawsuits currently pending in Pennsylvania, New York, and New Jersey described above. The Company does not believe that there was any wrongdoing on its part, and is entering into this settlement to further its efforts to address its customers' concerns. Under the Settlement Agreement, the Company has agreed to pay certain amounts to resolve the lawsuits and obtain a release of claims that were asserted or could be asserted in the lawsuits or that are related to or arise out of the conduct alleged in the lawsuits or similar conduct, wherever it may have occurred. The settlement payment includes payments to customers who timely make a claim, class counsel, and the named plaintiffs as well as the cost of a claims administrator for administrating the claims process. The Company estimated, based in part on historical participation rates that its total settlement payment will be approximately $9 million, although it is reasonably possible that the total payments could reach $10.1 million. In the year ended December 31, 2017, the Company recorded a revenue reduction of $3.6 million and an expense of $5.4 million that is included in "Selling, general and administrative expense", and a liability of $9.0 million. We estimated, based in part on historical participation rates that our total settlement payment will be approximately $9 million, although it is reasonably possible that the total payments could reach $10.1 million. The actual amount to be paid out will depend on several factors, including the number of customers who claim settlement payments to which they are entitled. The Settlement Agreement was preliminarily approved by the Court on October 16, 2017. The Settlement Agreement is subject to entry of a final order by the Court approving the Settlement Agreement, and the Court has scheduled a hearing concerning final approval for April 9, 2018.

On June 20, 2014, the Pennsylvania Attorney General's Office ("AG") and the Acting Consumer Advocate ("OCA") filed a Joint Complaint against IDT Energy, Inc. with the Pennsylvania Public Utility Commission ("PUC"). In the Joint Complaint, the AG and the OCA alleged, among other things, various violations of Pennsylvania's Unfair Trade Practices and Consumer Protection Law, the Telemarketing Registration Act and the PUC's regulations. IDT Energy reached an agreement in principle on a settlement with the AG and the OCA to terminate the litigation with no admission of liability or finding of wrongdoing by IDT Energy. On August 4, 2015, IDT Energy, the AG, and the OCA filed a Joint Petition to the Pennsylvania PUC seeking approval of the settlement terms. Under the settlement, IDT Energy will issue additional refunds to its Pennsylvania customers who had variable rates for electricity supply in January, February and March of 2014. IDT Energy will also implement certain modifications to its sales, marketing and customer service processes, along with additional compliance and reporting requirements. The settlement was approved by the Pennsylvania PUC on July 8, 2016. In July 2016, IDT Energy paid the agreed-upon $2.4 million for additional customer refunds to a refund administrator.

In the fourth quarter of 2015, the Company received a request for information from the New Jersey Office of the Attorney General. The Company responded to the inquiry. The Company has recently been engaged in discussions with the New Jersey Office of the Attorney General regarding concerns raised by the New Jersey Board of Public Utilities and Division of Consumer Affairs related to energy supply charges issued to the Company's retail customers during the first quarter of 2014 and have reached a tentative agreement in principle. In the year ended December 31, 2017, the Company accrued $1.5 million of estimated loss related to this matter. The Company recorded a revenue reduction in the consolidated statement of operations of $1.3 million relating to refunds to customers and an expense of $0.2 million for related fees that is included in "Selling, general and administrative expense," and a liability of $1.5 million that is included in "Accrued expenses" in the consolidated balance sheet.

From time to time, the Company receives inquiries or requests for information or materials from public utility commissions or other governmental regulatory or law enforcement agencies related to investigations under statutory or regulatory schemes, and the Company responds to those inquiries or requests. The Company cannot predict whether any of those matters will lead to claims or enforcement actions.

In addition to the above, the Company may from time to time be subject to legal proceedings that arise in the ordinary course of business. Although there can be no assurance in this regard, the Company does not expect any of those legal proceedings to have a material adverse effect on the Company's results of operations, cash flows or financial condition.

New York Public Service Commission Orders

On February 23, 2016, the New York PSC issued an order that sought to impose significant new restrictions on REPs operating in New York, including those owned by GRE. The restrictions described in the PSC's order, which were to become effective March 4, 2016, would require that all REPs' electricity and natural gas offerings to residential and small business customers include an annual guarantee of savings compared to the price charged by the relevant incumbent utility or, for electricity offerings, provide at least 30% of the supply from renewable sources. Customers not enrolled in a compliant program would be relinquished back to the local utility at the end of their contract period or, for variable price customers operating on month to month agreements, at the end of the current monthly billing cycle.

On March 4, 2016, a group of parties from the REP industry sought and won a temporary restraining order to stay implementation of the most restrictive portions of the PSC's order pending a court hearing on those parties' motion for a preliminary injunction. On July 25, 2016, the New York State Supreme Court, County of Albany, entered a decision and order granting the Petitioners' petition, vacated provisions 1 through 3 of the Order, and remitted the matter to the PSC for further proceedings consistent with the Court's order.

In December 2017, the PSC held an evidentiary hearing to assess the retail energy market in New York. That process is continuing and is expected to last for at least several more months. The Company is evaluating the potential impact of any new order from the PSC that would follow from the evidentiary process, while preparing to operate in compliance with any new requirements that may be imposed. Depending on the final language of any new order, as well as the Company's ability to modify its relationships with its New York customers, an order could have a substantial impact upon the operations of GRE's REPs in New York. At December 31, 2017, New York represented 36% of GRE's total meters served and 28% of the total RCEs of GRE's customer base.

On July 14, 2016, and September 19, 2016, the PSC issued orders restricting REPs, including those owned by GRE, from serving customers enrolled in New York's utility low-income assistance programs. Representatives of the REP industry challenged the ruling in New York State Supreme Court, Albany County, and, on September 27, 2016, the Court issued an order temporarily restraining the PSC from implementing the July and September orders. On December 16, 2016, the PSC issued the 2016 Order prohibiting REP service to customers enrolled in New York's utility low-income assistance programs. After an agreed-upon delay, on July 5, 2017, the New York State Supreme Court, Albany County, denied interested parties' efforts to invalidate the 2016 Order, and the 2016 Order began to be implemented on July 26, 2017. Several REPs have appealed the Supreme Court's Order to the Appellate Division, Third Department. That court stayed implementation of the 2016 Order for a period of time, but later lifted the stay pending resolution of the appeal.

In a related action, several customers impacted by the 2016 Order filed a putative class action in the United States District Court for the Northern District of New York, challenging the 2016 Order. Temporary stays of the 2016 Order entered in connection with this action have expired, and REPs are now required to return service of their current low-income customers to the relevant local incumbent utility on the modified schedule set forth in the PSC's 2016 Order. GRE is complying with the 2016 Order and has begun the transfer of customers as required. The 2016 Order will require GRE's REPs to transfer customer accounts comprising approximately 21,000 meters, representing 12,000 RCEs, to their respective incumbent utilities during the first half of 2018.

Item 4. Mine Safety Disclosures.

Not applicable.

Part II

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

PRICE RANGE OF COMMON STOCK

Our Class B common stock trades on the New York Stock Exchange under the symbol "GNE".

The table below sets forth the high and low sales prices for our Class B Common Stock as reported by the NYSE for the fiscal periods indicated which represents the only fiscal periods our Class B Common Stock has been trading on the NYSE.

	High	Low
Fiscal year ended December 31, 2016		
First Quarter	$11.02	$7.00
Second Quarter	$8.48	$6.32
Third Quarter	$7.49	$5.69
Fourth Quarter	$6.60	$5.07
Fiscal year ended December 31, 2017		
First Quarter	$7.35	$5.25
Second Quarter	$8.31	$6.97
Third Quarter	$7.61	$5.65
Fourth Quarter	$6.93	$4.18

On March 9, 2018, there were 320 holders of record of our Class B common stock and one holder of record of our Class A common stock. All shares of Class A common stock are beneficially owned by Howard Jonas. These numbers do not include the number of persons whose shares are in nominee or in "street name" accounts through brokers. On March 15, 2018 the last sales price reported on the New York Stock Exchange for the Class B common stock was $4.94 per share.

PRICE RANGE OF PREFERRED STOCK

The Series 2012-A Preferred Stock is listed and traded on the NYSE under the symbol “GNEPRA”. Trading began on the NYSE on October 24, 2012.

The table below sets forth the high and low sales prices for our Series 2012-A Preferred Stock as reported by the NYSE for the fiscal periods indicated.

	High	Low
Fiscal year ended December 31, 2016		
First Quarter	$7.65	$6.80
Second Quarter	$7.50	$6.81
Third Quarter	$7.64	$7.15
Fourth Quarter	$8.01	$7.08
Fiscal year ended December 31, 2017		
First Quarter	$8.40	$7.35
Second Quarter	$7.89	$7.26
Third Quarter	$7.94	$7.32
Fourth Quarter	$7.82	$7.24

On March 9, 2018, there were 4 holders of record of our Series 2012-A Preferred Stock. These numbers do not include the number of persons whose shares are in nominee or in “street name” accounts through brokers. On March 15, 2018, the last sales price reported on the New York Stock Exchange for the Series 2012-A Preferred Stock was $7.35 per share.

Additional information regarding dividends required by this item is incorporated by reference from the Management’s Discussion and Analysis section in Item 7 to Part II and Note 11 to the Consolidated Financial Statements in Item 8 to Part II of this Annual Report.

The information required by Item 201(d) of Regulation S-K will be contained in our Proxy Statement for our Annual Stockholders Meeting, which we will file with the Securities and Exchange Commission within 120 days after December 31, 2017, and which is incorporated by reference herein.

Performance Graph of Stock

The line graph below compares the cumulative total stockholder return on our Class B common stock and our Series 2012-A Preferred Stock with the cumulative total return of the New York Stock Exchange Composite Index and the Standard & Poor's Integrated Oil & Gas Index for the period beginning December 31, 2012 and ending December 31, 2017. The graph and table assume that $100 was invested December 31, 2012 with the cumulative total return of the NYSE Composite Index and the S&P Integrated Oil & Gas Index, and that all dividends were reinvested. Cumulative total stockholder returns for our Class B common stock, Series 2012-A Preferred Stock, NYSE Composite Index and the S&P Integrated Oil & Gas Index are based on our fiscal year.

	12/12	**12/13**	**12/14**	**12/15**	**12/16**	**12/17**
Genie Energy Ltd.	100.00	143.80	87.83	160.58	85.63	68.16
Genie Energy Ltd. Series 2012 - A Preferred	100.00	124.76	105.57	140.37	151.14	161.36
NYSE Composite	100.00	126.28	134.81	129.29	144.73	171.83
S&P Integrated Oil & Gas	100.00	121.53	113.35	97.64	121.21	123.73

Issuer Purchases of Equity Securities

The following table provides information with respect to purchases by us of our shares during the fourth quarter of the year ended December 31, 2017.

	Total Number of Shares Purchased	Average Price per Share	Total Number of Shares Purchased as part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs[(1)]
October 1 – 31, 2017	**—**	**$ —**	**—**	**6,896,669**
November 1 – 30, 2017	**—**	**$ —**	**—**	**6,896,669**
December 1 – 31, 2017	**—**	**$ —**	**—**	**6,896,669**
Total	**—**	**$ —**		

(1) Under our existing stock repurchase program, approved by our Board of Directors on March 11, 2013, we were authorized to repurchase up to an aggregate of 7 million shares of our Class B common stock.

Item 6. Selected Financial Data.

The selected consolidated financial data presented below as of December 31, 2017, 2016, 2015, 2014 and 2013, and for each of the five years then ended, has been derived from our Consolidated Financial Statements, which have been audited by BDO USA, LLP, independent registered public accounting firm. The selected consolidated financial data should be read in conjunction with the Consolidated Financial Statements and the Notes thereto and other financial information appearing elsewhere in this Annual Report.

	Year ended December 31,				
(in thousands, except per share data)	**2017**	**2016**	**2015**	**2014**	**2013**
STATEMENT OF OPERATIONS DATA:					
Revenues	$264,202	$212,112	$213,056	$280,963	$285,713
Write-off of capitalized exploration costs	6,483	41,041	—	—	—
Net loss	(8,648)	(32,192)	(8,636)	(27,407)	(5,341)
Loss per common share – basic and diluted	(0.36)	(1.14)	(0.40)	(1.31)	(0.36)

Cash dividend declared per common share	0.30	0.24	0.12	0.06	—

December 31 (in thousands)	**2017**	**2016**	**2015**	**2014**	**2013**
BALANCE SHEET DATA:					
Total assets	$125,778	$121,813	$155,815	$152,928	$158,843
Long-term obligations	2,513	—	2,000	—	—

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

This Annual Report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, including statements that contain the words "believes," "anticipates," "expects," "plans," "intends" and similar words and phrases. These forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from the results projected in any forward-looking statement. In addition to the factors specifically noted in the forward-looking statements, other important factors, risks and uncertainties that could result in those differences include, but are not limited to, those discussed under Item 1A to Part I "Risk Factors" in this Annual Report. The forward-looking statements are made as of the date of this Annual Report, and we assume no obligation to update the forward-looking statements, or to update the reasons why actual results could differ from those projected in the forward-looking statements. Investors should consult all of the information set forth in this report and the other information set forth from time to time in our reports filed with the Securities and Exchange Commission pursuant to the Securities Act of 1933 and the Securities Exchange Act of 1934, including our reports on Forms 10-Q and 8-K.

The following discussion should be read in conjunction with the Consolidated Financial Statements and Notes thereto included in Item 8 of this Annual Report.

OVERVIEW

We are comprised of GRE, which owns and operates REPs, including IDT Energy, Residents Energy, Town Square Energy, and Mirabito Natural Gas, or Mirabito, and also offers energy brokerage and advisory services through its Genie Retail Energy Services and Diversegy divisions. Its REP businesses resell electricity and natural gas to residential and small business customers primarily in the Eastern United States. Through a joint venture, GRE has begun serving customers in Great Britain.

We are also comprised of GOGAS, an oil and gas exploration company with contracted drilling services as well. GOGAS' four exploration projects are inactive. GOGAS also holds a 100% interest in Atid, an early stage drilling services company operating in Israel.

We own 99.3% of our subsidiary, GEIC, which owns 100% of GRE, and 92% of GOGAS. GOGAS holds an 86.1% interest in Afek, an oil and gas exploration project in Northern Israel, whose operations have been suspended. GOGAS also holds controlling interests in other inactive oil and gas projects.

GRE has outstanding deferred stock units granted to officers and employees that represent an aggregate interest of 1.25% of the equity of GRE.

As part of our ongoing business development efforts, we seek out new opportunities, which may include complementary operations or businesses that reflect horizontal or vertical expansion from our current operations. Some of these potential opportunities are considered briefly and others are examined in further depth. In particular, we seek out acquisitions to expand the geographic scope and size of our REP businesses.

Genie Retail Energy

GRE operates REPs that resell electricity and/or natural gas to residential and small business customers in Connecticut, Delaware, Illinois, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Florida, Rhode Island, and Washington, D.C. GRE's revenues represented 100% of our consolidated revenues in the years ended December 31, 2017, 2016 and 2015.

On August 10, 2017, GRE acquired Mirabito Natural Gas, a Ft. Lauderdale, Florida-based natural gas supplier that serves commercial and government customers throughout Florida.

On July 17, 2017, our subsidiary, Genie Energy UK Ltd., or GEUK, entered into a definitive agreement with Energy Global Investments Pty Ltd, or EGC, to launch Shoreditch Energy Limited, or Shoreditch, a joint venture to offer electricity and natural gas service to residential and small business customers in the United Kingdom under the brand Orbit Energy. In December 2017, Orbit commenced initial customer acquisition in the United Kingdom under the mandated three-month Controlled Market Entry framework in which new entrants can acquire a limited number of customers in a test environment.

GRE's cost of revenues consists primarily of natural gas and electricity purchased for resale. As of November 19, 2015, certain of GRE's REPs entered into an Amended and Restated Preferred Supplier Agreement with BP pursuant to which those REPs purchase electricity and natural gas at a market rate plus a fee. The agreement's termination date is November 30, 2019, except either party may terminate the agreement on November 30, 2018 by giving the other party notice by May 31, 2018. IDT Energy's ability to purchase electricity and natural gas under this agreement is subject to satisfaction of certain conditions including the maintenance of certain covenants.

As an operator of REPs, GRE does not own electrical power generation, transmission, or distribution facilities, or natural gas production, pipeline or distribution facilities. Instead, GRE's REPs contract with various pipeline and distribution companies for natural gas pipeline, storage and transportation services, and utilizes NYISO, PJM, ISO New England and MISO for electric transmission and distribution. GRE's cost of revenues includes scheduling costs, ISO fees, pipeline costs and utility service charges for the purchase of these services.

For risk management purposes, GRE's REPs utilize put and call options and swaps as hedges against unfavorable fluctuations in market prices of electricity and natural gas and to reduce exposure from price fluctuations. The put and call options and swaps are recorded at fair value as a current asset or liability and any changes in fair value are recorded in cost of revenues. The impact of these options and swaps on cost of revenues is relatively small in comparison to the purchases of gas and electricity for resale.

The electricity transmission and distribution operators perform real-time load balancing for each of the electrical power grids in which GRE's REPs operate. Similarly, the utility or the LDC performs load balancing for each of the natural gas markets in which GRE's REPs operate. Load balancing ensures that the amount of electricity and natural gas that GRE's REPs purchase is equal to the amount necessary to service its REP customers' demands at any specific point in time. GRE's REPs manage the differences between the actual electricity and natural gas demands of its customers and its bulk or block purchases by buying and selling in the spot market, and through monthly cash settlements and/or adjustments to futures deliveries in accordance with the load balancing performed by utilities, LDCs, and electricity transmission and distribution operators. Suppliers and the LDC's charge or credit GRE for balancing the electricity and natural gas purchased and sold for its account.

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The local utilities generally meter and deliver electricity and natural gas to GRE’s REP customers. The local utilities provide billing and collection services on GRE’s REPs behalf for most of GRE’s REPs’ customers. GRE’s REPs receive the proceeds less the utility’s POR fees and in some cases less fees for billing and other ancillary services.

Volatility in the electricity and natural gas markets affects the wholesale cost of the electricity and natural gas that GRE’s REPs sell to customers. GRE’s REPs may not always choose to pass along increases in costs to its customers for various reasons including competitive pressures and for overall customer satisfaction. In addition, GRE’s REPs offer fixed rate products or guaranteed pricing and may be unable to change their sell rates offered to fixed rate and guaranteed pricing customers in response to volatility in the prices of the underlying commodities. This can adversely affect GRE’s gross margins and results of operations. Alternatively, increases in GRE’s REPs rates charged to customers may lead to increased customer churn.

GRE’s REPs’ selling expense consists primarily of sales commissions paid to independent agents and marketing costs, which are the primary costs associated with the acquisition of customers. General and administrative expense includes compensation, benefits, utility fees for billing and collection, professional fees, rent and other administrative costs.

Seasonality and Weather

The weather and the seasons, among other things, affect GRE’s REPs’ revenues. Weather conditions have a significant impact on the demand for natural gas used for heating and electricity used for heating and cooling. Typically, colder winters increase demand for natural gas and electricity, and hotter summers increase demand for electricity. Milder winters and/or summers have the opposite effect. Natural gas revenues typically increase in the first quarter due to increased heating demands and electricity revenues typically increase in the third quarter due to increased air conditioning use. Approximately 45% and 43% of GRE’s REPs’ natural gas revenues for the relevant years were generated in the first quarter of 2017 and 2016, respectively, when demand for heating was highest. Although the demand for electricity is not as seasonal as natural gas (due, in part, to usage of electricity for both heating and cooling), approximately 30% and 31% of GRE’s REPs’ electricity revenues for the relevant years were generated in the third quarter of 2017 and 2016, respectively.

Concentration of Customers and Associated Credit Risk

GRE’s REPs reduce their customer credit risk by participating in purchase of receivable programs for a majority of their receivables. In addition to providing billing and collection services, utility companies purchase those REPs’ receivables and assume all credit risk without recourse to those REPs. GRE’s REPs primary credit risk is therefore nonpayment by the utility companies. Certain of the utility companies represent significant portions of our consolidated revenues and consolidated gross trade accounts receivable balance and such concentrations increase our risk associated with nonpayment by those utility companies.

The following table summarizes the percentage of consolidated revenues from customers by utility company that equal or exceed 10% of consolidated revenues in the period (no other single utility company accounted for more than 10% of consolidated revenues in these periods):

	Year ended December 31,		
	2017	**2016**	**2015**
Con Edison	15 %	20 %	23 %
ComEd	10 %	13 %	na
National Grid USA	**na**	na	12 %

na – less than 10% of consolidated revenue in the period

The following table summarizes the percentage of consolidated gross trade accounts receivable by utility company that equal or exceed 10% of consolidated gross trade accounts receivable at December 31, 2017 and 2016 (no other single utility company accounted for 10% or greater of our consolidated gross trade accounts receivable at December 31, 2017 or 2016):

December 31	**2017**	**2016**
Con Edison	11 %	15 %
ComEd	**na**	10 %

na – less than 10% of consolidated gross trade accounts receivable

New York Public Service Commission Orders

On February 23, 2016, the New York PSC issued an order that sought to impose significant new restrictions on REPs operating in New York, including those owned by GRE. The restrictions described in the PSC’s order, which were to become effective March 4, 2016, would require that all REPs’ electricity and natural gas offerings to residential and small business customers include an annual guarantee of savings compared to the price charged by the relevant incumbent utility or, for electricity offerings, provide at least 30% of the supply from renewable sources. Customers not enrolled in a compliant program would be relinquished back to the local utility at the end of their contract period or, for variable price customers operating on month to month agreements, at the end of the current monthly billing cycle.

On March 4, 2016, a group of parties from the REP industry sought and won a temporary restraining order to stay implementation of the most restrictive portions of the PSC’s order pending a court hearing on those parties’ motion for a preliminary injunction. On July 25, 2016, the New York State Supreme Court, County of Albany, entered a decision and order granting the Petitioners’ petition, vacated provisions 1 through 3 of the Order, which outlined the proposed rule changes, and remitted the matter to the PSC for further proceedings consistent with the Court’s order.

In December 2017, the PSC held an evidentiary hearing to assess the retail energy market in New York. That process is continuing and is expected to last for at least several more months. We are evaluating the potential impact of any new order from the PSC that would follow from the evidentiary process, while preparing to operate in compliance with any new requirements that may be imposed. Depending on the final language of any new order, as well as our ability to modify our relationships with our New York customers, an order could have a substantial impact upon the operations of GRE’s REPs in New York. At December 31, 2017, New York represented 36% of GRE’s total meters served and 28% of the total RCEs of GRE’s customer base.

On July 14, 2016, and September 19, 2016, the PSC issued orders restricting REPs, including those owned by GRE, from serving customers enrolled in New York’s utility low-income assistance programs. Representatives of the REP industry challenged the ruling in New York State Supreme Court, Albany County, and, on September 27, 2016, the Court issued an order temporarily restraining the PSC from implementing the July and September orders. On December 16, 2016, the PSC issued an order, the 2016 Order, prohibiting REP service to customers enrolled in New York’s utility low-income assistance programs. After an agreed-upon stay of the 2016 Order, on July 5, 2017, the New York State Supreme Court, Albany County, denied interested parties’ efforts to invalidate the 2016 Order, and the 2016 Order began to be implemented on July 26, 2017. Several REPs have appealed the Supreme Court’s Order to the Appellate Division, Third Department. That court stayed implementation of the 2016 Order for a period of time, but later lifted the stay pending resolution of the appeal.

In a related action, several customers impacted by the 2016 Order filed a putative class action in the United States District Court for the Northern District of New York, challenging the 2016 Order. Temporary stays of the 2016 Order entered in connection with this action have expired, and REPs are now required to return service of their current low-income customers to the relevant local incumbent utility on the modified schedule set forth in the PSC's 2016 Order. GRE's REPs are complying with the 2016 Order and have begun the transfer of customers as required. The 2016 Order will require GRE's REPs to transfer customer accounts comprising approximately 21,000 meters, representing 12,000 RCEs, to their respective incumbent utilities during the first half of 2018.

Afek Oil and Gas, Ltd.

In April 2013, the Government of Israel finalized the award to Afek of an exclusive three-year petroleum exploration license covering 396.5 square kilometers in the southern portion of the Golan Heights in Northern Israel. The license has been extended to April 2018. Israel's Northern District Planning and Building Committee granted Afek a one-year permit that commenced in February 2015, which has been subsequently extended to April 18, 2018, to conduct an up to ten-well oil and gas exploration program.

In February 2015, Afek began drilling its first exploratory well. Afek completed drilling five wells in the Southern region of its license area. In light of the analysis received in the third quarter of 2016 and the information and market conditions at that time, Afek determined that it did not have a clear path to demonstrate probable or possible reserves in the Southern region of its license area over the next 12 to 18 months. Since there was substantial doubt regarding the economic viability of these wells, in the year ended December 31, 2016, Afek wrote off the $41.0 million of capitalized exploration costs incurred in the Southern region.

Afek turned its operational focus to the Northern region of its license area. Afek viewed the Northern and Southern regions separately when evaluating its unproved properties. In 2017, Afek drilled an exploratory well at a site in the Northern portion of its license area. In November 2017, Afek announced that the preliminary analysis of results from the completed well at the Northern site suggested that the well's target zone does not contain commercially producible quantities of oil or natural gas, and that it was suspending drilling operations pending further analysis. In the fourth quarter of 2017, Afek determined that it did not have a clear path to demonstrate probable or possible reserves in the Northern region of its license area over the next 12 to 18 months. Since there was substantial doubt regarding the economic viability of the well, Afek wrote off the $6.5 million of capitalized exploration costs incurred in the Northern region.

There is no current plan for a next phase of Afek's activity. Any future exploratory drilling would be contingent upon licensing and permitting. Afek may seek financing for any next phase of activity.

GOGAS Inactive Projects

Genie Mongolia

In April 2013, Genie Mongolia and the Petroleum Authority of Mongolia entered into an exclusive oil shale development agreement to explore and evaluate the commercial potential of oil shale resources in a 34,470 square kilometer area in Central Mongolia. In September 2014, Genie Mongolia signed a prospecting agreement with the Petroleum Authority of Mongolia covering an additional 25,000 square kilometers in Central Mongolia. Genie Mongolia maintains its rights to the acreage, however, it has suspended its operations in Mongolia.

American Shale Oil, LLC

AMSO, LLC holds a research, development and demonstration lease awarded by the U.S. Bureau of Land Management that covers an area of 160 acres in western Colorado. Through April 30, 2016, we accounted for our ownership interest in AMSO, LLC using the equity method since we had the ability to exercise significant influence over its operating and financial matters, although we did not control AMSO, LLC. AMSO, LLC was a variable interest entity, however, we determined that we were not the primary beneficiary.

On February 23, 2016, Total notified AMSO of its decision not to continue to fund AMSO, LLC. On March 23, 2016, Total gave AMSO its notice of withdrawal from AMSO, LLC. The withdrawal was effective on April 30, 2016. As of April 1, 2016, AMSO and Total agreed that Total would pay AMSO, LLC $3.0 million as full payment of its share of all costs associated with the decommissioning, winding up and dissolution of AMSO, LLC. Total will not be refunded any amount if the decommissioning costs are less than $3.0 million. At December 31, 2016, the AMSO, LLC project was substantially decommissioned. Effective April 30, 2016, AMSO, LLC's assets, liabilities, results of operations and cash flows are included in our consolidated financial statements.

We accounted for our acquisition on April 30, 2016 of Total's ownership interest in AMSO, LLC as a business combination. We estimated the fair value of AMSO, LLC to be nil, as it had ceased operations and its shutdown was in progress. We recognized a gain from the acquisition of Total's interest in AMSO, LLC because we acquired the net assets of AMSO, LLC while no consideration was transferred by us, due to our assumption of the risk associated with the shutdown obligations. The gain also included our gain on the remeasurement of AMSO's investment in AMSO, LLC at its acquisition date fair value. The aggregate gain recognized was $1.3 million, which was included in "Gain on consolidation of AMSO, LLC" in the consolidated statements of operations.

Israel Energy Initiatives, Ltd.

IEI had an exclusive Shale Oil Exploration and Production License awarded in July 2008 by the Government of Israel. The license covered approximately 238 square kilometers in the south of the Shfela region in Central Israel. On September 2, 2014, the Jerusalem District Committee for Planning and Building voted against issuing the pilot plant building and construction permits. The Shale Oil Exploration and Production License expired in July 2015. Operations at IEI are currently suspended.

CRITICAL ACCOUNTING POLICIES

Our financial statements and accompanying notes are prepared in accordance with accounting principles generally accepted in the United States of America, or U.S. GAAP. The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses as well as the disclosure of contingent assets and liabilities. Critical accounting policies are those that require application of management's most subjective or complex judgments, often as a result of matters that are inherently uncertain and may change in subsequent periods. Our critical accounting policies include those related to the allowance for doubtful accounts, goodwill, oil and gas accounting and income taxes. Management bases its estimates and judgments on historical experience and other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions. See Note 1 to the Consolidated Financial Statements in this Annual Report for a complete discussion of our significant accounting policies.

Allowance for Doubtful Accounts

We maintain an allowance for doubtful accounts for estimated losses that result from the inability or unwillingness of our customers to make required payments. The allowance for doubtful accounts was $1.1 million at December 31, 2017 and $0.2 million at December 31, 2016. Our allowance is determined based on known troubled accounts, historical experience and other currently available evidence. Our estimates of recoverability of customer accounts may change due to new developments, changes in assumptions or changes in our strategy, which may impact our allowance for doubtful accounts balance. We continually assess the likelihood of potential amounts or ranges of recoverability and adjust our allowance accordingly, however, actual collections and write-offs of trade accounts receivable may materially differ from our estimates.

Goodwill

Our goodwill balance of $10.0 million and $8.7 million at December 31, 2017 and 2016, respectively, was allocated to our GRE segment. GRE is the reporting unit for our goodwill impairment tests. Goodwill is not amortized since it is deemed to have an indefinite life. It is reviewed annually (or more frequently under various conditions) for impairment using a fair value approach.

In 2017, we adopted the Accounting Standards Update, or ASU, that simplifies the subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test. In computing the implied fair value of goodwill under Step 2, an entity had to perform procedures to determine the fair value at the impairment testing date of its assets and liabilities (including unrecognized assets and liabilities) following the procedure that would be required in determining the fair value of assets acquired and liabilities assumed in a business combination. Instead, under the amendments in this ASU, we perform our annual, or interim, goodwill impairment test by comparing the fair value of our reporting units with their carrying amounts. We would recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit’s fair value; however, the loss recognized would not exceed the total amount of goodwill allocated to that reporting unit. Additionally, we consider income tax effects from any tax deductible goodwill on the carrying amount of the reporting unit when measuring the goodwill impairment loss, if applicable.

We have the option to perform a qualitative assessment to determine whether it is necessary to perform the quantitative goodwill impairment test. However, we may elect to perform the quantitative goodwill impairment test even if no indications of a potential impairment exist.

We estimate the fair value of our reporting units using discounted cash flow methodologies, as well as considering third party market value indicators. For GRE's annual impairment test for the year ended December 31, 2017, since its estimated fair value substantially exceeded its carrying value, there was no goodwill impairment. In addition, we do not believe GRE is currently at risk of goodwill impairment. For GRE's annual impairment tests for the years ended December 31, 2016 and 2015, since its estimated fair value substantially exceeded its carrying value in Step 1, it was not necessary to perform Step 2 for these tests.

Calculating the fair value of the reporting units requires significant estimates and assumptions by management. Should our estimates or assumptions regarding the fair value of our reporting units prove to be incorrect, we may be required to record impairments to our goodwill in future periods and such impairments could be material.

Oil and Gas Accounting

We account for our oil and gas activities under the successful efforts method of accounting. Under this method, the costs of drilling exploratory wells and exploratory-type stratigraphic test wells are capitalized, pending determination of whether the well has found proved reserves. Other exploration costs are charged to expense as incurred. Unproved properties are assessed for impairment, and if considered impaired, are charged to expense when such impairment is deemed to have occurred. The assessment of unproved properties for impairment requires significant estimates and assumptions by management.

At December 31, 2017 and 2016, our capitalized exploration costs — unproved oil and gas property were nil. In the third quarter of 2016, based on the analysis of the first five wells and market conditions at that time, Afek determined that it did not have a clear path to demonstrate probable or possible reserves in the Southern region of its license area over the next 12 to 18 months. Since there was substantial doubt regarding the economic viability of its five wells in the Southern region, in the year ended December 31, 2016, Afek wrote off the $41.0 million of capitalized exploration costs incurred in the Southern region. In the fourth quarter of 2017, Afek determined that it did not have a clear path to demonstrate probable or possible reserves in the Northern region of its license area over the next 12 to 18 months. Since there was substantial doubt regarding the economic viability of its well, Afek wrote off the $6.5 million of capitalized exploration costs incurred in the Northern region.

Income Taxes

Our current and deferred income taxes and associated valuation allowance are impacted by events and transactions arising in the normal course of business as well as in connection with special and non-routine items. Assessment of the appropriate amount and classification of income taxes is dependent on several factors, including estimates of the timing and realization of deferred income tax assets, the results of Internal Revenue Service audits of our federal income tax returns, and changes in tax laws or regulations.

The valuation allowance on our deferred income tax assets was $48.3 million and $53.0 million at December 31, 2017 and 2016, respectively. We employ a tax strategy that enables us to currently deduct losses from our foreign subsidiaries against our profitable U.S. operations. Because of this strategy and our current projections, we concluded that we do not meet the criteria of more likely than not in order to utilize our deferred federal income tax assets in the foreseeable future.

We use a two-step approach for recognizing and measuring tax benefits taken or expected to be taken in a tax return. We determine whether it is more-likely-than-not that, a tax position will be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. In evaluating whether a tax position has met the more-likely-than-not recognition threshold, we presume that the appropriate taxing authority that has full knowledge of all relevant information will examine the position. Tax positions that meet the more-likely-than-not recognition threshold are measured to determine the amount of tax benefit to recognize in the financial statements. The tax position is measured at the largest amount of benefit that is greater than 50 percent likely of being realized upon ultimate settlement. Differences between tax positions taken in a tax return and amounts recognized in the financial statements will generally result in one or more of the following: an increase in a liability for income taxes payable, a reduction of an income tax refund receivable, a reduction in a deferred tax asset, or an increase in a deferred tax liability. We review and adjust our liability for unrecognized tax benefits based on our best estimate and judgment given the facts, circumstances and information available at each reporting date. To the extent that the outcome of these tax positions is different from the amounts recorded, such differences may affect income tax expense and actual tax payments.

RECENTLY ISSUED ACCOUNTING STANDARDS NOT YET ADOPTED

In February 2016, the Financial Accounting Standards Board, or FASB, issued an ASU related to the accounting for leases. The new standard establishes a right-of-use, or ROU, model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. We will adopt the new standard on January 1, 2019. A modified retrospective transition approach is required for lessees for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. We are evaluating the impact that the new standard will have on our consolidated financial statements.

In June 2016, the FASB issued an ASU that changes the impairment model for most financial assets and certain other instruments. For receivables, loans and other instruments, entities will be required to use a new forward-looking "expected loss" model that generally will result in the earlier recognition of allowance for losses. For available-for-sale debt securities with unrealized losses, entities will measure credit losses in a manner similar to current practice, except the losses will be recognized as allowances instead of reductions in the amortized cost of the securities. In addition, an entity will have to disclose significantly more information about allowances, credit quality indicators and past due securities. The new provisions will be applied as a cumulative-effect adjustment to retained earnings. We will adopt the new standard on January 1, 2020. We are evaluating the impact that the new standard will have on our consolidated financial statements.

In August 2017, the FASB issued an ASU intended to improve the financial reporting of hedging relationships to better portray the economic results of an entity's risk management activities in its financial statements. In addition, the ASU includes certain targeted improvements to simplify the application of hedge accounting guidance in U.S. GAAP. The amendments in this ASU are effective for us on January 1, 2019. Early application is permitted. Entities will apply the amendments to cash flow and net investment hedge relationships that exist on the date of adoption using a modified retrospective approach. The presentation and disclosure requirements will be applied prospectively. We are evaluating the impact that this ASU will have on our consolidated financial statements.

RESULTS OF OPERATIONS

We evaluate the performance of our operating business segments based primarily on income (loss) from operations. Accordingly, the income and expense line items below income (loss) from operations are only included in our discussion of the consolidated results of operations.

In May 2014, the FASB and the International Accounting Standards Board jointly issued a comprehensive new revenue recognition standard that superseded most of the revenue recognition guidance under U.S. GAAP and International Financial Reporting Standards, or IFRS. The goals of the revenue recognition project were to clarify and converge the revenue recognition principles under U.S. GAAP and IFRS and to develop guidance that would streamline and enhance revenue recognition requirements. We adopted this standard on January 1, 2018 using the modified retrospective method.

We have substantially completed our evaluation of the effects of adopting the new standard and determined that it will not have any impact on revenue recognition and measurement in our consolidated financial statements upon adoption. Variable quantities in requirements contracts are considered to be options for additional goods and services which follow discussions outlined in the AICPA Power and Utilities Industry Task Force Issue No. 13-2. Revenue for each unit of electricity or natural gas is recognized as it is delivered to the customer. We will estimate variable consideration related to our rebate programs using the expected value method and a portfolio approach. We expect to apply a practical expedient for expensing costs to obtain a contract as the estimated customer relationship periods are currently less than twelve months. We will monitor our customer relationship periods going forward to ensure compliance with the application of the practical expedient. The adoption of the new standard will not have any impact on our current method of recording accrued rebates.

We are also currently reviewing future required disclosures, and updating our accounting policy. We anticipate completing the implementation in connection with our first quarter 2018 interim financial statements.

Year Ended December 31, 2017 compared to Year Ended December 31, 2016

Genie Retail Energy Segment

(in millions)			**Change**	
Year ended December 31,	**2017**	**2016**	**$**	**%**
Revenues:				
Electricity	$222.2	$179.5	$42.7	23.8 %
Natural gas	40.1	31.0	9.1	29.2
Other	1.9	1.6	0.3	19.8
Total revenues	264.2	212.1	52.1	24.6
Cost of revenues	178.7	135.2	43.5	32.2
Gross profit	85.5	76.9	8.6	11.1
Selling, general and administrative	68.3	50.4	17.9	35.5
Equity in net loss of joint venture	0.6	—	0.6	nm
Income from operations	$16.6	$26.5	$(9.9)	(37.4)%

nm — not meaningful

On August 10, 2017, GRE acquired Mirabito Natural Gas, a Ft. Lauderdale, Florida-based natural gas supplier that serves commercial and government customers throughout Florida. Mirabito’s operating results from the date of acquisition, which were not significant, are included in our results of operations.

On July 17, 2017, our subsidiary, GEUK, entered into a definitive agreement with EGC to launch Shoreditch, a joint venture to offer electricity and natural gas service to residential and small business customers in the United Kingdom.

On November 2, 2016, GRE acquired REH, a privately held owner of REPs that operates as TSE in eight states. REH's licenses and customer base expanded GRE's geographic footprint to four new states — New Hampshire, Rhode Island, Massachusetts and Connecticut — and provided additional electricity customers in New Jersey, Maryland, Ohio and Pennsylvania.

On July 5, 2017, we entered into a class action Settlement Agreement with the class action plaintiffs acting individually and on behalf of the entire class, in the lawsuits currently pending in New York, Pennsylvania and New Jersey (see Item 3 to Part I "Legal Proceedings" included in this Annual Report). We estimated, based in part on historical participation rates that our total settlement payment will be approximately $9 million, although it is reasonably possible that the total payments could reach $10.1 million. The actual amount to be paid out will depend on several factors, including the number of customers who claim settlement payments to which they are entitled. The Settlement Agreement is subject to entry of a final order by the Court approving the Settlement Agreement. The Court has scheduled a hearing on final approval in April 2018. In the year ended December 31, 2017, we recorded a revenue reduction of $3.6 million for estimated payments to customers, of which $3.1 million reduced electricity revenues and $0.5 million reduced natural gas revenues, and an expense of $5.4 million that is included in "Selling, general and administrative expense."

We have been engaged in discussions with the New Jersey Office of the Attorney General regarding concerns raised by the New Jersey Board of Public Utilities and Division of Consumer Affairs related to energy supply charges issued to our retail customers during the first quarter of 2014 (see Item 3 to Part I "Legal Proceedings" included in this Annual Report) and have reached a tentative agreement in principle. In the year ended December 31, 2017, we accrued $1.5 million of estimated loss related to this matter. We recorded a revenue reduction of $1.3 million relating to refunds to customers, of which half reduced electricity revenues and half reduced natural gas revenues, and an expense of $0.2 million for related fees that is included in "Selling, general and administrative expense."

Revenues. GRE's electricity revenues increased in 2017 compared to 2016 because of customers of REH. We acquired REH in November 2016 at which time it served 43,000 electricity-only customers. REH customers represented an average of approximately 61,400 electricity-only customers, and $49.9 million in electricity revenues in 2017 compared to $6.1 million in electricity revenues in November and December 2016. Electricity consumption by GRE's REP customers, including by TSE's electricity customers, increased 21.5% in 2017 compared to 2016, and average consumption per meter increased 10.0% in 2017 compared to 2016. Average meters served increased 10.5% in 2017 compared to 2016. In addition, the average rate charged to customers increased 1.9% in 2017 compared to 2016. The increase in electricity revenues in 2017 compared to 2016 was partially offset by an aggregate reduction of $3.8 million for estimated payments to customers as a result of the settlement of the class action lawsuits described above and for the pending regulatory matter in New Jersey described above.

GRE's natural gas revenues increased in 2017 compared to 2016 because of an increase in the average rate charged to customers. In addition, the Mirabito acquisition in August 2017 added $2.3 million in natural gas revenues in 2017, which was partially offset by the reduction of $0.7 million in 2017 for the pending regulatory matter in New Jersey described above, and a reduction of $0.5 million for estimated payments to customers as a result of the settlement of the class action lawsuits described above. The average rate charged to customers increased 29.2% in 2017 compared to 2016 reflecting an increase in the underlying commodity cost. Natural gas meters served decreased 6.3% in 2017 compared to 2016, although average consumption per meter increased 6.8% in 2017 compared to 2016. Natural gas consumption, including by Mirabito's natural gas customers, was substantially unchanged in 2017 compared to 2016.

The customer base for GRE's REPs as measured by meters served consisted of the following:

(in thousands)	**December 31, 2017**	**September 30, 2017**	**June 30, 2017**	**March 31, 2017**	**December 31, 2016**
Meters at end of quarter:					
Electricity customers	307	330	317	307	296
Natural gas customers	105	116	113	111	116
Total meters	412	446	430	418	412

The total meters at December 31, 2017 and 2016 included TSE's respective approximate 78,400 and 44,500 electric-only meters, and Mirabito's approximately 970 natural gas-only meters at December 31, 2017. Gross meter acquisitions in 2017 were 355,000 (including TSE's and Mirabito's gross meter acquisitions) compared to 235,000 in 2016. In response to the New York PSC developments discussed above, we focused our meter acquisition efforts outside of New York State while simultaneously taking steps to reduce the prospective and contingent impacts of the PSC's orders on our New York operations. Meters served decreased by approximately 400 or 0.1% from December 31, 2016 to December 31, 2017, compared to an increase of 20,000 or 5.0% from December 31, 2015 to December 31, 2016. Average monthly churn increased to 6.6% in 2017 from 6.0% in 2016. In 2017, GRE modified its method of calculating churn and these figures reflect the revised methodology.

GRE’s REPs have applications pending to enter into additional utility service areas, primarily electric and dual meter territories in the states where we currently operate. We continue to evaluate additional, deregulation-driven opportunities in order to expand our business geographically.

The average rates of annualized energy consumption, as measured by residential customer equivalents, or RCEs, are presented in the chart below. An RCE represents a natural gas customer with annual consumption of 100 mmbtu or an electricity customer with annual consumption of 10 MWh. Because different customers have different rates of energy consumption, RCEs are an industry standard metric for evaluating the consumption profile of a given retail customer base.

(in thousands)	**December 31, 2017**	**September 30, 2017**	**June 30, 2017**	**March 31, 2017**	**December 31, 2016**
RCEs at end of quarter:					
Electricity customers	228	243	219	220	218
Natural gas customers	73	82	70	67	65
Total RCEs	301	325	289	287	283

Total RCEs at December 31, 2017 and December 31, 2016 included TSE’s approximately 67,400 and 50,600 electric-only RCEs, respectively, and Mirabito’s approximately 11,300 natural gas-only RCEs at December 31, 2017. Exclusive of the impact of the TSE and Mirabito acquisitions on RCEs and meters, RCEs decreased 4.1% at December 31, 2017 compared to December 31, 2016 primarily due to weather conditions in portions of our service area.

Other revenue in 2017 and 2016 included commissions, entry fees and other fees from our energy brokerage and marketing services businesses.

Cost of Revenues and Gross Margin Percentage. GRE's cost of revenues and gross margin percentage were as follows:

(in millions)			**Change**	
Year ended December 31,	**2017**	2016	**$**	**%**
Cost of revenues:				
Electricity	$149.7	$113.0	$36.7	32.5%
Natural gas	28.2	21.6	6.6	30.8
Other	0.8	0.6	0.2	27.9
Total cost of revenues	$178.7	$135.2	$43.5	32.2%

Year ended December 31,	**2017**	**2016**	**Change**
Gross margin percentage:			
Electricity	32.6%	37.0%	(4.4)%
Natural gas	29.7	30.5	(0.8)
Other	58.7	61.3	(2.6)
Total gross margin percentage	32.4%	36.3%	(3.9)%

Cost of revenues for electricity increased in 2017 compared to 2016 primarily because of the acquisition of REH in November 2016, which added $43.5 million in cost of revenues for electricity in 2017 compared to $5.0 million in November and December 2016. Electricity consumption by GRE's REP's customers in 2017 increased 21.5% compared to 2016, including consumption from TSE's electricity customers, and the average unit cost of electricity increased 9.0% in 2017 compared to 2016. Gross margin on electricity sales decreased in 2017 compared to 2016 because the average rate charged to customers increased less than the average unit cost of electricity.

Cost of revenues for natural gas increased in 2017 compared to 2016 primarily because the average unit cost of natural gas increased 30.7% in 2017 compared to 2016. The Mirabito acquisition in August 2017 added $1.6 million in cost of revenues for natural gas in 2017. Natural gas consumption, including by Mirabito's natural gas customers, was substantially unchanged in 2017 compared to 2016. Gross margin on natural gas sales decreased in 2017 compared to 2016 because the average rate charged to customers increased less than the average unit cost of natural gas.

Other cost of revenues primarily includes commission expense incurred by our energy brokerage and marketing services businesses.

Selling, General and Administrative. The increase in selling, general and administrative expense in 2017 compared to 2016 was due to an increase in customer acquisition costs, reflecting the increase in gross meter acquisitions, an increase in amortization expense from the amortization of the intangible assets acquired in the REH and Mirabito acquisitions, as well as an increase in payroll expense. In addition, the increase in selling, general and administrative expense in 2017 compared to 2016 was due to the accrual of $5.4 million for the settlement of various class action lawsuits described above. As a percentage of GRE's total revenues, selling, general and administrative expense increased from 23.8% in 2016 to 25.9% in 2017.

Equity in net loss of joint venture. GEUK accounts for its ownership interest in Shoreditch using the equity method since GEUK has the ability to exercise significant influence over its operating and financial matters, although it does not control Shoreditch. Shoreditch is a variable interest entity, however, GEUK has determined that it is not the primary beneficiary, as GEUK does not have the power to direct the activities that most significantly impact Shoreditch's economic performance. In December 2017, Shoreditch commenced initial customer acquisition in the United Kingdom under the mandated three-month Controlled Market Entry framework in which new entrants can acquire a limited number of customers in a test environment. Shoreditch's net loss from its inception to December 31, 2017 was $0.8 million.

Afek Segment

Afek does not currently generate any revenues, nor does it incur any cost of revenues.

(in millions)			**Change**	
Year ended December 31,	**2017**	**2016**	**$**	**%**
General and administrative expense	$1.3	$1.1	$0.2	24.1 %
Exploration	4.9	6.1	(1.2)	(19.9)
Write-off of capitalized exploration costs	6.5	41.0	(34.5)	(84.2)
Other operating loss, net	—	0.1	(0.1)	(100.0)
Loss from operations	$12.7	$48.3	$(35.6)	(73.7)%

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General and Administrative. General and administrative expense increased in 2017 compared to 2016 primarily because of an increase in depreciation expense, as well as a reduction in the amount of costs classified as exploration expense and capitalized exploration costs.

Exploration. Afek accounts for its oil and gas activities under the successful efforts method of accounting. Under this method, the costs of drilling exploratory wells and exploratory-type stratigraphic test wells are capitalized, pending determination of whether the well has found proved reserves. Other exploration costs are charged to expense as incurred. In February 2015, Afek began drilling its first exploratory well in Northern Israel's Golan Heights. Afek completed drilling five wells in the Southern region of its license area. Afek subsequently turned its operational focus to the Northern region of its license area. In 2017, Afek commenced drilling its sixth exploratory well at one of the Northern sites in its license area. In November 2017, Afek announced that the preliminary analysis of results from the completed well at the Northern site suggested that the well's target zone does not contain commercially producible quantities of oil or natural gas, and that it was suspending drilling operations pending further analysis.

Write-Off of Capitalized Exploration Costs. Afek assesses the economic and operational viability of its project on an ongoing basis. The assessment requires significant estimates and assumptions by management. In the fourth quarter of 2017, Afek determined that it did not have a clear path to demonstrate probable or possible reserves in the Northern region of its license area over the next 12 to 18 months. Since there was substantial doubt regarding the economic viability of the well, Afek wrote off the $6.5 million of capitalized exploration costs incurred in the Northern region. In the third quarter of 2016, based on the analysis of the first five wells and market conditions at that time, Afek determined that it did not have a clear path to demonstrate probable or possible reserves in the Southern region of its license area over the next 12 to 18 months. Since there was substantial doubt regarding the economic viability of these wells, in 2016, Afek wrote off the $41.0 million of capitalized exploration costs incurred in the Southern region.

Other Operating Loss, net. In 2016, Afek incurred net expense of $0.1 million from its drilling and related operations for the Mei Golan Water Cooperative, a water cooperative of agricultural settlements in the Golan Heights.

Genie Oil and Gas Segment

Genie Oil and Gas does not currently generate any revenues, nor does it incur any cost of revenues. On March 23, 2016, Total gave AMSO its notice of withdrawal from AMSO, LLC. The withdrawal was effective on April 30, 2016. As a result of Total's withdrawal, beginning on April 30, 2016, AMSO, LLC's assets, liabilities, results of operations and cash flows are included in our consolidated financial statements.

(in millions)	**Change**

Year ended December 31,	**2017**	**2016**	**$**	**%**
General and administrative expense	$(0.6)	$(1.0)	$0.4	32.0 %
Research and development	—	0.3	(0.3)	(100.0)
Gain on consolidation of AMSO, LLC	—	1.3	(1.3)	(100.0)
Equity in net loss of AMSO, LLC	—	(0.2)	0.2	100.0
(Loss) income from operations	$(0.6)	$0.4	$(1.0)	(235.3)%

General and Administrative. General and administrative expense decreased in 2017 compared to 2016 primarily because of decreases in payroll and severance expense, partially offset by an increase in stock-based compensation expense.

Research and Development. At December 31, 2016, AMSO, LLC's oil shale development project in Colorado was substantially decommissioned. In 2016, AMSO, LLC reversed accrued research and development expense related to its decommissioning, winding up and dissolution.

Gain on consolidation of AMSO, LLC. We accounted for our acquisition on April 30, 2016 of Total's ownership interest in AMSO, LLC as a business combination. We recognized a gain from the acquisition of Total's interest in AMSO, LLC because we acquired the net assets of AMSO, LLC while no consideration was transferred by us, due to our assumption of the risk associated with the shutdown obligations. The gain also included our gain on the remeasurement of AMSO's investment in AMSO, LLC at its acquisition date fair value. The aggregate gain recognized was $1.3 million.

Equity in the Net Loss of AMSO, LLC. In part because of AMSO's decisions not to fund all of its share of AMSO, LLC's expenditures in 2014 and 2015, AMSO, LLC allocated its net loss mostly to Total in 2015 and from January 1, 2016 until April 30, 2016, the effective date of Total's withdrawal from AMSO, LLC.

Corporate

Corporate does not generate any revenues, nor does it incur any cost of revenues. Corporate costs include unallocated compensation, consulting fees, legal fees, business development expense and other corporate-related general and administrative expense.

(in millions)			**Change**	
Year ended December 31,	**2017**	**2016**	**$**	**%**
General and administrative expense and loss from operations	$9.8	$9.2	$0.6	7.1%

The increase in Corporate general and administrative expense in 2017 compared to 2016 was primarily due to severance expense that we accrued in 2017 for our former President. As a percentage of our consolidated revenues, Corporate general and administrative expense decreased from 4.3% in 2016 to 3.7% in 2017.

Consolidated

Selling, General and Administrative. Pursuant to an agreement between us and IDT, IDT charges us for services it provides to us, and we charge IDT for services that we provide to certain of IDT's subsidiaries. In 2017 and 2016, the amounts that IDT charged us, net of the amounts that we charged IDT, were $1.3 million and $1.6 million, respectively, which were included in consolidated selling, general and administrative expense.

Stock-based compensation expense included in consolidated selling, general and administrative expense was $5.2 million and $4.8 million in 2017 and 2016, respectively. At December 31, 2017, aggregate unrecognized compensation cost related to non-vested stock-based compensation was $4.8 million. The unrecognized compensation cost is recognized over the expected service period.

The following is a discussion of our consolidated income and expense line items below loss from operations.

(in millions)			**Change**	
Year ended December 31,	**2017**	2016	**$**	**%**
Loss from operations	$(6.5)	$(30.5)	$24.0	78.6 %
Interest income	0.3	0.3	—	(11.1)

Interest expense	(0.3)	—	(0.3)	nm
Other (expense) income, net	(0.4)	0.2	(0.6)	(262.4)
Provision for income taxes	(1.7)	(2.2)	0.5	22.2
Net loss	(8.6)	(32.2)	23.6	73.1
Net loss attributable to noncontrolling interests	1.6	7.7	(6.1)	(78.4)
Net loss attributable to Genie	$(7.0)	$(24.5)	$17.5	71.5 %

nm — not meaningful

Interest Expense. On April 4, 2017, we entered into a Credit Agreement with Vantage Commodities Financial Services II, LLC, or Vantage, for a $20 million revolving line of credit. In 2017, we incurred interest expense from borrowings under the Vantage revolving line of credit.

Other (Expense) Income, net. Other (expense) income, net, included foreign currency transaction losses of $0.4 million in 2017 and foreign currency transaction gains of $0.1 million in 2016. In addition, in 2016, included a $0.2 million gain from the repayment of the Maple Bank GmbH revolving credit loan payable.

Provision for Income Taxes. The decrease in the provision for income taxes in 2017 compared to 2016 was primarily due to the decrease in income tax expense in GRE. GRE includes IDT Energy, certain limited liability companies and our consolidated variable interest entity. For purposes of computing Federal income taxes, we consolidate the GOGAS and Afek entities so that the losses from those businesses offset the taxable income from GRE and reduce the consolidated tax provision to zero. The additional net operating losses are fully offset by a valuation allowance so no additional benefit for Federal income taxes was recorded. IDT Energy and the limited liability companies are included in our consolidated return. Citizens Choice Energy, LLC, or CCE, a consolidated variable interest entity, files a separate tax return since we do not have any ownership interest in CCE.

On December 22, 2017 the U.S. enacted the Tax Cuts and Jobs Act, which makes various changes to the U.S. tax code, including a reduction in the corporate tax rate from 35% to 21% effective January 1, 2018. We have not completed our accounting for the income tax effects of the enactment of the Tax Cuts and Jobs Act; however, we have made a reasonable estimate of the effect on our existing deferred tax assets and corresponding valuation allowance. At December 31, 2017, we adjusted our deferred income tax assets and related valuation allowance in equal and offsetting amounts to reflect the new rate. There was no impact to our provision for income taxes from this adjustment. We do not expect the enactment of the Tax Cuts and Jobs Act to have any other material impact on our consolidated financial statements.

Net Loss Attributable to Noncontrolling Interests. The change in the net loss attributable to noncontrolling interests in 2017 compared to 2016 was primarily due to the noncontrolling interest's share of Afek's write-off of capitalized exploration costs in 2016. In 2016, the noncontrolling interest in Afek increased from 13.5% to 14.9% and the write-off of capitalized exploration costs was $41.0 million.

Year Ended December 31, 2016 compared to Year Ended December 31, 2015

Genie Retail Energy Segment

(in millions)			**Change**	
Year ended December 31,	**2016**	**2015**	**$**	**%**
Revenues:				
Electricity	$179.5	$170.3	$9.2	5.4 %
Natural gas	31.0	40.8	(9.8)	(23.9)
Other	1.6	2.0	(0.4)	(19.9)
Total revenues	212.1	213.1	(1.0)	(0.4)
Cost of revenues	135.2	146.4	(11.2)	(7.7)
Gross profit	76.9	66.7	10.2	15.4
Selling, general and administrative	50.4	55.6	(5.2)	(9.2)
Income from operations	$26.5	$11.1	$15.4	138.9%

On November 2, 2016, GRE acquired REH, a privately held owner of REPs that operates as TSE in eight states. REH's licenses and customer base expanded GRE's geographic footprint to four new states — New Hampshire, Rhode Island, Massachusetts and Connecticut — and provided additional electricity customers in New Jersey, Maryland, Ohio and Pennsylvania. In addition, GRE's REPs began operations in Ohio in the second quarter of 2016.

Revenues. GRE's electricity revenues increased in 2016 compared to 2015 partially because of the acquisition of REH in November 2016, which added approximately 43,000 electricity-only customers at acquisition and $6.1 million in electricity revenues in November and December 2016, which offset a 6.5% decline in the average rate charged to electricity customers. GRE's electricity consumption in 2016 compared to 2015 increased 12.7%, including the TSE electricity customers. The increase in electricity consumption reflected the increase in average meters served, which increased 14.1% in 2016 compared to 2015, although average consumption per meter decreased 1.3% in 2016 compared to 2015.

GRE's natural gas revenues decreased in 2016 compared to 2015 because of a 16.9% decrease in the average rate charged to customers, and an 8.4% decrease in natural gas consumption. The decrease in natural gas consumption was the result of a 3.6% decrease in average meters served, as well as a 5.0% decrease in average consumption per meter, in 2016 compared to 2015.

GRE's customer base as measured by meters served consisted of the following:

(in thousands)	**December 31, 2016**	**September 30, 2016**	**June 30, 2016**	**March 31, 2016**	**December 31, 2015**
Meters at end of quarter:					
Electricity customers	296	263	268	267	264
Natural gas customers	116	120	122	126	128
Total meters	412	383	390	393	392

The total meters at December 31, 2016 included TSE's approximately 44,500 electric-only meters. Gross meter acquisitions in 2016, exclusive of TSE, were 235,000 compared to 275,000 in 2015. In response to the New York PSC developments discussed above, we focused our meter acquisition efforts outside of New York State while simultaneously taking steps to reduce the prospective and contingent impacts of the PSC's orders on our New York operations. Including the impact of the REH acquisition, meters served increased by 20,000 or 5.0% from December 31, 2015 to December 31, 2016 compared to an increase of 29,000 or 8.4% from December 31, 2014 to December 31, 2015. Average monthly churn increased from 5.4% in 2015 to 6.0% in 2016. Note that in 2017, GRE modified its method of calculating churn and these figures reflect the revised methodology.

The average rates of annualized energy consumption, as measured by residential customer equivalents, or RCEs, are presented in the chart below. An RCE represents a natural gas customer with annual consumption of 100 mmbtu or an electricity customer with annual consumption of 10 MWh. Because different customers have different rates of energy consumption, RCEs are an industry standard metric for evaluating the consumption profile of a given retail customer base.

(in thousands)	**December 31, 2016**	**September 30, 2016**	**June 30, 2016**	**March 31, 2016**	**December 31, 2015**
RCEs at end of quarter:					
Electricity customers	218	174	172	175	178
Natural gas customers	65	67	67	72	81
Total RCEs	283	241	239	247	259

Total RCEs at December 31, 2016 included TSE's approximately 50,600 electric-only RCEs. Exclusive of the impact of the REH acquisition, RCEs decreased at December 31, 2016 compared to December 31, 2015 primarily due to changing weather patterns as well as the declines in electric and natural gas meters served.

Other revenue in 2016 and 2015 included commissions, entry fees and other fees from our energy brokerage and marketing services businesses.

Cost of Revenues and Gross Margin Percentage. GRE's cost of revenues and gross margin percentage were as follows:

(in millions)			**Change**	
Year ended December 31,	**2016**	**2015**	**$**	**%**
Cost of revenues:				
Electricity	$113.0	$112.7	$0.3	0.2 %
Natural gas	21.6	31.5	(9.9)	(31.5)
Other	0.6	2.2	(1.6)	(71.7)
Total cost of revenues	$135.2	$146.4	$(11.2)	(7.7)%

Year ended December 31,	**2016**	**2015**	**Change**
Gross margin percentage:			
Electricity	37.0%	33.8%	3.2 %
Natural gas	30.5	22.7	7.8

Other	61.3	(9.5)	70.8	
Total gross margin percentage	36.3%	31.3%	5.0	%

Cost of revenues for electricity increased in 2016 compared to 2015 primarily because of the acquisition of REH in November 2016, which added $5.0 million in cost of revenues for electricity in November and December 2016. GRE's electricity consumption in 2016 compared to 2015 increased 12.7%, including the TSE electricity customers. The increase in cost of revenues for electricity was partially offset by an 11.0% decrease in the average unit cost of electricity in 2016 compared to 2015. Gross margin on electricity sales increased in 2016 compared to 2015 because the average rate charged to customers decreased less than the average unit cost of electricity.

Cost of revenues for natural gas decreased in 2016 compared to 2015 primarily because the average unit cost of natural gas decreased 25.3% in 2016 compared to 2015 and natural gas consumption decreased 8.4% in 2016 compared to 2015. Gross margin on natural gas sales increased in 2016 compared to 2015 because the average rate charged to customers decreased less than the average unit cost of natural gas.

Other cost of revenues primarily includes commission expense incurred by our energy brokerage and marketing services businesses.

Selling, General and Administrative. The decrease in selling, general and administrative expense in 2016 compared to 2015 was due to a decrease in the cost of regulatory and legal matters, the reorganization of our energy brokerage and marketing services businesses that reduced the payroll, office rent and certain other general and administrative expenses of those businesses, and a reduction in customer acquisition costs. In 2015, selling, general and administrative expense included an accrual of $2.7 million for regulatory and legal matters including outside counsel fees. As a percentage of GRE's total revenues, selling, general and administrative expense decreased from 26.1% in 2015 to 23.8% in 2016.

Afek Segment

Afek does not currently generate any revenues, nor does it incur any cost of revenues.

(in millions)			**Change**	
Year ended December 31,	**2016**	**2015**	**$**	**%**
General and administrative expense	$1.1	$0.8	$0.3	32.6 %
Research and development	—	0.1	(0.1)	(100.0)
Exploration	6.1	6.6	(0.5)	(7.5)
Write-off of capitalized exploration costs	41.0	—	41.0	nm
Other operating loss, net	0.1	—	0.1	nm
Loss from operations	$48.3	$7.5	$40.8	547.3 %

nm — not meaningful

General and Administrative. General and administrative expense increased in 2016 compared to 2015 primarily because of an increase in payroll expense partially offset by a decrease in consulting and professional fees.

Exploration. In February 2015, Afek began drilling its first exploratory well. Exploration costs in 2016 and 2015 related to the drilling of five wells in the Southern region of its license area that was completed in 2016.

Write-Off of Capitalized Exploration Costs. Based on the analysis of the first five wells and market conditions at that time, in the third quarter of 2016, Afek determined that it did not have a clear path to demonstrate probable or possible reserves in the Southern region of its license area over the next 12 to 18 months. Since there was substantial doubt regarding the economic viability of these wells, in 2016, Afek wrote off the $41.0 million of capitalized exploration costs incurred in the Southern region.

Other Operating Loss, net. In 2016, Afek incurred net expense of $0.1 million from its drilling and related operations for the Mei Golan Water Cooperative, a water cooperative of agricultural settlements in the Golan Heights.

Genie Oil and Gas Segment

Genie Oil and Gas does not currently generate any revenues, nor does it incur any cost of revenues. On March 23, 2016, Total gave AMSO its notice of withdrawal from AMSO, LLC. The withdrawal was effective on April 30, 2016. As a result of Total's withdrawal, beginning on April 30, 2016, AMSO, LLC's assets, liabilities, results of operations and cash flows are included in our consolidated financial statements.

(in millions)			**Change**	
Year ended December 31,	**2016**	**2015**	**$**	**%**
General and administrative expense	$(1.0)	$(0.7)	$(0.3)	(18.0)%
Research and development	0.3	(1.9)	2.2	114.0
Gain on consolidation of AMSO, LLC	1.3	—	1.3	nm
Equity in net loss of AMSO, LLC	(0.2)	(0.4)	0.2	44.1
Income (loss) from operations	$0.4	$(3.0)	$3.4	114.3%

nm — not meaningful

General and Administrative. General and administrative expense increased in 2016 compared to 2015 primarily due to the consolidation of AMSO, LLC's general and administrative expense of $0.3 million in 2016 and a reduction in the amount of costs classified as research and development expense, partially offset by a decrease in stock-based compensation expense.

Research and Development. Research and development expense consists of the following:

(in millions) **Year ended December 31,**	**2016**	**2015**
AMSO, LLC	$(0.4)	$—
Genie Mongolia	0.1	1.7
IEI	—	0.2
Total research and development expense	$(0.3)	$1.9

In 2016, AMSO, LLC reversed accrued research and development expense related to its decommissioning, winding up and dissolution. At December 31, 2016, the AMSO, LLC project was substantially decommissioned.

Genie Mongolia’s research and development expense in 2016 and 2015 related to the joint geological survey agreement with the Republic of Mongolia, which was executed in April 2013, to explore certain of that country’s oil shale deposits. In late 2015, we scaled back operations in Mongolia, and in 2016 we suspended our operations.

IEI had an exclusive Shale Oil Exploration and Production License awarded in July 2008 by the Government of Israel. The license was extended until July 2015 when it expired.

Gain on consolidation of AMSO, LLC. We accounted for our acquisition on April 30, 2016 of Total’s ownership interest in AMSO, LLC as a business combination. We estimated the fair value of AMSO, LLC to be nil, as it had ceased operations and its shutdown was in progress. We recognized a gain from the acquisition of Total’s interest in AMSO, LLC because we acquired the net assets of AMSO, LLC while no consideration was transferred by us, due to our assumption of the risk associated with the shutdown obligations. The gain also included our gain on the remeasurement of AMSO’s investment in AMSO, LLC at its acquisition date fair value.

Equity in the Net Loss of AMSO, LLC. In part because of AMSO’s decisions not to fund all of its share of AMSO, LLC’s expenditures in 2014 and 2015, AMSO, LLC allocated its net loss mostly to Total in 2015 and from January 1, 2016 until April 30, 2016, the effective date of Total’s withdrawal from AMSO, LLC.

Corporate

Corporate does not generate any revenues, nor does it incur any cost of revenues. Corporate costs include unallocated compensation, consulting fees, legal fees, business development expense and other corporate-related general and administrative expense.

(in millions)			**Change**	
Year ended December 31,	**2016**	**2015**	**$**	**%**
General and administrative expense and loss from operations	$9.2	$8.9	$0.3	3.1%

The increase in Corporate general and administrative expense in 2016 compared to 2015 was mostly due to an increase in payroll and related expense, partially offset by a decrease in stock-based compensation expense. As a percentage of our consolidated revenues, Corporate general and administrative expense increased from 4.2% in 2015 to 4.3% in 2016.

Consolidated

Selling, General and Administrative. Pursuant to an agreement between us and IDT, IDT charges us for services it provides to us, and we charge IDT for services that we provide to certain of IDT's subsidiaries. In 2016 and 2015, the amounts that IDT charged us, net of the amounts that we charged IDT, were $1.6 million and $1.8 million, respectively, which were included in consolidated selling, general and administrative expense.

Stock-based compensation expense included in consolidated selling, general and administrative expense was $4.8 million and $5.2 million in 2016 and 2015, respectively. The decrease in stock-based compensation expense was primarily due to unrecognized compensation cost that was fully recognized in 2015.

The following is a discussion of our consolidated income and expense line items below loss from operations.

(in millions)			**Change**	
Year ended December 31,	**2016**	**2015**	**$**	**%**
Loss from operations	$(30.5)	$(8.3)	$(22.2)	(266.3)%
Interest income	0.3	0.4	(0.1)	(19.2)
Interest expense	—	—	—	(90.0)
Other income (expense), net	0.2	(0.2)	0.4	223.5
Provision for income taxes	(2.2)	(0.5)	(1.7)	(322.5)
Net loss	(32.2)	(8.6)	(23.6)	(272.8)
Net loss attributable to noncontrolling interests	7.7	1.1	6.6	550.3
Net loss attributable to Genie	$(24.5)	$(7.5)	$(17.0)	(228.9)%

Other Income (Expense), net. In 2016, other income (expense), net included a $0.2 million gain from the repayment of the Maple Bank GmbH revolving credit loan payable. In addition, other income (expense), net, included foreign currency transaction gains of $0.1 million in 2016 and foreign currency transaction losses of $0.1 million in 2015.

Provision for Income Taxes. The change in the provision for income taxes in 2016 compared to 2015 was primarily due to the change in income tax expense in GRE. GRE includes IDT Energy, certain limited liability companies and our consolidated variable interest entity. For purposes of computing Federal income taxes, we consolidate the GOGAS and Afek entities so that the losses from those businesses offset the taxable income from GRE and reduce the consolidated tax provision to zero. The additional net operating losses are fully offset by a valuation allowance so no additional benefit for Federal income taxes was recorded. State and local taxes, which have no offset, increased in 2016 compared to 2015. IDT Energy and the limited liability companies are included in our consolidated return. CCE, a consolidated variable interest entity, files a separate tax return since we do not have any ownership interest in CCE.

Net Loss Attributable to Noncontrolling Interests. The change in the net loss attributable to noncontrolling interests in 2016 compared to 2015 was primarily due to the noncontrolling interest's share of Afek's write-off of capitalized exploration costs. In 2016, the noncontrolling interest in Afek increased from 13.5% to 14.9% and the write-off of capitalized exploration costs was $41.0 million.

LIQUIDITY AND CAPITAL RESOURCES

General

We currently expect that our cash flows from operations in the next twelve months and the $29.9 million balance of unrestricted cash and cash equivalents that we held at December 31, 2017 will be sufficient to meet our currently anticipated cash requirements for at least the year ending December 31, 2018.

At December 31, 2017, we had working capital (current assets less current liabilities) of $35.4 million.

	Year ended December 31,		
(in millions)	**2017**	**2016**	**2015**
Cash flows provided by (used in):			
Operating activities	$9.3	$15.6	$(3.1)
Investing activities	(16.5)	(9.5)	(31.6)
Financing activities	1.8	(9.7)	1.6
Effect of exchange rate changes on cash and cash equivalents	0.1	—	—
Decrease in cash and cash equivalents	$(5.3)	$(3.6)	$(33.1)

Operating Activities

Cash provided by operating activities was $9.3 million and $15.6 million in years ended December 31, 2017 and 2016, respectively, and cash used in operating activities was $3.1 million in the year ended December 31, 2015. Our cash flow from operations varies significantly from quarter to quarter and from year to year, depending on our operating results and the timing of operating cash receipts and payments, specifically trade accounts receivable and trade accounts payable, including payments relating to our exploration activities.

Gross trade accounts receivable increased to $45.7 million at December 31, 2017 from $37.0 million at December 31, 2016 and $27.4 million at December 31, 2015 reflecting mainly the increase in GRE's revenues in the three months ended December 31, 2017 compared to the three months ended December 31, 2016 and the three months ended December 31, 2015.

Inventory of natural gas increased to $1.0 million at December 31, 2017 from $0.6 million at December 31, 2016 due to a 60% increase in the average unit cost, partially offset by a 4% decrease in quantity at December 31, 2017 compared to December 31, 2016. Inventory of natural gas decreased to $0.6 million at December 31, 2016 from $1.6 million at December 31, 2015 due to a 51% decrease in the average unit cost and an 18% decrease in quantity at December 31, 2016 compared to December 31, 2015. Inventory at December 31, 2017, 2016 and 2015 also included $3.0 million, $5.4 million and $9.8 million, respectively, in renewable energy credits.

On July 5, 2017, we entered into a class action Settlement Agreement with the class action plaintiffs acting individually and on behalf of the entire class, in the lawsuits currently pending in New York, Pennsylvania and New Jersey (see Item 3 to Part I "Legal Proceedings" included in this Annual Report). We estimated, based in part on historical participation rates that our total settlement payment will be approximately $9 million, although it is reasonably possible that the total payments could reach $10.1 million. The payments pursuant to the Settlement Agreement are expected to be disbursed during the first half of 2018. The actual amount to be paid out will depend on several factors, including the number of customers who claim settlement payments to which they are entitled. The Settlement Agreement is subject to entry of a final order by the Court approving the Settlement Agreement. The Court has scheduled a hearing concerning final approval for April 9, 2018.

In 2017, we accrued $1.5 million of estimated loss related to a pending regulatory matter in New Jersey, (see Item 3 to Part I "Legal Proceedings" included in this Annual Report), which did not impact cash provided by operating activities in the periods presented.

CCE is a consolidated variable interest entity. We determined that, since the acquisition of the interest in CCE, we had the power to direct the activities of CCE that most significantly impact its economic performance, and we have the obligation to absorb losses of CCE that could potentially be significant to CCE on a stand-alone basis. We therefore determined that we are the primary beneficiary of CCE, and as a result, we consolidate CCE within our GRE segment. We provided CCE with all of the cash required to fund its operations. In 2017 and 2015, CCE repaid $0.2 million and $1.0 million, respectively, to us. In 2016, we provided CCE with net funding of $0.9 million to finance its operations.

As of November 19, 2015, certain of GRE's REPs entered into an Amended and Restated Preferred Supplier Agreement with BP. The agreement's termination date is November 30, 2019, except either party may terminate the agreement on November 30, 2018 by giving the other party notice by May 31, 2018. The obligations to BP are secured by a first security interest in deposits or receivables from utilities in connection with their purchase of the REPs' customer's receivables, and in any cash deposits or letters of credit posted in connection with any collateral accounts with BP. The ability to purchase electricity and natural gas under this agreement is subject to satisfaction of certain conditions including the maintenance of certain covenants. At December 31, 2017, we were in compliance with such covenants. At December 31, 2017, restricted cash — short-term of $0.5 million and trade accounts receivable of $34.4 million were pledged to BP as collateral for the payment of the trade accounts payable to BP of $13.8 million at December 31, 2017.

In July 2016, in accordance with a settlement approved by the Pennsylvania Public Utility Commission, IDT Energy paid the agreed-upon $2.4 million to a refund administrator for refunds (in addition to other refunds that IDT Energy had voluntarily paid to affected customer in prior periods) to its Pennsylvania customers in January, February and March of 2014 who had variable rates for electricity supply (see Item 3 to Part I "Legal Proceedings" included in this Annual Report).

In December 2017, the PSC held an evidentiary hearing to assess the retail energy market in New York. That process is continuing and is expected to last for at least several more months. We are evaluating the potential impact of any new order from the PSC that would follow from the evidentiary process, while preparing to operate in compliance with any new requirements that may be imposed. Depending on the final language of any new order, as well as our ability to modify our relationships with our New York customers, an order could have a substantial impact upon the operations of GRE's REPs in New York. At December 31, 2017, New York represented 36% of GRE's total meters served and 28% of the total RCEs of GRE's customer base.

On December 16, 2016, the PSC issued the 2016 Order prohibiting REP service to customers enrolled in New York's utility low-income assistance programs (see Item 3 to Part I "Legal Proceedings" included in this Annual Report). GRE's REPs are complying with the 2016 Order and have begun the transfer of customers as required. The 2016 Order will require GRE's REPs to transfer customer accounts comprising approximately 21,000 meters, representing 12,000 RCEs, to their respective incumbent utilities during the first half of 2018.

From time to time, we receive inquiries or requests for information or materials from public utility commissions or other governmental regulatory or law enforcement agencies related to investigations under statutory or regulatory schemes, and we respond to those inquiries or requests. We cannot predict whether any of those matters will lead to claims or enforcement actions.

Investing Activities

Our capital expenditures were $3.3 million, $0.6 million and $0.3 million in 2017, 2016 and 2015, respectively. In 2017, our subsidiary Atid Drilling Ltd., or Atid, an on-shore drilling services venture based in Israel, purchased a drilling rig and associated drilling equipment for $2 million. Atid provided drilling services to Afek for its sixth exploratory well.

In 2017, 2016 and 2015, we used cash of $5.5 million, $12.9 million and $27.0 million, respectively, for investments in Afek's unproved oil and gas property in the Golan Heights in Northern Israel. We had purchase commitments of $46.4 million at December 31, 2017, of which $45.0 million was for future purchases of electricity. We currently anticipate that our total capital expenditures in the year ending December 31, 2018 will be between $1 million and $2 million.

There is no current plan for a next phase of Afek's activity. Any future exploratory drilling would be contingent upon licensing and permitting. Afek may seek financing for any next phase of its activity.

On February 23, 2016, Total notified AMSO of its decision not to continue to fund AMSO, LLC. On March 23, 2016, Total gave AMSO its notice of withdrawal from AMSO, LLC. The withdrawal was effective on April 30, 2016. As of April 1, 2016, AMSO and Total agreed that Total would pay AMSO, LLC $3.0 million as full payment of its share of all costs associated with the decommissioning, winding up and dissolution of AMSO, LLC. Total will not be refunded any amount if the decommissioning costs are less than $3.0 million. Effective April 30, 2016, AMSO, LLC's assets, liabilities, results of operations and cash flows are included in our consolidated financial statements. We accounted for our acquisition on April 30, 2016 of Total's ownership interest in AMSO, LLC as a business combination. We estimated the fair value of AMSO, LLC to be nil, as it had ceased operations and its shutdown was in progress. We recognized a gain from the acquisition of Total's interest in AMSO, LLC because we acquired the net assets of AMSO, LLC while no consideration was transferred by us, due to our assumption of the risk associated with the shutdown obligations. The gain also included our gain on the remeasurement of AMSO's investment in AMSO, LLC at its acquisition date fair value. The aggregate gain recognized was $1.3 million, which was included in 2016 in "Gain on consolidation of AMSO, LLC" in the consolidated statements of operations.

In 2016 and 2015, cash used for capital contributions to AMSO, LLC was $0.1 million and $0.3 million, respectively.

On August 10, 2017, GRE acquired Mirabito for cash of $3.9 million, net of $0.1 million cash acquired.

On November 2, 2016, GRE acquired REH, a privately held owner of REPs, for $9.5 million plus $1.4 million for REH's working capital, or an aggregate cash payment of $10.9 million. At acquisition, REH had cash of $2.2 million. In addition, in February 2017, GRE paid $0.3 million for the REH acquisition.

We received $0.4 million from an employee for the partial repayment of notes receivable in the year ended December 31, 2017.

On July 17, 2017, GEUK entered into a definitive agreement with EGC to launch Shoreditch in the United Kingdom. At December 31, 2017, GEUK had contributed $4.0 million to Shoreditch, and GEUK will contribute an additional aggregate of up to £2.2 million ($3.0 million at December 31, 2017) by August 1, 2018, contingent on Shoreditch's achievement of performance based milestones. EGC is obligated to contribute an aggregate of up to £1.7 million ($2.2 million at December 31, 2017) to Shoreditch by August 1, 2018, contingent on Shoreditch's achievement of performance based milestones.

In 2016 and 2015, we used cash of $3.0 million and $8.8 million, respectively, to purchase certificates of deposits. In 2016 and 2015, proceeds from maturities of certificates of deposit were $11.9 million and $4.7 million, respectively. There were no purchases or maturities of certificates of deposit in 2017.

Financing Activities

In each of 2017, 2016 and 2015, we paid aggregate Base Dividends per share of $0.6376 on our Series 2012-A Preferred Stock. The aggregate preferred stock dividends paid in each of 2017, 2016 and 2015 were $1.5 million. On February 15, 2018, we paid a quarterly Base Dividend of $0.1594 per share on our Series 2012-A Preferred Stock for the fourth quarter of 2017 to stockholders of record as of the close of business on February 6, 2018.

In 2017, 2016 and 2015, we paid aggregate dividends per share of $0.30, $0.24 and $0.12, respectively, to stockholders of our Class A common stock and Class B common stock. The aggregate dividends paid in 2017, 2016 and 2015 were $7.4 million, $5.9 million and $3.0 million, respectively. In March 2018, our Board of Directors declared a quarterly dividend of $0.075 per share on our Class A common stock and Class B common stock for the fourth quarter of 2017 to stockholders of record as of the close of business on March 19, 2018. The dividend will be paid on or about March 23, 2018.

In the year ended December 31, 2017, GOGAS purchased from employees of Afek a 1.15% fully vested interest in Afek for $0.3 million in cash.

In 2017, 2016 and 2015, we paid an aggregate of nil, $0.2 million and $0.4 million, respectively, in scheduled and contingent payments related to a December 2013 acquisition. At December 31, 2017, there were estimated contingent payments of $0.2 million outstanding.

REH had a Credit Agreement with Vantage for a revolving line of credit for up to a maximum principal amount of $7.5 million. The principal outstanding incurred interest at one-month LIBOR plus 5.25% per annum, payable monthly. The outstanding principal and any accrued and unpaid interest was due on the maturity date of October 31, 2017. In 2016, subsequent to the acquisition of REH, REH borrowed $3.7 million and repaid $4.9 million under the revolving line of credit.

On April 4, 2017, GRE, IDT Energy, and other GRE subsidiaries entered into a Credit Agreement with Vantage for a $20 million revolving line of credit. The borrowers consist of our subsidiaries that operate REP businesses, and those subsidiaries' obligations are guaranteed by GRE. On April 4, 2017, the borrowers borrowed $4.3 million under this facility, which included $1.7 million that was previously outstanding under the credit facility between REH and Vantage. The REH Credit Agreement with Vantage was terminated in connection with the entry into this credit agreement. The borrowers have provided as collateral a security interest in their receivables, bank accounts, customer agreements, certain other material agreements and related commercial and intangible rights. Outstanding principal amount incurs interest at LIBOR plus 4.5% per annum. Interest is payable monthly and all outstanding principal and any accrued and unpaid interest is due on the maturity date of April 3, 2020. The borrowers are required to comply with various affirmative and negative covenants, including maintaining a target tangible net worth during the term of the credit agreement. To date, we are in compliance with such covenants. In 2017, including the prior REH Credit Agreement, GRE borrowed $14.5 million under the revolving line of credit and repaid $12.7 million. At December 31, 2017, $2.5 million was outstanding under the revolving line of credit and the effective interest rate was 5.99% per annum.

On December 17, 2015, GRE, IDT Energy and certain affiliates entered into a Credit Agreement with Maple Bank GmbH for a revolving loan facility. On December 17, 2015, GRE borrowed $2.0 million under the facility. In February 2016, the German banking regulator, Bafin, closed Maple Bank GmbH due to impending financial over-indebtedness related to tax-evasion investigations. In September 2016, GRE and its affiliates entered into a settlement agreement with the court appointed liquidator of Maple Bank. Under this agreement, GRE paid $1.8 million as a full settlement of all of its obligations, and the revolving loan facility was terminated. Accordingly, GRE recorded a gain from this settlement of $0.2 million.

On May 31, 2017, our Loan Agreement with JPMorgan Chase Bank for a revolving line of credit expired. There were no amounts outstanding under the line of credit. Cash collateral of $10.0 million that was included in “Restricted cash—short-term” in the consolidated balance sheet was released.

We received proceeds from the exercise of our stock options of $0.1 million, nil, and $0.2 million in 2017, 2016 and 2015, respectively. In 2017 and 2015, we issued 15,855 shares and 25,469 shares, respectively, of our Class B common stock for the exercise of the stock options.

In December 2016, Afek sold a 1% equity interest to Dr. Harold Vinegar, former Chief Scientist of the Company, for $1.0 million paid in cash.

In June 2011, GOGAS issued a stock option to Michael Steinhardt at an exercise price of $5.0 million. The expiration date was April 9, 2015. The expiration date was extended for one month, and on May 9, 2015, the option was exercised. Mr. Steinhardt and an affiliate received interests of approximately 1.5% in each of Afek, Genie Mongolia and IEI. In addition, Mr. Steinhardt and the affiliate received an approximately 1.7% interest in AMSO. The exercise price of $5.0 million was paid $2.5 million in cash and $2.5 million in promissory notes that were due in November 2015. The notes incurred interest at 0.43% per annum, and were secured by 50% of the shares received in the exercise. In November 2015, we received cash of $0.8 million to repay one-third of the principal amount of the promissory notes. Effective December 31, 2017, the remaining notes, an aggregate of $1.7 million, were cancelled and the pledged shares were transferred to GOGAS. At December 31, 2016, the notes receivable of $1.7 million were included in “Receivables for issuance of equity” in the consolidated balance sheet.

In November 2010, GOGAS sold a 0.5% equity interest to Rupert Murdoch for $1.0 million paid with a promissory note. The note was secured by a pledge of the shares issued in exchange for the note. The note accrued interest at 1.58% per annum. We received an aggregate of $1.1 million for the payment of the principal and accrued interest on the maturity date of November 15, 2015.

In October 2015, GRE paid $0.2 million to the owner of the limited liability company interests in CCE, and loaned CCE $0.5 million in exchange for an option to purchase 100% of the issued and outstanding limited liability company interests of CCE for one dollar plus the forgiveness of the $0.5 million loan. The option expires on October 22, 2023.

In 2017, we paid $0.8 million to repurchase 129,898 shares of our Class B common stock. In 2016, we paid $29,000 to repurchase 3,096 shares of our Class B common stock. In 2015, we paid $27,000 to repurchase 4,220 shares of our Class B common stock. These shares were tendered by our employees to satisfy tax withholding obligations in connection with the lapsing of restrictions on awards of restricted stock. Such shares were repurchased by us based on their fair market value on the trading day immediately prior to the vesting date.

GRE has the right, at its option, to satisfy its obligations to issue common stock of GRE upon the vesting of the deferred stock units it granted in July 2015 to officers and employees in shares of our Class B common stock or cash. In August 2017, we issued 287,233 shares of our Class B common stock in exchange for 26.1 vested deferred stock units of GRE. The aggregate fair value of the shares of our Class B common stock issued was $1.8 million.

On March 11, 2013, our Board of Directors approved a stock repurchase program for the repurchase of up to an aggregate of 7.0 million shares of our Class B common stock. There were no repurchases under the program in 2017, 2016 or 2015. At December 31, 2017, 6.9 million shares remained available for repurchase under the stock repurchase program.

Series 2012-A Preferred Stock

At December 31, 2017, there were 2.3 million shares of our Series 2012-A Preferred Stock issued and outstanding with an aggregate liquidation preference of $19.7 million. Each share of our Series 2012-A Preferred Stock has a liquidation preference of $8.50 (the “Liquidation Preference”), and is entitled to receive an annual dividend per share equal to the sum of (i) $0.6375 (the “Base Dividend”) plus (ii) seven and one-half percent (7.5%) of the quotient obtained by dividing (A) the amount by which the EBITDA for a fiscal year of our retail energy provider business exceeds $32 million by (B) 8,750,000 (the “Additional Dividend”), payable in cash. EBITDA consists of income (loss) from operations exclusive of depreciation and amortization and other operating gains (losses).

The Series 2012-A Preferred Stock is redeemable, in whole or in part, at our option following October 11, 2017 at 101% of the Liquidation Preference plus accrued and unpaid dividends, and 100% of the Liquidation Preference plus accrued and unpaid dividends following October 11, 2018.

During any period when we have failed to pay a dividend on the Series 2012-A Preferred Stock and until all unpaid dividends have been paid in full, we are prohibited from paying dividends or distributions on our Class B or Class A common stock.

The Base Dividend is payable (if declared by our Board of Directors, and accrued, if not declared) quarterly on each February 15, May 15, August 15 and November 15, and to the extent that there is any Additional Dividend payable with respect to a fiscal year, it will be paid to holders of Series 2012-A Preferred Stock with the May dividend. With respect to the payment of dividends and amounts upon liquidation, dissolution or winding up, the Series 2012-A Preferred Stock is equal in rank to all other equity securities we issue, the terms of which specifically provide that such equity securities rank on a parity with the Series 2012-A Preferred Stock with respect to dividend rights or rights upon our liquidation, dissolution or winding up; senior to our common stock; and junior to all of our existing and future indebtedness.

Each share of Series 2012-A Preferred Stock has the same voting rights as a share of Class B common stock, except on certain matters that only impact our common stock, as well as additional voting rights on specific matters or upon the occurrence of certain events.

Subsequent Event — Proposed Sales of Shares and Warrants

On February 15, 2018, our Board of Directors approved, subject to stockholder approval at our annual meeting to be held on May 7, 2018, the sale of (1) 1,152,074 shares of our Class B common stock, at a price of $4.34 per share for an aggregate sales price of $5.0 million, and (2) warrants to purchase an additional 1,048,218 shares of our Class B common stock at an exercise price of $4.77 per share for an aggregate exercise price of $5.0 million, to Howard S. Jonas or his affiliates. The warrants will expire two years from the closing of the sale, which will take place as soon as practicable following stockholder approval, if obtained. In addition, our Board of Directors approved, upon the same terms, the sale of up to 230,415 shares of our Class B common stock and warrants to purchase an additional 209,644 shares of our Class B common stock to a third-party investor, subject to agreement of that investor. The price for the sale of the shares is equal to the closing price of our Class B common stock on the day before the transaction was first considered by our Board of Directors. The exercise price of the warrants represents a 10% premium on the sale price.

CONTRACTUAL OBLIGATIONS AND OTHER COMMERCIAL COMMITMENTS

The following table quantifies our future contractual obligations and other commercial commitments at December 31, 2017:

Payments Due by Period

(in millions)	**Total**	**Less than 1 year**	**1 – 3 years**	**4 – 5 years**	**After 5 years**
Purchase obligations	$46.4	$43.2	$3.2	$ —	$ —
Renewable energy credits purchase obligations	15.6	7.9	7.7	—	—
Revolving credit loan payable (1)	3.3	0.3	3.0	—	—
Operating leases	0.3	0.2	0.1	—	—
Other liabilities (2) (3)	0.3	0.3	—	—	—
TOTAL CONTRACTUAL OBLIGATIONS (4) (5)	$65.9	$51.9	$14.0	$ —	$ —

(1) The above table includes principal outstanding at December 31, 2017 plus estimated interest and fees.

(2) The above table does not include estimated contingent payments of $0.2 million in connection with the acquisition of Diversegy and IDT Energy Network due to the uncertainty of the amount and/or timing of any such payments.

(3) The above table does not include an aggregate of up to £2.2 million ($3.0 million at December 31, 2017) to be contributed by GEUK to Shoreditch by August 1, 2018, contingent on Shoreditch's achievement of performance based milestones, due to the uncertainty of the amount and/or timing of any payments.

(4) The above table does not include an aggregate of $11.8 million in performance bonds at December 31, 2017 due to the uncertainty of the amount and/or timing of any payments.

(5) The above table does not include our unrecognized income tax benefits for uncertain tax positions at December 31, 2017 of $0.6 million due to the uncertainty of the amount and/or timing of any such payments. Uncertain tax positions taken or expected to be taken on an income tax return may result in additional payments to tax authorities. We are not currently able to reasonably estimate the timing of any potential future payments. If a tax authority agrees with the tax position taken or expected to be taken or the applicable statute of limitations expires,

then additional payments will not be necessary.

OFF-BALANCE SHEET ARRANGEMENTS

We do not have any “off-balance sheet arrangements,” as defined in relevant SEC regulations that are reasonably likely to have a current or future effect on our financial condition, results of operations, liquidity, capital expenditures or capital resources, other than the following. GRE has performance bonds issued through a third party for the benefit of certain utility companies and for various states in order to comply with the states’ financial requirements for retail energy providers. At December 31, 2017, GRE had aggregate performance bonds of $11.8 million outstanding.

Item 7A. Quantitative and Qualitative Disclosures about Market Risks.

Our primary market risk exposure is the price applicable to our natural gas and electricity purchases and sales. The sales price of our natural gas and electricity is primarily driven by the prevailing market price. Hypothetically, if our gross profit per unit in 2017 had remained the same as in 2016, due to changes in the price of natural gas and electricity, our gross profit from electricity sales would have increased by $8.3 million in 2017 and our gross profit from natural gas sales would have decreased by $2.4 million in 2017.

The energy markets have historically been very volatile, and we can reasonably expect that electricity and natural gas prices will be subject to fluctuations in the future. In an effort to reduce the effects of the volatility of the cost of electricity and natural gas on our operations, we have adopted a policy of hedging electricity and natural gas prices from time to time, at relatively lower volumes, primarily through the use of put and call options and swaps. While the use of these hedging arrangements limits the downside risk of adverse price movements, it also limits future gains from favorable movements. We do not apply hedge accounting to these swaps or options, therefore the mark-to-market change in fair value is recognized in cost of revenue in our consolidated statements of operations.

The summarized volume of GRE’s outstanding contracts and options at December 31, 2017 was as follows (MWh — Megawatt hour and Dth — Decatherm):

Commodity	**Settlement Dates**	**Volume**
Electricity	First quarter 2018	739,120 MWh
Electricity	Third quarter 2018	339,440 MWh
Electricity	Fourth quarter 2018	209,920 MWh
Natural gas	First quarter 2018	2,873,215 Dth
Natural gas	Second quarter 2018	306,725 Dth
Natural gas	Third quarter 2018	57,125 Dth
Natural gas	Fourth quarter 2018	66,030 Dth

Natural gas	First quarter 2019	61,350 Dth
Natural gas	Second quarter 2019	35,100 Dth
Natural gas	Third quarter 2019	19,050 Dth

Item 8. Financial Statements and Supplementary Data.

Our Consolidated Financial Statements and supplementary data and the report of the independent registered public accounting firm thereon set forth starting on page F-1 herein are incorporated herein by reference.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Our Chief Executive Officer and Chief Financial Officer have evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended), as of the end of the period covered by this Annual Report on Form 10-K. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were effective as of December 31, 2017.

Report of Management on Internal Control over Financial Reporting

We, the management of Genie Energy Ltd. and subsidiaries (the "Company"), are responsible for establishing and maintaining adequate internal control over financial reporting of the Company.

The Company's internal control over financial reporting is defined in Rule 13a-15(f) and 15d-15(f) promulgated under the Securities Exchange Act of 1934 as a process designed by, or under the supervision of, the Company's principal executive and principal financial officers and effected by the Company's board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company's financial statements for external purposes in accordance with generally accepted accounting principles in the United States and includes those policies and procedures that:

1. Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of assets of the Company;

2. Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and

3. Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Management has assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2017. In making this assessment, the Company's management used the criteria established in *Internal Control — Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO").

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of our internal control over financial reporting, as prescribed above, as of December 31, 2017. Based on our evaluation, our principal executive officer and principal financial officer concluded that the Company's internal control over financial reporting as of December 31, 2017 was effective based on the criteria established in the *Internal Control — Integrated Framework* (2013) issued by COSO.

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

We acquired Mirabito Natural Gas in August 2017. Management has excluded the operations of this business from our evaluation of, and conclusion on, the effectiveness of our internal controls over financial reporting as of December 31, 2017. Mirabito Natural Gas constituted 3.9% and 6.2% of total assets and net assets, respectively, as of December 31, 2017, and 0.9% and 2.5% of revenues and net loss, respectively, for the year then ended. Management plans to fully integrate the operations of this business into its assessment of the effectiveness of our internal control over financial reporting in 2018.

BDO USA, LLP has provided an attestation report on the Company's internal control over financial reporting as of December 31, 2017.

Changes in Internal Control over Financial Reporting

We made changes in our internal control over financial reporting described below during the quarter ended December 31, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Estimation of Weather Impact on Estimated Unbilled Revenue

In November 2017, management concluded that there were material weaknesses in our internal control over financial reporting, as we did not maintain effective controls over the application of U.S. GAAP related to the estimation of weather impact on our estimated unbilled revenue. This estimation process is performed in an effort to allocate billings to a calendar period using historical consumption data of the customer base of the retail energy providers operated by us and applying a weather factor to estimated unbilled amounts. The weather adjustment in the quarter ended March 31, 2017 was erroneous, causing understated amounts of estimated unbilled commodity consumption, resulting in under estimates of revenues and cost of revenues to be included in the quarter ended March 31, 2017. The nature of the estimation processes is reversing, as actual billings representing the unbilled estimates manifest in the following period, in this case, in April 2017. The reversal of this estimate resulted in commodity consumption and the associated revenues and cost of revenues to be overstated in the quarter ended June 30, 2017. The cumulative operating results for the six months ended June 30, 2017 were unaffected.

We implemented the following measures to remediate the material weakness and improve our internal control over financial reporting:

Enhanced the review process of the inputs into the schedules for the weather adjustment to estimated unbilled revenue;

Enhanced the schedules used for the weather adjustments to improve the review of the inputs; and

Key members of management meet each month to review the estimated consumption amounts to assess whether results are in-line with expectations.

Management Review Controls Associated with the Completeness and Accuracy of Computations Relating to Domestic and Foreign Income Tax Accounts and Disclosures

We initially identified this material weakness as of December 31, 2016. We implemented the following measures to remediate the material weakness and improve our internal control over financial reporting:

Engaged an independent third party to assist in preparation of and perform a comprehensive review of tax calculations and related disclosures;

Enhance the review of calculations and disclosure of deferred income tax balances;

Implement additional internal analytical procedures to validate tax accounting tax-related balances; and

Enhance internal documentation support related to the Company’s tax position.

We believe the material weaknesses described above were remediated by December 31, 2017.

Item 9B. Other Information.

None.

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Part III

Item 10. Directors, Executive Officers and Corporate Governance.

The following is a list of our directors and executive officers along with the specific information required by Rule 14a-3 of the Securities Exchange Act of 1934:

Executive Officers

Howard S. Jonas — Chairman of the Board

Michael Stein — Chief Executive Officer

Avi Goldin — Chief Financial Officer

Geoffrey Rochwarger — Vice Chairman

Michael Jonas — Executive Vice President

Directors

Howard S. Jonas — Chairman of the Board of the Company

James A. Courter — Vice Chairman of the Board of the Company

W. Wesley Perry — Owner and operator of S.E.S. Investments, Ltd., an oil and gas investment company

Alan B. Rosenthal — Founder and managing partner of ABR Capital Financial Group LLC, an investment fund

Allan Sass — Former President and Chief Executive Officer of Occidental Oil Shale Corporation, a subsidiary of Occidental Petroleum

The remaining information required by this Item will be contained in our Proxy Statement for our Annual Stockholders Meeting, which will be filed with the Securities and Exchange Commission within 120 days after December 31, 2017, and which is incorporated by reference herein.

Corporate Governance

We have included as exhibits to this Annual Report on Form 10-K certificates of our Chief Executive Officer and Chief Financial Officer certifying the quality of our public disclosure.

We make available free of charge through the investor relations page of our web site (*www.idt.net/ir*) our Annual Reports on Form 10–K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and all amendments to those reports, and all beneficial ownership reports on Forms 3, 4 and 5 filed by directors, officers and beneficial owners of more than 10% of our equity, as soon as reasonably practicable after such reports are electronically filed with the Securities and Exchange Commission. We have adopted codes of business conduct and ethics for all of our employees, including our principal executive officer, principal financial officer and principal accounting officer. Copies of the codes of business conduct and ethics are available on our web site.

Our web site and the information contained therein or incorporated therein are not intended to be incorporated into this Annual Report on Form 10-K or our other filings with the SEC.

Item 11. Executive Compensation.

The information required by this Item will be contained in our Proxy Statement for our Annual Stockholders Meeting, which will be filed with the Securities and Exchange Commission within 120 days after December 31, 2017, and which is incorporated by reference herein.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information required by this Item will be contained in our Proxy Statement for our Annual Stockholders Meeting, which will be filed with the Securities and Exchange Commission within 120 days after December 31, 2017, and which is incorporated by reference herein.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information required by this Item will be contained in our Proxy Statement for our Annual Stockholders Meeting, which will be filed with the Securities and Exchange Commission within 120 days after December 31, 2017, and which is incorporated by reference herein.

Item 14. Principal Accounting Fees and Services.

The information required by this Item will be contained in our Proxy Statement for our Annual Stockholders Meeting, which will be filed with the Securities and Exchange Commission within 120 days after December 31, 2017, and which is incorporated by reference herein.

Part IV

Item 15. Exhibits, Financial Statement Schedules.

(a) The following documents are filed as part of this Report:

1. Report of Independent Registered Public Accounting Firm on Internal Control Over Financial Reporting

   Report of Independent Registered Public Accounting Firm on Consolidated Financial Statements

   Consolidated Financial Statements covered by Report of Independent Registered Public Accounting Firm

2. Financial Statement Schedules.

   All schedules have been omitted since they are either included in the Notes to Consolidated Financial Statements or not required or not applicable.

3. The exhibits listed in paragraph (b) of this item. Exhibit Numbers 10.01, 10.03, 10.04 and 10.05 are management contracts or compensatory plans or arrangements.

(b) Exhibits.

Exhibit Number	Description of Exhibits
3.01(1)	Amended and Restated Certificate of Incorporation of the Registrant.
3.02(2)	Amended and Restated Certificate of Designation of Series 2012-A Preferred Stock of the Registrant.
3.03(3)	Amended and Restated By-Laws of the Registrant.
10.01(4)	Third Amended and Restated Employment Agreement, effective as of November 1, 2017, between the Registrant and Howard S. Jonas.
10.02(5)	Restricted Stock Agreement between the Registrant and Howard Jonas, dated August 7, 2017.
10.03(6)	Second Amended and Restated Employment Agreement, effective as of January 1, 2018, between the Registrant and Avi Goldin.
10.04(7)	Employment Agreement, dated June 17, 2015, between the Registrant, Genie Energy E&P Ltd. and Geoffrey Rochwarger.

10.05[8]	2011 Stock Option and Incentive Plan of Genie Energy Ltd.
10.06[1]	Preferred Supplier Agreement between IDT Energy, Inc. and BP Energy Company, dated June 29, 2009, as amended.
21.01*	Subsidiaries of the Registrant.
23.01*	Consent of BDO USA, LLP
31.01*	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.02*	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.01*	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.02*	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

Exhibit Number	Description of Exhibits
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document

* filed herewith.

(1) Incorporated by reference to Form 10-12G/A, filed October 7, 2011.

(2) Incorporated by reference to Exhibit 99(A)(1)(A) to Schedule TO, filed May 22, 2014.

(3) Incorporated by reference to Form 8-K filed August 9, 2012.

(4) Incorporated by reference to Form 8-K/A, filed November 6, 2017.

(5) Incorporated by reference to Form 10-Q, filed November 9, 2017.

(6) Incorporated by reference to Form 8-K/A, filed January 2, 2018.

(7) Incorporated by reference to Form 8-K/A, filed June 23, 2015.

(8) Incorporated by reference to Form 10-12G/A, filed October 27, 2011.

Item 16. Form 10-K Summary

None.

Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized.

GENIE ENERGY LTD.

By: /s/ Michael Stein
Chief Executive Officer

Date: March 16, 2018

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Titles	Date
/s/ Howard S. Jonas Howard S. Jonas	Chairman of the Board and Director	March 16, 2018
/s/ Michael Stein Michael Stein	Chief Executive Officer (Principal Executive Officer)	March 16, 2018
/s/ Avi Goldin Avi Goldin	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 16, 2018
/s/ James A. Courter James A. Courter	Vice Chairman of the Board and Director	March 16, 2018
/s/ W. Wesley Perry W. Wesley Perry	Director	March 16, 2018
/s/ Alan B. Rosenthal Alan B. Rosenthal	Director	March 16, 2018
/s/ Allan Sass Allan Sass	Director	March 16, 2018

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders

Genie Energy Ltd.

Newark, New Jersey

Opinion on Internal Control over Financial Reporting

We have audited Genie Energy Ltd.'s (the "Company's") internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (the "COSO criteria"). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated balance sheets of the Company and subsidiaries as of December 31, 2017 and 2016, the related consolidated statements of operations, comprehensive loss, equity and cash flows for each of the three years in the period ended December 31, 2017, and the related notes and our report dated March 16, 2018 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying "Management's Report on Internal Control over Financial Reporting". Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit of internal control over financial reporting in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

As indicated in the accompanying “Management’s Report on Internal Control over Financial Reporting”, management’s assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Mirabito Natural Gas, which was acquired on August 10, 2017, and which is included in the consolidated balance sheets of the Company and subsidiaries as of December 31, 2017, and the related consolidated statements of operations, comprehensive loss, equity, and cash flows for the year then ended. Mirabito Natural Gas constituted 4% and 6% of total assets and net assets, respectively, as of December 31, 2017, and 1% and 3% of revenues and net loss, respectively for the year then ended. Management did not assess the effectiveness of internal control over financial reporting of Mirabito Natural Gas because of the timing of the acquisition which was completed on August 10, 2017. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of Mirabito Natural Gas.

Definition and Limitations of Internal Control over Financial Reporting

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

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

/s/ BDO USA, LLP
Woodbridge, New Jersey
March 16, 2018

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GENIE ENERGY LTD.

Index to Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Shareholders and Board of Directors
Genie Energy Ltd.
Newark, New Jersey

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Genie Energy, Ltd. (a Delaware Corporation) and subsidiaries (the "Company") as of December 31, 2017 and 2016, the related consolidated statements of operations, comprehensive loss, equity and cash flows for each of the three years in the period ended December 31, 2017, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2017 and 2016, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2017**,** in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") and our report dated March 16, 2018 expressed an unqualified opinion thereon.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

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

/s/ BDO USA, LLP

We have served as the Company’s auditor since 2013.

Woodbridge, New Jersey
March 16, 2018

GENIE ENERGY LTD.

CONSOLIDATED BALANCE SHEETS

December 31 **(in thousands)**	**2017**	**2016**
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$29,913	$35,192
Restricted cash – short-term	518	10,813
Trade accounts receivable, net of allowance for doubtful accounts of $1,099 and $171 at December 31, 2017 and 2016, respectively	44,629	36,858
Inventory	3,986	5,989
Prepaid expenses	6,131	4,026
Other current assets	4,985	4,932
TOTAL CURRENT ASSETS	90,162	97,810
Property and equipment, net	4,020	1,617
Goodwill	9,998	8,728
Other intangibles, net	4,859	4,277
Investment in joint venture	3,450	—
Restricted cash – long-term	1,496	1,047
Deferred income tax assets, net	2,141	1,781
Other assets	9,652	6,553
TOTAL ASSETS	$125,778	$121,813
LIABILITIES AND EQUITY		
CURRENT LIABILITIES:		
Revolving line of credit	$—	$711
Trade accounts payable	21,068	17,274
Accrued expenses	28,069	16,301
Income taxes payable	2,204	2,426
Due to IDT Corporation	228	141
Other current liabilities	3,172	4,292
TOTAL CURRENT LIABILITIES	54,741	41,145
Revolving line of credit	2,513	—
Other liabilities	1,396	803
TOTAL LIABILITIES	58,650	41,948
Commitments and contingencies (Note 15 and Note 16)		
EQUITY:		
Genie Energy Ltd. stockholders’ equity:		
Preferred stock, $.01 par value; authorized shares – 10,000:		
Series 2012-A, designated shares – 8,750; at liquidation preference, consisting of 2,322 shares issued and outstanding at December 31, 2017 and 2016	19,743	19,743
Class A common stock, $.01 par value; authorized shares – 35,000; 1,574 shares issued and outstanding at December 31, 2017 and 2016	16	16
	236	233

Class B common stock, $.01 par value; authorized shares – 200,000; 23,601 and 23,274 shares issued and 23,270 and 23,073 shares outstanding at December 31, 2017 and 2016, respectively		
Additional paid-in capital	130,870	128,243
Treasury stock, at cost, consisting of 331 and 201 shares of Class B common at December 31, 2017 and 2016, respectively	(2,428)	(1,599)
Accumulated other comprehensive income	3,045	1,465
Accumulated deficit	(67,469)	(51,567)
Total Genie Energy Ltd. stockholders' equity	84,013	96,534
Noncontrolling interests:		
Noncontrolling interests	(16,885)	(15,002)
Receivable for issuance of equity	—	(1,667)
Total noncontrolling interests	(16,885)	(16,669)
TOTAL EQUITY	67,128	79,865
TOTAL LIABILITIES AND EQUITY	$125,778	$121,813

See accompanying notes to consolidated financial statements.

GENIE ENERGY LTD.

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year ended December 31,		
(in thousands, except per share data)	**2017**	**2016**	**2015**
REVENUES:			
Electricity	$222,171	$179,467	$170,283
Natural gas	40,098	31,031	40,757
Other	1,933	1,614	2,016
Total revenues	264,202	212,112	213,056
Cost of revenues	178,693	135,172	146,409
GROSS PROFIT	85,509	76,940	66,647
OPERATING EXPENSES, (GAINS) AND LOSSES:			
Selling, general and administrative (i)	80,122	61,569	66,011
Research and development	—	(269)	1,985
Exploration	4,879	6,088	6,583
Write-off of capitalized exploration costs	6,483	41,041	—
Other operating loss, net	—	64	—
Gain on consolidation of AMSO, LLC	—	(1,262)	—
Equity in the net loss of joint ventures	565	222	397
Loss from operations	(6,540)	(30,513)	(8,329)
Interest income	295	332	411
Interest expense	(310)	(19)	(10)
Other (expense) income, net	(367)	226	(183)
Loss before income taxes	(6,922)	(29,974)	(8,111)
Provision for income taxes	(1,726)	(2,218)	(525)
NET LOSS	(8,648)	(32,192)	(8,636)
Net loss attributable to noncontrolling interests	1,654	7,667	1,179
NET LOSS ATTRIBUTABLE TO GENIE ENERGY LTD.	(6,994)	(24,525)	(7,457)
Dividends on preferred stock	(1,481)	(1,481)	(1,481)
NET LOSS ATTRIBUTABLE TO GENIE ENERGY LTD. COMMON STOCKHOLDERS	$(8,475)	$(26,006)	$(8,938)
Basic and diluted loss per share attributable to Genie Energy Ltd. common stockholders	$(0.36)	$(1.14)	$(0.40)
Weighted-average number of shares used in calculation of basic and diluted loss per share	23,531	22,804	22,135
(i) Stock-based compensation included in selling, general and administrative expenses	$5,213	$4,813	$5,229

See accompanying notes to consolidated financial statements.

GENIE ENERGY LTD.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

	Year ended December 31,		
(in thousands)	2017	2016	2015
NET LOSS	$(8,648)	$(32,192)	$(8,636)
Other comprehensive income:			
Foreign currency translation adjustments	917	1,349	142
COMPREHENSIVE LOSS	(7,731)	(30,843)	(8,494)
Comprehensive loss attributable to noncontrolling interests	2,317	7,629	1,181
COMPREHENSIVE LOSS ATTRIBUTABLE TO GENIE ENERGY LTD.	$(5,414)	$(23,214)	$(7,313)

See accompanying notes to consolidated financial statements.

GENIE ENERGY LTD.

CONSOLIDATED STATEMENTS OF EQUITY (in thousands)

	Genie Energy Ltd. Stockholders										Noncontrolling Interests	
	Preferred Stock		Class A Common Stock		Class B Common Stock		Additional Paid-In	Treasury	Accumulated Other Comprehensive	Accumulated	Noncontrolling	Receivabl for issuance of
	Shares	Amount	Shares	Amount	Shares	Amount	Capital	Stock	Income	Deficit	Interests	equity
BALANCE AT DECEMBER 31, 2014	2,322	$19,743	1,574	$16	23,178	$232	$114,322	$(1,543)	$10	$(7,759)	$(4,678)	$(1,000)
Dividends on preferred stock	—	—	—	—	—	—	—	—	—	(1,481)	—	—
Dividends declared on common stock ($0.12 per share)	—	—	—	—	—	—	—	—	—	(2,950)	—	—
Restricted Class B common stock purchased from employees	—	—	—	—	—	—	—	(27)	—	—	—	—
Stock-based compensation	—	—	—	—	—	—	5,095	—	—	—	—	—
Restricted stock issued to employees and directors	—	—	—	—	36	—	—	—	—	—	—	—
Exercise of stock options	—	—	—	—	25	—	174	—	—	—	—	—
Exercise of GOGAS stock option	—	—	—	—	—	—	5,979	—	—	—	(979)	(2,500)
Collection of receivables for issuance of equity	—	—	—	—	—	—	79	—	—	—	—	1,833
	—	—	—	—	—	—	(1,200)	—	—	—	—	—

Subsidiary equity grant reclassified to liability												
Payment for option to purchase noncontrolling interests	—	—	—	—	—	—	—	—	—	—	(175)	—
Other comprehensive income	—	—	—	—	—	—	—	—	144	—	(2)	—
Net loss for the year ended December 31, 2015	—	—	—	—	—	—	—	—	—	(7,457)	(1,179)	—
BALANCE AT DECEMBER 31, 2015	2,322	19,743	1,574	16	23,239	232	124,449	(1,570)	154	(19,647)	(7,013)	(1,667)
Dividends on preferred stock	—	—	—	—	—	—	—	—	—	(1,481)	—	—
Dividends on common stock ($0.24 per share)	—	—	—	—	—	—	—	—	—	(5,914)	—	—
Restricted Class B common stock purchased from employees	—	—	—	—	—	—	—					