Genie Energy Ltd.
Form 10-K
March 16, 2015

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

FORM 10-K

x Annual report pursuant to section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2014,

or

o 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.)

550 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 o No x

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 o No x

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 x No o

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 x No o

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. x

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 o Accelerated filer x
Non-accelerated filer o Smaller reporting company o

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

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, 2014 (the last business day of the registrant's most recently completed second fiscal quarter) of the Class B common stock of $7.87 per share, as reported on the New York Stock Exchange, was approximately $117 million.

As of March 10, 2015, the registrant had outstanding 22,988,112 shares of Class B common stock and 1,574,326 shares of Class A common stock. Excluded from these numbers are 197,441 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 5, 2015, is incorporated by reference into Part III of this Form 10-K to the extent described therein.

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Genie Energy Ltd.

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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.

OVERVIEW

Genie Energy Ltd., a Delaware corporation, owns 99.3% of its subsidiary, Genie Energy International Corporation, or GEIC, which owns 100% of Genie Retail Energy, or GRE, and 92% of Genie Oil and Gas, Inc., or GOGAS. Genie’s principal businesses consist of the following:

Genie Retail Energy (GRE) operates retail energy providers, including IDT Energy, and Residents Energy, and energy brokerage and marketing services. Its retail energy provider businesses resells electricity and natural gas to residential and small business customers primarily in the Eastern United States; and

Genie Oil and Gas (GOGAS) is an oil and gas exploration company. GOGAS’s early stage projects include (1) an 88.5% interest in Afek Oil & Gas Ltd., or Afek, which operates an exploration project in the southern portion of the Golan Heights in Northern Israel, (2) an 89.9% interest in Genie Mongolia, Inc., an oil shale exploration project in Central Mongolia, (3) American Shale Oil Corporation, or AMSO, which holds and manages a 43.1% interest in American Shale Oil, L.L.C., or AMSO, LLC, an oil shale development project in Colorado; and (4) an 87.9% interest in Israel Energy Initiatives, Ltd., or IEI, an oil shale development project in Israel.

IDT Energy has outstanding deferred stock units granted to directors and employees that represent an interest of 1.4% of the equity of IDT Energy.

The Company has two reportable business segments: Genie Retail Energy 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 under the heading “Business Segment Information” in the Notes to our Consolidated Financial Statements in this Annual Report.

Our main offices are located at 550 Broad Street, Newark, New Jersey 07102. The telephone number at our headquarters 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 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

Genie was incorporated in January 2011. References to us in the following discussion are made on a consolidated basis as if we existed and owned Genie Retail Energy and Genie Oil and Gas in all periods discussed.

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 March 2008, we formed Israel Energy Initiatives, Ltd., which was awarded an exclusive Shale Oil Exploration and Production License in July 2008 by the Government of Israel.

In April 2008, IDT acquired E.G.L. Oil Shale, L.L.C., which was subsequently renamed American Shale Oil, LLC.

In March 2009, a subsidiary of TOTAL S.A., the world’s fifth largest integrated oil and gas company, acquired a 50% interest in AMSO, LLC in exchange for cash paid to us of $3.2 million and Total’s commitment to fund the majority of AMSO, LLC’s research, development and demonstration expenditures as well as certain other funding commitments.

In April 2013, the Government of Israel finalized the award to our subsidiary, 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.

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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 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, and Epiq Energy, LLC, its network marketing channel.

In February 2015, Afek began drilling its first exploratory well in Northern Israel's Golan Heights.

Spin-Off from IDT Corporation

We were formerly a subsidiary of IDT. On October 28, 2011, we were spun-off by IDT and became an independent public company through a pro rata distribution of our common stock to IDT's stockholders, which we refer to as the Spin-Off. As a result of the Spin-Off, each of IDT's stockholders received: (i) one share of our Class A common stock for every share of IDT's Class A common stock held of record on October 21, 2011, or the Record Date, and (ii) one share of our Class B common stock for every share of IDT's Class B common stock held of record on the Record Date.

Exchange Offer and Issuance of Preferred Stock

On August 2, 2012, we initiated an offer to exchange up to 8.75 million outstanding shares of our Class B common stock for the same number of shares of a new series of preferred stock. On October 17, 2012, we issued 1,604,591 shares of our newly designated Series 2012-A Preferred Stock, par value $0.01 per share, in exchange for an equal number of shares of Class B common stock tendered in the exchange offer.

In subsequent exchange offers concluded in March 2013 and June 2014, we issued an aggregate of 718,108 shares of Series 2012-A Preferred Stock in exchange for an equal number of shares of Class B common stock tendered in the exchange offer.

RECENT DEVELOPMENTS

In connection with an amendment to his compensation arrangement with the Company, between July 30, and August 4, 2014, Howard S. Jonas, our Chairman and Chief Executive Officer, purchased an aggregate of 3,600,000 shares of our Class B Common Stock at a price of $6.82 per share for an aggregate purchase price of $24,552,000.

Afek

In December 2014, the Supreme Court of Israel rejected petitions challenging the exploratory drilling permits issued to Afek, and the Court lifted its injunction on Afek's exploratory program in the Golan Heights of Northern Israel.

In February 2015, Afek began drilling its first exploratory well in Northern Israel's Golan Heights.

Mongolia

In September 2014, Genie Mongolia signed an additional prospecting agreement with the Petroleum Authority of Mongolia (PAM). The new exploration block covers twenty-five thousand square kilometers in Central Mongolia. The agreement provides a framework under which the company can request a commercial production agreement once a specific suitable resource and location are identified.

IEI

On September 2, 2014, the Jerusalem District Committee for Planning and Building declined to issue IEI a permit to build and operate a pilot drilling project. IEI holds an exclusive Shale Oil Exploration and Production License awarded in 2008 by the Israeli Ministry of National Infrastructure. IEI is currently evaluating its options to determine the best course of action to move forward to exploit the abundant oil shale resource in Israel.

Dividends

On November 12, 2014, we announced our intention to pay a quarterly dividend to holders of our Class A and Class B Common Stock and declared a $0.06 per share dividend for the third quarter of 2014. The dividend was paid on December 2, 2014 to stockholders of record at the close of business on November 24, 2014. No dividends on Genie Energy common stock were declared or paid in the year ended December 31, 2013.

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The aggregate dividends paid in the year ended December 31, 2014 on our Preferred Stock was $1.4 million, as follows:

On February 14, 2014, we paid a quarterly Base Dividend of $0.1594 per share on our Preferred Stock for the fourth quarter of 2013 to stockholders of record at the close of business on February 6, 2014 of our Preferred Stock.

On May 15, 2014, we paid a quarterly Base Dividend of $0.1594 per share on the Preferred Stock for the first a quarter of 2014 to stockholders of record at the close of business on May 7, 2014 of our Preferred Stock.

On August 15, 2014, we paid a quarterly Base Dividend of $0.1594 per share on the Preferred Stock for the second quarter of 2014 to stockholders of record at the close of business on August 7, 2014 of our Preferred Stock.

On November 14, 2014, we paid a quarterly Base Dividend of $0.1594 per share on the Preferred Stock for the third quarter of 2014 to stockholders of record at the close of business on November 6, 2014 of our Preferred Stock.

On February 13, 2015, we paid a quarterly Base Dividend of $0.1594 per share on the Preferred Stock for the fourth quarter of 2014 to stockholders of record at the close of business on February 5, 2015 of our preferred stock.

On March 10, 2015, the Company's Board of Directors declared a quarterly dividend of $0.06 per share on its Class A and Class B common stock for the fourth quarter of 2014. The dividend will be paid on or about March 31, 2015 to stockholders of record as of the close of business on March 23, 2015, equal to $1.5 million in total dividends.

Genie Retail Energy

In November 2004, IDT launched a retail energy provider (REP) business, which has since experienced significant growth. Today, GRE operates two active REP businesses which resell natural gas and electricity to residential and small business customers. IDT Energy operates in eight utility markets in New York, six utility territories in New Jersey, eight utility territories in Pennsylvania, four utility territories in Maryland and one utility territory in each of Washington D.C. and Illinois. Residents Energy resells natural gas and electricity to residential and small business customers in eight utility markets in New York.

GRE REPs have applications pending to enter into additional utility service areas, primarily natural gas and dual meter territories, in Pennsylvania, Maryland, Washington, D.C. and Illinois. Management continues to evaluate additional, deregulation-driven opportunities in other states, including Massachusetts, New Hampshire and Rhode Island.

GRE's REP businesses, particularly sales of natural gas, are seasonal businesses. Approximately 59% and 49% of our natural gas revenues in the years ended December 31, 2014 and December 31, 2013, respectively were generated during the first quarter, when the demand for heating was highest. The demand for electricity is not as seasonal as natural gas, but is typically higher during the third quarter when air conditioning usage usually peaks. Revenues from sales of electricity in the three months ended September 30 represented approximately 20% and 31% of total revenues from electricity sales in the years ended December 31, 2014 and December 31, 2013, respectively. Revenues in the three months ended March 31, represented 45% and 25% of total revenues from electricity sales in the years ended December 31, 2014 and 2013, respectively.

In the year ended December 31, 2014, GRE generated revenues of $275 million comprised of $215 million from sales of electricity, $58 million from sales of natural gas and other revenue of $2 million, as compared with revenues of $279 million in the year ended December 31, 2013 comprised of $217 million from the sales of electricity and $62 million from the sales of natural gas. Due to the return of the customer base and other factors, electricity sales are becoming a more significant portion of GRE's business. GRE's revenues represent 100% of our total consolidated revenues since our inception. In addition in the year ended December 31, 2014, GRE had income from operations of $4 million, as compared to income from operations of $26 million in the year ended December 31, 2013.

The weather has a significant impact on GRE's results of operations. Unusually sustained cold weather in the first quarter of 2014, drove increased demand. Coupled with short reserves of natural gas in the wholesale markets and delivery constrictions beyond our control, this caused a significant increase in revenues and direct cost of revenues in the first quarter of 2014. In addition, many electricity generation plants are in fact natural gas fired. The winter's "polar vortex" resulted in 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.

Because of the resulting dramatic increases in wholesale electricity costs, the retail electricity prices that GRE's REPs and many other variable rate electricity suppliers charged to their customers also increased sharply. These retail electricity price increases resulted in large numbers of complaints, regulatory actions, calls for legislation and regulation and litigation. GRE's subsidiary, IDT Energy, also 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.

IDT Energy also responded to formal and informal information requests from state utility commissions, state attorneys general, and state legislators related to the wholesale and retail electricity price increases in the winter of 2014.

In June 2014, the Pennsylvania Attorney General's Office ("OAG") and the Office of the Acting Consumer Advocate ("OCA") filed Joint Complaints before the Pennsylvania Public Utility Commission against five energy suppliers, including IDT Energy, who were selling variable rate energy products in Pennsylvania. IDT Energy maintains that it did nothing illegal or inappropriate with respect to the increased billing rates and is vigorously defending itself against the allegations in the Joint Complaint (Docket No. C-2014-2427657). Hearings before the Administrative Law Judges commenced in mid-February 2015. The submission of testimony is expected to continue over the next several months.

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.

In December 2013, GRE acquired Dallas-based Diversegy, LLC, or Diversegy, a retail energy advisory and brokerage company that serves commercial and industrial customers, and its network marketing channel, Epiq Energy, LLC, or Epiq. Diversegy connects large commercial and industrial customers with its portfolio of competitive energy products provided by some of the industry's leading energy suppliers. Diversegy evaluates alternative supply sources based on its customers' usage patterns and risk profiles in order to provide options that benefit their bottom lines. Epiq provides independent representatives with the opportunity to build sales organizations and to profit from both residential and commercial energy. Epiq Energy offers its direct marketing representatives the opportunity to earn commissions on energy supply based on the consumption of the customers they bring into the program.

During 2014, we worked to integrate Diversegy and Epiq into our existing operations and platform. Neither company contributed materially to revenues in 2014, but we expect that Epiq's operations will have an impact in new meter acquisitions in 2015.

Industry Overview

GRE operates retail energy providers, or REPs, which operate in states with deregulated retail energy markets. Like other REPs, GRE's REPs purchase electricity and natural gas on the wholesale markets and resell the commodities to its customers, primarily homeowners, renters and small businesses. The incumbent local utilities continue to handle electricity and natural gas distribution, billing, and collections. A portion of the proceeds billed to GRE's REPs customers for the commodity supply is remitted to the REPs.

GRE has no significant fixed assets and low levels of capital expenditure. Its direct costs are incurred to purchase electricity and natural gas in their respective wholesale markets. Selling, general and administrative costs are primarily related to customer acquisition, care and retention, billing and purchase of receivables fees paid to the utilities and program management.

Customers; Marketing

GRE’s REPs include IDT Energy and Residents Energy. REP services are made available to customers under several categories of terms and conditions. The large majority of our current customer base is enrolled in variable rate programs, the only programs GRE’s REPs offered until 2014, 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 adjustments are determined by GRE, and are not restricted by regulation. A minority of customers are enrolled in single fixed-rate offerings with rates guaranteed for up to one year.

Variable rate energy supply programs are available to all customers in all states served by GRE’s REPs. 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 and generated from sources like running water, wind, solar and biomass.

GRE’s REPs fixed-rate offerings are currently available in seven utility service areas in Pennsylvania, one in New Jersey and one in Illinois. The fixed-rate offerings guarantee a rate per kilowatt hour that will remain locked for a period of twelve billing cycles.

While GRE’s REPs variable rates are not regulated, they, like all GRE’s REP programs, are governed by their terms and conditions, which are accepted by all customers. GRE’s REPS are required to comply with various reporting requirements in order to maintain eligibility to operate as a REP. Certain jurisdictions require GRE’s REPs to publish its customer offers with the applicable regulatory commission, or in the public domain, generally a website established for such purpose. The electricity and natural gas we sell are metered and delivered to customers by the local utilities. Consequently, we do not have a maintenance or service staff for customer locations. 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 generally purchased by the utilities in whose areas we operate for a percentage of their face value (as of December 31, 2014, approximately 1.6%) in exchange for the utility receiving a first priority lien in the customer receivable without recourse against the REP.

As the provider of a fully variable rate product, the amount we charge to our customers changes with our costs for the underlying commodity. During times of rising costs, the number of complaints made to our call center or to the state regulators may increase. We proactively seek to address customer concerns through rebates and incentives, other programs and by providing accurate information, as well as communications with regulators.

GRE’s REP businesses market their energy services primarily through direct marketing methods, including door-to-door sales, outbound telemarketing, network marketing through Epiq Energy, direct mail and internet signup. As of December 31, 2014, GRE’s REPs serviced 363,000 meters (234,000 electric and 129,000 natural gas), as compared to 427,000 meters (282,000 electric and 145,000 natural gas) as of December 31, 2013. In the territories that GRE’s REPs have operated for at least a year, we have captured between 1% and 10% of the migrated share.

GRE’s strategy is to acquire profitable customers in low-risk markets, specifically where the utilities have adopted a portfolio of REP-friendly, regulatory-driven programs. Key among these programs is purchase of receivables, or POR, programs, where utilities are contractually obligated to purchase customer receivables at a pre-determined fixed discount. Under POR programs, utilities offer consolidated billing, where the utilities have the responsibility of billing the individual customer and the subsequent collections of the remittances. Additionally, we target 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, coupled with GRE’s strategy to primarily sell variable-rate products, allows GRE to reflect a true market cost base and vary its rates to its customers taking into account its competitors who change their commodity prices at longer intervals.

Utilities in New York, Pennsylvania, Illinois, Washington, D.C. 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.

We also 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 should deregulated conditions develop favorably.

Acquisition and Management of Gas and Electric Supply

Since 2009, IDT Energy has been party to a Preferred Supplier Agreement with BP Energy Company, or BP, pursuant to which BP is IDT Energy’s preferred provider of electricity and natural gas. The agreement allows for purchases of electricity and natural gas for customers focused in areas where the utilities have POR programs. Under the arrangement, IDT Energy purchases electricity and natural gas at market rate plus a fee. IDT Energy’s obligations to BP are secured by a first security interest in deposits or receivables from utilities in connection with their purchase of IDT Energy’s 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 is scheduled to terminate on June 30, 2015. IDT Energy and BP are currently negotiating an extension to the agreement. 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.

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 (REC's). In addition, GRE offers green or other renewable energy products to its customers in several territories. GRE acquires green renewable energy conversion rights or attributes and REC's to satisfy the load requirements for these customers.

As an operator of REPs, 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 REPs utilize forward physical delivery contracts for a portion of its 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 NYISO and PJM 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 purchases is equal to the amount necessary to service its customers' demands at any specific point in time. GRE is charged or credited for balancing the electricity and natural gas purchased and sold for its account by its suppliers and the LDCs. GRE manages 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 future deliveries in accordance with the load balancing performed by utilities, LDCs, NYISO and PJM.

Diversegy and Epiq

Diversegy, which we acquired in December 2013, operates as an energy broker and advisor to industrial, commercial and municipal customers across deregulated energy markets in the United States. Customers of all types and size have the ability to leverage Diversegy' s expertise and purchasing power as they evaluate their electricity and natural gas procurement plans.

Epiq, which we also acquired in December 2013, has built and operates a network marketing platform that sells services for REPs in several states. Epiq offers an innovative direct sales opportunity to individuals who are seeking to profit from the deregulation of energy in the United Sates, focusing on residential and small to medium-sized businesses. Epiq's sales channel has the potential to reach customers our traditional sales channels of door-door marketing and outbound telemarketing has difficulty in reaching. Over the course of 2014, Epiq recruited active independent representatives in most states where GRE operates REPs, with an early focus on Illinois.

Our Diversegy and Epiq operations have allowed us to enter more markets around the country as we are not limited to only the markets we operate as a REP, and therefore are not responsible for assuming the risk associated with procuring and managing the commodity. However, we do not expect revenues from Diversegy and Epiq operations outside the states in which we operate our REP businesses to materially impact our financial results in 2015. The acquisition and integration of Diversegy and Epiq did increase our expenses in Fiscal 2014 related to the costs of that business and our investment in integration and growth of the sales channels.

Competition

As an operator of REPs, GRE competes with the local utility companies in each of the markets where 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. Some of these competitors are larger and better capitalized than GRE. Competition with the utilities and REPs exposes GRE to customer churn, especially since GRE's residential customers generally do not sign long-term contracts.

REPs and utilities offering fixed rate products or guaranteed pricing often are unable to change their sell rates offered to customers immediately in response to volatility in the prices of the underlying commodities. In times of high commodity prices, REPs like GRE's REPs that offer variable rate products, and reflect real-time commodity costs, may offer variable rates prices which are not competitive with fixed rate providers. Conversely, in a downward moving commodity cost environment, variable rate REPs like GRE's REPs 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.

In the latter part of 2014, IDT Energy began offering a locked, or fixed, rate to customers in Pennsylvania, New Jersey and Illinois. We expect this offering to expand to all markets in 2015.

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. 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. If GRE is not successful in convincing customers to switch, our REP businesses, results of operations and financial condition will all be adversely affected

Regulation

As of December 31, 2014, GRE's REPs operate in eight utility territories in New York, six utility territories in New Jersey, eight utility territories in Pennsylvania, four utility territories in Maryland, one in Washington D.C. and one in Illinois. IDT Energy recently received regulatory approvals to enter nine new utility territories in Pennsylvania and one new territory covering Maryland and Washington D.C. 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 federal government, and related public service/utility commissions, among others, establish the rules and regulations for our REP operations.

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 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. GRE's REPs may be subject to new laws, orders or regulations or the revision or interpretation of existing laws, orders or regulations.

If GRE's REPs enter territories outside of the utility regions within which they currently operate in New York, New Jersey, Pennsylvania, Maryland, Illinois and Washington DC, or territories outside of these states, they would need to be licensed and would be subject to the rules and regulations of such states or municipalities and respective utilities.

As of December 31, 2014, Diversegy was licensed to serve as a broker of electricity in New Jersey, Pennsylvania, Maryland, the District of Columbia, Illinois, Ohio, Rhode Island, New Hampshire, Massachusetts and Delaware, and as a gas broker in New Jersey, Maryland, Ohio, Rhode Island and New Hampshire. Epiq was licensed as an electricity broker in New Jersey, Illinois, Ohio, District of Columbia, Maryland and Pennsylvania, and as a gas broker in New Jersey, Ohio, Maryland and Pennsylvania. Both Diversegy and Epiq serve as brokers in other states that do not require licenses.

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Employees

As of March 1, 2015, GRE employed 156 full time employees, 55 of whom are located in the Jamestown, New York office, of which approximately 80% are affiliated with the customer care center, 32 of whom are located in IDT Energy’s NJ offices, 26 of whom are located in our Texas office and 43 of whom are located in the Florida and New York offices 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 Genie’s interests in four projects: (1) an 88.5% interest in Afek, which operates an exploration project in the southern portion of the Golan Heights in Northern Israel (2) a 89.9% interest in Genie Mongolia, Inc., an oil shale exploration project in Central Mongolia, (3) AMSO, which holds and manages a 43.1% interest in AMSO, LLC, an oil shale development project in Colorado, that is a joint venture with Total, S.A., and (4) an 87.9% interest in IEI, an oil shale development project in Israel’s Shfela Basin.

Genie Mongolia, AMSO and IEI projects are early stage oil shale projects. Oil shale is an organic-rich, fine-grained sedimentary rock that contains significant amounts of kerogen (a solid mixture of organic chemical compounds) from which liquid hydrocarbons can be extracted. However, extracting oil and gas from oil shale is more complex than conventional oil and gas recovery and is more expensive. Rather than pumping it directly out of the ground in the form of liquid oil, the oil shale can be mined and then heated to a high temperature through a process called surface retorting, with the resultant liquid separated and collected. An alternative which we and others are researching and developing is in-situ retorting, which involves heating the oil shale to a temperature of approximately 660°F while it is still underground, and then pumping the resulting liquid and/or gases to the surface. In-situ retorting is considered to be less environmentally invasive than surface retorting and may offer significant economic advantages.

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. Afek has retained seasoned oil and gas exploration professionals and has contracted with internationally recognized vendors to provide the services required for its exploration project. In 2013, Afek completed preliminary geophysical work including electromagnetic and gravimetric surveys and reprocessing of the 2D seismic data to characterize the subsurface prior to drilling exploration wells. Afek subsequently began the analysis of the acquired data internally and with outside oil exploration experts.

In early 2014, Afek submitted a permit application to the Planning and Construction Committee, North District, to conduct a ten-well exploration drilling program to further characterize the resource in its license area. In July, the Planning and Construction Committee, North District voted to approve the ten well exploratory drilling program, and subsequently issued the requisite permits.

In October, 2014, the High Court of Justice in Israel issued an interim order to halt Afek's drilling program until it could rule on a petition filed by the Israel Union for Environmental Defense and some local residents challenging the issuance of the drilling permit. In December 2014, the Court ruled against petitioners, and lifted its interim order.

In February 2015, Afek began drilling its first exploratory well in Northern Israel's Golan Heights.

Afek incurred research and development expenses of $7.1 million, $4.2 million and nil in the years ended December 31, 2014, 2013 and 2012, respectively.

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. The five year agreement allows Genie Mongolia to explore, identify and characterize the oil shale resource in the exclusive survey area and to conduct a pilot test using in-situ technology on appropriate oil shale deposits.

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. The agreement, the first to be signed under recently passed legislation, also provides a framework under which Genie Mongolia can request a commercial production agreement once a specific suitable resource and location are identified.

Under the two agreements, Genie Mongolia currently has exclusive rights to explore for oil shale in approximately 60,000 square kilometers in Mongolia.

In 2014, Genie Mongolia carried out surface mapping, other geophysical evaluation work and exploration drilling within its license areas. In 2015, Genie Mongolia plans to drill roughly four wells to more definitively understand the resources in Mongolia. Upon the successful completion of the exploration program planned in 2015, Genie Mongolia hopes to begin a demonstration project in Mongolia.

Genie Mongolia incurred research and development expenses of $2.7 million, $3.4 million and $2.1 million in the years ended December 31, 2014, 2013 and 2012, respectively.

American Shale Oil Corporation

In 2008 and 2009, AMSO acquired E.G.L. Oil Shale, L.L.C. (which was subsequently renamed American Shale Oil, LLC) in exchange for cash of $5.5 million, certain commitments for future funding of AMSO, LLC’s operations and a 1% override on AMSO, LLC’s future revenue. In March 2009, a subsidiary of TOTAL S.A., or Total, the world’s fifth largest integrated oil and gas company, acquired a 50% interest in AMSO, LLC in exchange for cash paid to us of $3.2 million and Total’s commitment to fund the majority of AMSO, LLC’s research, development and demonstration, or RD&D, expenditures as well as certain other funding commitments.

AMSO is operating the project during the RD&D phase and Total will provide a majority of the funding during this phase of the project, and technical and financial assistance throughout the RD&D and commercial stages of the project. Total will lead the planning of the commercial development and will assume management responsibilities during the subsequent commercial phase.

According to reports from the United States Geological Service, or USGS, oil shale resources in the United States are estimated at over 4 trillion barrels, and based on management estimates, could potentially supply the U.S.’s demand for liquid fuel over the next 100 years. The majority of those deposits are found in the Green River Formation which spans parts of Colorado, Utah and Wyoming, the Piceance Basin of Colorado, and the Uinta Basin of Utah and

Colorado. Colorado's Piceance Basin, where AMSO, LLC's RD&D Lease is located as described below, contains some of the richest oil shale resources in the world (as reported by DOE and USGS sources).

The U.S. Bureau of Land Management, or BLM, effective January 1, 2007, issued to EGL Resources a lease for research, development and demonstration, or RD&D Lease, in western Colorado, which it assigned to its affiliate, E.G.L. Oil Shale, L.L.C. ("EGL"). In April 2008, EGL was acquired by AMSO and IDT and subsequently renamed American Shale Oil, LLC.

The RD&D Lease awarded by the BLM to EGL Resources and acquired by AMSO, LLC covers an area of 160 acres. The lease runs for a ten-year period beginning on January 1, 2007. Under the terms of the lease, AMSO, LLC may apply for an extension of up to five years if AMSO, LLC can demonstrate that a process leading to the production of commercial quantities of shale oil is diligently being pursued. AMSO, LLC intends to apply for a five year extension of its lease in 2015.

If AMSO, LLC can demonstrate the economic and environmental viability of its technology, it will have the opportunity to submit a one-time payment pursuant to the applicable regulations and convert its RD&D Lease to a commercial lease on 5,120 acres which overlap and are contiguous with the 160 acres covered by its RD&D Lease. AMSO, LLC's initial plan is to target the illite-rich mining interval where the "illite" rich oil shale is located. As technologies are developed to facilitate environmentally sound extraction processes from additional areas of the oil shale formation, we would expect to pursue the remaining reserves within our commercial lease.

AMSO, LLC is utilizing a team of experienced experts in various fields to conduct research, development and demonstration activities. AMSO, LLC constructed a surface oil and gas processing facilities and drilled pilot wells for its pilot test in Colorado. The pilot test is intended to confirm the accuracy of several of the key underlying assumptions of AMSO, LLC's proposed in-situ heating and retorting process. In January 2012, AMSO, LLC conducted a fully integrated commissioning test of the above and below ground facilities to determine their readiness for pilot test operations. The underground electric heater did not perform to specifications during the commissioning test. After modifications were made, in March 2013 AMSO, LLC initiated start-up of the oil shale pilot test. After approximately two weeks of operation, the down-hole electric heater failed. Pilot operations were too short to allow conclusions to be drawn about the ultimate viability of AMSO, LLC's technical approach. AMSO, LLC has initiated a comprehensive review of alternative heating system solutions. AMSO, LLC intends to qualify, design, engineer, build and thoroughly test the heating solution offering the best prospects for reliable pilot test operations. A key objective of the development process is to significantly de-risk the pilot operations before heater installation. In addition, this alternative heating system qualification process may result in development of a solution applicable to subsequent phases of the research, development and demonstration project's operations. It is expected that the heater development process will continue into, and possibly through, 2015. Additionally, AMSO, LLC has conducted a series of diagnostic tests to analyze the status of its pilot test's down-hole heating and production well system. The tests are designed to help us determine how the limited pilot test operations conducted in 2012 and 2013, including down-hole heating, have impacted the well system's condition and whether modifications to the pilot test's operational plans will be required.

Equipment modifications and technical issues are common in projects of the complexity and scope of the AMSO, LLC pilot test, particularly given the extent to which new concepts and applications have been incorporated into the pilot test's design.

Upon successful completion of the pilot test, AMSO, LLC will evaluate the appropriate timing to submit an application to convert its research, development and demonstration lease into a commercial lease. AMSO, LLC also expects to design and implement a larger scale demonstration project to further test its process and operations under commercial conditions, and assess scalability to commercial production levels.

AMSO, LLC incurred $7.8 million, $8.6 million and $8.6 million for research and development in the years ended December 31, 2014, 2013 and 2012, respectively.

Israel Energy Initiatives, Ltd.

Israel Energy Initiatives, Ltd., or IEI, holds an exclusive Shale Oil Exploration and Production License awarded in July 2008 by the Government of Israel. The license covers approximately 238 square kilometers in the south of the Shfela region in central Israel. Under the terms of the license, IEI is to conduct a geological appraisal study across the license area, characterize the resource and select a location for a pilot plant in which it will demonstrate its in-situ technology. The initial term of the license was for three years until July 2011. The license has been extended until July 2015.

IEI began its resource appraisal study in 2009, and completed the field work included in its study in 2011. The resource appraisal was comprised primarily of a drilling operation conducted in the license area. The resource appraisal plan included drilling and coring several wells to depths of approximately 600 meters, as well as well logging, analysis of core materials and other geochemical tests, water monitoring and hydrology tests, laboratory analyses of samples and other laboratory experiments. The results from the appraisal process, both from field tests and laboratory experiments, confirmed IEI's expectations as to the attractiveness of the oil shale resource in the license area from the standpoint of richness, thickness and hydrology.

In June 2013, IEI submitted its application for the construction and operation of its oil shale pilot test facility to the Jerusalem District Building and Planning Committee. IEI was asked to provide supplements to the environmental impact assessment and a revised application was submitted in November, 2013. In September 2014, the Jerusalem District Building and Planning Committee voted against issuing the pilot plant building and construction permits.

IEI is evaluating alternative approaches to permitting an oil shale pilot plant before deciding whether and how to proceed with its oil shale development program in the Shfela region.

IEI incurred $2.6 million, $3.7 million and $7.2 million for research and development in the years ended December 31, 2014, 2013 and 2012, respectively.

Other Projects

GOGAS evaluates additional potential exploration and development projects for potential oil and gas resources in other locations. The energy development prospects vary in potential size, applied technology and potential time to commercial production. The prospects we evaluate or pursue are in various stages of development and it is unclear when or if they will be developed or commercialized or prove to be profitable. However, if one or more of these prospects were to be successfully commercialized, they could be significant in terms of their potential impact on our operations and financial condition, and could materially affect our financial results, future prospects and valuation.

Financing

The Company is considering sales of equity interests in the various GOGAS projects or in GOGAS to provide the necessary financing for such activities.

Competition

If GOGAS is successful developing and producing commercial quantities of oil and gas from oil shale and other conventional and unconventional resources in an environmentally acceptable manner and receives all the necessary regulatory approvals, then, in the commercial production phases of operations, it will likely face competition from conventional and unconventional oil producers, other fossil fuels and other alternative energy providers in marketing and selling refined products and natural gas. Many of the potential competitors, including national oil companies, are larger and have substantially greater resources to be able to withstand the volatility of the oil and gas market (including as to price, availability, refining capacity and other factors).

Regulation

AMSO, LLC was granted an RD&D Lease by the BLM for 10 years beginning on January 1, 2007 with up to a 5-year extension upon demonstration that a process leading up to the production of commercial quantities of shale oil is diligently pursued. AMSO, LLC plans to apply for an extension of its RD&D Lease in 2015. Throughout the term of the RD&D Lease, AMSO, LLC will execute various activities and milestones within the technical phases of its research and development plan with the aim of ultimately converting its RD&D Lease to a long term commercial lease.

In order to execute these activities and milestones, AMSO, LLC must obtain the necessary permitting and comply with the various rules, regulations, and policies spanning multiple regulatory bodies and governmental agencies at various levels. In connection with the site characterization phase (which AMSO, LLC completed) and the pilot phase (which is ongoing), AMSO, LLC has been working to ensure compliance with rules, regulations, and policies of the BLM and the Department of Environmental Protection at the federal level, with the Colorado Division of Reclamation and Mining Service and the Air Pollution Control Division and the Water Control Division of the Colorado Department of Public Health and Environment at the state level, and with Rio Blanco County at the county level. In accordance with the technical and regulatory requirements of the RD&D Lease, in May 2009, AMSO, LLC submitted its in-situ Plan of Development to the BLM. In September 2009, the BLM approved AMSO, LLC's Plan of Development, allowing AMSO, LLC to proceed with implementation, subject to compliance with Colorado's permitting requirements (which AMSO, LLC has satisfied). AMSO, LLC continues to refine its Plan of Development in conjunction with its ongoing operations, and the BLM has approved such modifications.

Although AMSO, LLC has diligently worked to satisfy the regulatory requirements and challenges necessary for implementing the site characterization and initial pilot phase of the project, it is difficult at this time to predict all of the compliance requirements that may be necessary throughout the life of the project.

IEI holds an exclusive Shale Oil Exploration and Production License that was extended until July 2015. IEI has applied to the Ministry of Energy and Water in a request to secure its rights over the license period beyond the seven year limit set forth in the Petroleum Law, citing past precedents and the Force Majure doctrine in Israeli Law. Based on third party analysis and initial feedback from the Ministry, we estimate that this issue will be satisfactorily resolved. However, there is no guarantee the license will be extended as described above or that a new license would be granted. The license is subject to certain conditions and milestones and the failure to achieve those milestones may result in the termination, revocation, suspension or limitation of the license.

In order to execute its plan of operation, IEI must obtain and comply with a large number of permits and authorizations from various government agencies, local authorities and other regulators and interested parties in Israel, such as the District Planning Committee, the Ministry of Environmental Protection, the Israel Defense Forces and many others. On September 2, 2014, the Jerusalem District Committee for Planning and Building declined to issue IEI

a permit to build and operate a pilot drilling project. IEI is currently evaluating its options to determine the best course of action to move forward to exploit the abundant oil shale resource in Israel.

Afek holds an exclusive exploration license in Northern Israel's Golan Heights. Its ten well exploratory drilling program was licensed by the Planning and Construction Committee, North District. In February 2015, Afek began drilling its first exploratory well. Contingent upon the results of its exploration program, Afek may seek to declare a commercial discovery and apply for a commercial production lease pursuant to Israeli law. The international community considers the Golan Heights an internationally disputed territory, and therefore political risk may affect our ability to execute our plan of operations. This may influence local decision makers, as well as service providers necessary to our operations.

According to the Mongolian constitution, all minerals and other natural resources in the ground are owned by the Mongolian state. A mining license holder does not own the minerals, but is entitled to extract and sell the minerals located within the land area covered by the license on and subject to the terms of the laws. Recently the government of Mongolia has adopted a new petroleum law which now is the governing legislation for all conventional and unconventional oil and gas in Mongolia. The Ministry of Mining is currently finalizing a draft of the unconventional oil and gas regulations as well as a petroleum products law. The new regulations will set a firm basis of the future economic agreement between Genie and the government of Mongolia.

While a comprehensive environmental regulatory regime exists in Mongolia, historical enforcement of environmental obligations has not been adequate. Nevertheless, Genie Mongolia will need to comply with the Mongolian environmental laws, as the law imposes sanctions for non-compliance with environmental obligations and legal requirements, including potential termination or suspension of activities, confiscation of any income arising from such activities, monetary fines and revocation of a mining license. The Criminal Law specifies some criminal charges (heavier monetary fines or imprisonment) for severe environmental violations that result in significant damage to human health, property or flora and fauna.

Finally, in order to engage in mining operations, mining license holders must enter into either a “land possession” or “land use” agreement with the governing authorities of local *soums* and obtain a land certificate. A standard land possession or land use contract indicates the terms of the miner’s land use, amount of annual land fees (fixed per hectare as defined by the Government) and duties and entitlements of the contracting parties, namely the *soum* governor and the mining company.

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 the Company automatically by operation of law, the employee is required to assign his or her rights to us.

In connection with its RD&D process and related technologies, some patents are registered in the name of AMSO, LLC and some patents are registered in the name of Genie IP BV., a Dutch subsidiary of the Company. AMSO, LLC owns five patents issued in the United States, eleven patents issued abroad, four of which are jointly owned with Lawrence Livermore National Security, LLC (“LLNS”), as well as several pending applications, both in the United States and abroad. The issued or allowed patents include: patent No. 7,743,826 (US), which expires April 16, 2028; patent No. 7,921,907 (US), which expires January 19, 2027; patent No. 8,162,043 (US), which expires January 19, 2027; patent No. 8,464,792 (US), which expires July 27, 2031; patent No. 8,899,331 (US), granted jointly to AMSO, LLC and LLNS, which expires December 29, 2030; patent registration No. 3668 (Mongolia) which expires December 25, 2032; patent registration No. 32691 (Morocco), granted jointly to AMSO, LLC and LLNS on October 1, 2011, which expires September 30, 2029; patent registration No. 3565 (Mongolia), granted jointly to AMSO, LLC and LLNS on April 13, 2012, which expires March 29, 2031; patent No. 508 (Madagascar), granted on December 2, 2011, which expires November 2, 2029; patent No. 606 (Madagascar), granted on April 18, 2014, which expires April 27, 2031; patent registration No. 3590 (Mongolia), granted on April 13, 2012, which expires April 22, 2031; patent No. 32765 (Morocco), granted on November 1, 2011, which expires November 2, 2029; patent registration No. 2,741,861 (Canada), granted on August 27, 2013, which expires November 2, 2029; patent registration No. 2,738,920 (Canada), granted jointly to AMSO, LLC and LLNS, which expires September 30, 2029; and patent registration No. CN 102209835 (China), granted on April 16, 2014, which expires November 1, 2029; patent No. 3895 (Mongolia), granted January 28, 2015, which expires March 29, 2031; and patent appl. No. 222732 (Israel), which should be granted within the next 2 months, and expires March 29, 2031.

Genie IP B.V. owns Mongolian utility models 2050, 2052, 2053, 2054, 2055, and 2067 which all expire on January 23, 2019. The patents and utility models are directed to in-situ methods and systems for the extraction of oil from shale, integral to our technical and operational plans, as well as carbon sequestration in depleted oil shale deposits and down-hole heater technologies. AMSO has also been granted three trademarks in the United States in connection with

its operations.

Genie IP B.V. has seven published international Patent Cooperation Treaty (PCT) applications, three published Israeli patent applications and additional unpublished patent applications. Some of these patent applications relate to methods and apparatus for oil extraction from shale, some of these patent applications relate to downstream processing of oil extracted from shale, and some of these patent applications relate to techniques for locating and extracting unconventional naturally-occurring oil from a tight formation.

Employees

GOGAS, excluding AMSO, employs 62 employees, while AMSO (including AMSO, LLC) employs 17 full-time employees, including a secondee assigned by Total. AMSO, IEI, Afek and Genie Mongolia 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.

Industry Segments and Geographic Areas

For disclosure regarding our industry segments and geographic areas, please see Note 16 to our Consolidated Financial Statements in this Annual Report.

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 cut 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 don't change their sell rates offered to customers immediately in response to increased prices for the underlying commodities. There is a time lag before utilities increase prices to reflect their increased costs and market prices for commodities.

REPs like IDT Energy that offer variable rate products, and reflect real-time commodity costs, may offer variable rates prices which are not competitive with other fixed rate providers.

Conversely, in a downward moving commodity cost environment, variable rate REPs like IDT Energy 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.

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. 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.

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 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. In 2014, we faced challenges and delays in licensing for new territories, particularly in Pennsylvania. 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.

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

Competitors in the highly competitive REP market engage in unfair business practices to sign up new customers. Competitors engaging in unfair business practices create an unfavorable impression about our industry on consumers or with 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.

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. These factors included sustained, extremely cold weather, constriction of natural gas required to fuel electricity generation plants, the resulting failure of the Independent System Operators (ISO) to deliver peak power at a reasonable cost, and unusually volatile commodity trading in the financial markets. In some regions, wholesale prices increased briefly by factors of more than eight times. Because of dramatic increases in wholesale electricity costs, the retail electricity prices that GRE’s REPs and many other variable rate electricity suppliers charged to their customers increased sharply in January and February 2014. The unusually cold weather and resultant high energy costs also adversely affected GRE’s customer churn and customer acquisition efforts. GRE responded by reducing its target margins in order to mitigate the severity of the commodity price increases on its customers. In addition, in the year ended December 31, 2014, GRE issued approximately $5 million in rebates to hard hit customers.

Repeats of the circumstances described above 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 crit;font-size:10pt;">

	Six months ended June 30,		Three months ended June 30,	
	2011	2012	2011	2012
Revenues:				
Projects	$4,857	$7,618	$2,509	$4,582
Products	2,102	2,176	1,482	1,196
Services	243	341	116	122
Total revenues	7,202	10,135	4,107	5,900
Cost of sales:				
Projects	3,371	5,773	1,904	3,527
Products	1,115	1,322	758	668
Services	195	251	98	127
Total cost of sales	4,681	7,346	2,760	4,322
Gross profit	2,521	2,789	1,347	1,578
Operating expenses:				
Research and development expenses, net of credits	874	3,017	384	1,699
Selling, general and administrative expenses	5,467	8,619	2,724	4,390
Total operating expenses	6,341	11,636	3,108	6,089
Operating loss	(3,820)	(8,847)	(1,761)	(4,511)
Finance income (expense), net	(217)	107	(100)	130

Gain on sale of HangXing	492	—	—	—
Loss from continuing operations before taxes	(3,545)	(8,740)	(1,861)	(4,381)
Income tax benefit (expense)	(39)	989	26	1,064
Net loss from continuing operations	(3,584)	(7,751)	(1,835)	(3,317)
Loss from discontinued operations, net of income taxes	(1,404)	—	(568)	—
Non-controlling interest share of loss from discontinued operations	389	—	157	—
Net loss	(4,599)	(7,751)	(2,246)	(3,317)
Net loss attributable to non-controlling interests	303	461	167	205
Net loss attributable to Acorn Energy, Inc. shareholders	$(4,296)	$(7,290)	$(2,079)	$(3,112)
Basic and diluted net loss per share attributable to Acorn Energy, Inc. shareholders:				
From continuing operations	$(0.19)	$(0.41)	$(0.10)	$(0.17)
From discontinued operations	$(0.06)	$—	$(0.02)	$—
Basic and diluted net loss per share attributable to Acorn Energy, Inc. shareholders	$(0.25)	$(0.41)	$(0.12)	$(0.17)
Weighted average number of shares outstanding attributable to Acorn Energy, Inc. shareholders – basic and diluted	17,410	17,796	17,489	17,912
Dividends declared per common share	$—	$0.070	$—	$0.035

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

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ACORN ENERGY, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(IN THOUSANDS)

	Six months ended June 30,		Three months ended June 30,	
	2011	2012	2011	2012
Net loss attributable to Acorn Energy, Inc. shareholders	$(4,296)	$(7,290)	$(2,079)	$(3,112)
Other comprehensive income (loss), net of income taxes:				
Foreign currency translation adjustments	292	(1)	185	(202)
Comprehensive loss, net of income taxes	(4,004)	(7,291)	(1,894)	(3,314)
Comprehensive loss attributable to non-controlling interests	(6)	—	(2)	6
Comprehensive loss attributable to Acorn Energy, Inc. shareholders	(4,010)	(7,291)	(1,896)	(3,308)

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

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ACORN ENERGY, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (UNAUDITED)
(IN THOUSANDS)

	Acorn Energy, Inc. Shareholders									
	Number of Shares	Common Stock	Additional Paid-In Capital	Warrants	Accumulated Deficit	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total Acorn Energy, Inc. Shareholders' Equity	Non-controlling interests	Total Equity
As of December 31, 2011	18,326	$ 183	$ 84,614	$ 427	$ (13,022)	$ (3,036)	$ 485	$ 69,651	$ (84)	$ 69,567
Net loss	—	—	—	—	(7,290)	—	—	(7,290)	(461)	(7,751)
Differences from translation of subsidiaries' financial statements	—	—	—	—	—	—	(1)	(1)	—	(1)
Comprehensive income	—	—	—	—	—	—	—	(7,291)	(461)	(7,752)
Dividends	—	—	(1,248)	—	—	—	—	(1,248)	—	(1,248)
Adjustment of non-controlling interests in USSI following additional investment by the Company	—	—	(975)	—	—	—	—	(975)	975	—
Stock option compensation	—	—	182	—	—	—	—	182	—	182
Exercise of warrants and options	403	4	1,671	(372)	—	—	—	1,303	—	1,303
Balances as of June 30, 2012	18,729	$ 187	$ 84,244	$ 55	$ (20,312)	$ (3,036)	$ 484	$ 61,622	$ 430	$ 62,052

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

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ACORN ENERGY, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)
(IN THOUSANDS)

	Six months ended	
	June 30, 2011	June 30, 2012
Cash flows used in operating activities:		
Net loss before non-controlling interests	$(4,988)	$(7,751)
Less net loss from discontinued operations	(1,404)	—
Net loss from continuing operations	(3,584)	(7,751)
Adjustments to reconcile net loss to net cash used in operating activities (see Schedule A)	787	(2,157)
Net cash used in operating activities – continuing operations	(2,797)	(9,908)
Cash flows provided by (used in) investing activities:		
Acquisitions of property and equipment	(393)	(370)
Acquisition of license	—	(150)
Restricted deposits	(547)	(45)
Release of restricted deposits	342	386
Maturity of short-term deposits	—	8,000
Short-term deposit	—	(8,015)
Amounts funded for severance assets	(145)	(169)
Proceeds from the sale of HangXing	492	—
Acquisition of OmniMetrix, net of cash acquired (see Schedule C)	—	(7,835)
Net cash used in investing activities – continuing operations	(251)	(8,198)
Cash flows provided by (used in) financing activities:		
Proceeds from employee stock option and warrant exercises	193	1,303
Short-term bank credit, net	(126)	(510)
Proceeds from borrowings of long-term debt	76	16
Repayments of long-term debt	(225)	(95)
Dividends paid	—	(2,123)
Other	24	—
Net cash used in financing activities – continuing operations	(58)	(1,409)
Discontinued operations:		
Operating cash flows	(516)	—
Investing cash flows	455	—
Financing cash flows	489	—
Net cash provided by discontinued operations	428	—
Effect of exchange rate changes on cash and cash equivalents	77	(12)
Net decrease in cash and cash equivalents	(2,601)	(19,527)
Cash and cash equivalents at beginning of the year of discontinued operations	807	—
Cash and cash equivalents at beginning of year of continuing operations	6,549	34,280
Cash and cash equivalents at the end of the period	$4,755	14,753
Cash and cash equivalents of discontinued operations at end of period	$(1,363)	—
Cash and cash equivalents held by continuing operations at end of the period	$3,392	14,753

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

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ACORN ENERGY, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)
(IN THOUSANDS)

		Six months ended	
		June 30, 2011	June 30, 2012
A.	Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
	Depreciation and amortization	$402	$661
	Increase in accrued severance	190	211
	Stock-based compensation	265	181
	Deferred taxes	(136)	(240)
	Gain on the sale of HangXing	(492)	—
	Other	36	(35)
	Change in operating assets and liabilities:		
	Decrease (increase) in accounts receivable, unbilled work-in process, other current and other assets	1,545	(925)
	Increase in inventory	(209)	(275)
	Increase in accounts payable, accrued payroll, payroll taxes and social benefits, advances from customers, other current liabilities and other liabilities	(814)	(1,735)
		$787	$(2,157)
B.	Non-cash investing and financing activities:		
	Adjustment of additional paid-in-capital and non-controlling interests from additional investment option by Acorn in USSI	$600	$975
	Value of shares issued as compensation	101	
C.	Assets/liabilities acquired in the acquisition of OmniMetrix		
	Accounts receivable		(328)
	Inventory		(234)
	Other current assets		(10)
	Property and equipment		(26)
	Intangible assets		(5,581)
	Goodwill		(1,930)
	Current liabilities		274
			(7,835)

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

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NOTE 1— BASIS OF PRESENTATION

The accompanying unaudited condensed consolidated financial statements of Acorn Energy, Inc. and its subsidiaries (the “Company”) have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information and with the instructions to Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by accounting principles generally accepted in the United States of America for complete consolidated financial statements. In the opinion of management, all adjustments considered necessary for a fair presentation have been included. Operating results for the six month period ended June 30, 2012 are not necessarily indicative of the results that may be expected for the year ending December 31, 2012. These unaudited condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and footnotes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2011.

In August 2011 we sold our interest in CoaLogix whose results are reflected as discontinued operations. Accordingly, certain reclassifications have been made to the Company's condensed consolidated financial statements for the three and six month periods ended June 30, 2011 to conform to the current period's consolidated financial statement presentation.

All dollar amounts in the notes to the condensed consolidated financial statements are in thousands except for per share data.

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NOTE 2—RECENT AUTHORITATIVE GUIDANCE

In June 2011, the Financial Accounting Standards Board ("FASB") issued ASU No. 2011-05, "Comprehensive Income (ASC Topic 220): Presentation of Comprehensive Income," ("ASU 2011-05") which amends current comprehensive income guidance. This accounting update eliminates the option to present the components of other comprehensive income as part of the statement of shareholders' equity. Instead, the Company must report comprehensive income in either a single continuous statement of comprehensive income which contains two sections, net income and other comprehensive income, or in two separate but consecutive statements. ASU 2011-05 will be effective for public companies during the interim and annual periods beginning after Dec. 15, 2011 with early adoption permitted. The adoption of ASU 2011-05 by the Company did not have a material impact on the Company's consolidated results of operation and financial condition.

In July 2012, the FASB issued ASU 2012-02, Testing Indefinite-Lived Intangible Assets for Impairment (the revised standard). The revised standard is intended to reduce the cost and complexity of testing indefinite-lived intangible assets other than goodwill for impairment. It allows companies to perform a "qualitative" assessment to determine whether further impairment testing of indefinite-lived intangible assets is necessary, similar in approach to the goodwill impairment test. The Company is currently evaluating the effect that this guidance will have on its consolidated financial position, results of operations and cash flows.

Other recent authoritative guidance issued by the FASB (including technical corrections to the Codification), the American Institute of Certified Public Accountants, and the Securities and Exchange Commission did not, or are not expected to have a material effect on the Company's consolidated financial statements.

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NOTE 3—ACQUISITION OF OMNIMETRIX

On February 15, 2012, the Company entered into a definitive agreement pursuant to which it acquired, through its XYZ Holdings, Inc. wholly-owned Georgia subsidiary ("Holdings" which has been renamed OMX Holdings, Inc.), all of the issued and outstanding limited liability company membership interests (the "Interests") in OmniMetrix, LLC, a Georgia limited liability company ("OmniMetrix"). OmniMetrix is in the business of designing, manufacturing, marketing and selling (i) wireless remote systems that monitor standby power generation, backup power generators, remote powered equipment, cellular towers, emergency towered communications and remote tower sites (the "Power Generator Monitoring" segment - see Note 11), and (iii) cathodic protection products to monitor pipeline integrity (the "Cathodic Protection" segment - included in the Company's "Other" segment - see Note 11). Holdings purchased the Interests in OmniMetrix from its three individual holders (the "Sellers") in consideration for an aggregate cash payment of $8,500. The Company incurred approximately $300 of transaction costs in connection with the acquisition of OmniMetrix which are included in Selling, general and administrative expense in the Condensed Consolidated Statement of Operations. The acquisition of OmniMetrix adds to the Company's growing product lines of remote monitoring systems for aging energy infrastructure.
The transaction was accounted for as a purchase business combination. OmniMetrix's results from operations for the period from acquisition (February 15, 2012) to June 30, 2012 have been included in the Company's consolidated statement of comprehensive income. In the period since our acquisition, the Company recorded $382 of revenues and a net loss of $830 associated with OmniMetrix's activities. Pro forma information with respect to the acquisition of OmniMetrix are not included in these condensed financial statements as the information is not material.

In accordance with generally accepted accounting principles, the fair value of OmniMetrix is allocated to OmniMetrix's identifiable tangible and intangible assets and liabilities assumed based on their fair values as of the date of the transaction. Based upon a third-party valuation of intangible assets as of that date, the Company allocated the $8,500 consideration of the fair value to assets and liabilities as follows:

Cash	$665	
Accounts receivable	328	
Inventory	234	
Other current assets	10	
Property and equipment	26	
Intangible assets	5,581	
Goodwill (see Note 7 for allocation to segments)	1,930	
Total assets acquired	8,774	
Current liabilities	(274	)
Fair value of assets and liabilities acquired	$8,500	

Intangible assets with estimated useful lives are amortized over that period. The intangible assets acquired and their weighted average estimated useful life in years is noted in the table below:

Intangible Asset Acquired	Estimated value	Weighted average estimated useful life in years
OmniMetrix technologies	$2,319	10
Customer relationships	3,236	14
Non-compete agreements	26	6
	$5,581	

The goodwill is not amortized for financial statement purposes in accordance with generally accepted accounting principles. The goodwill is expected to be deductible for tax purposes.

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NOTE 4—US SEISMIC SYSTEMS, INC.

On February 6, 2012, the Company entered into a new Stock Purchase Agreement (the "USSI Purchase Agreement") with USSI pursuant to which the Company converted advanced funds into additional shares of USSI common stock ("USSI Common Stock") and shares of USSI's new Series A-1 Preferred Stock ("USSI Preferred Stock"). The Company also made a further payment to USSI of $2,250 on February 6, 2012 to purchase additional shares of USSI Preferred Stock. The USSI Preferred Stock provides that upon any future liquidation of USSI, to the extent funds are available for distribution to USSI's stockholders after the satisfaction of any USSI liabilities at that time, USSI would first repay the Company for the purchase price of our USSI Preferred Stock. Thereafter, the Company would receive a further payment for such shares ratably with all other USSI Common Stock holders as though the Company's shares of USSI Preferred Stock were the same number of shares of USSI Common Stock.

In April 2012, the Company conducted a second closing for the purchase of additional USSI Preferred Stock in accordance with the USSI Purchase Agreement and invested an additional $2,500 in USSI. Following this investment, the Company owns approximately 92% of USSI on a fully diluted basis. See Note 12 - Subsequent Events.

In connection with the USSI Purchase Agreement, the Company established a new 2012 Stock Plan (the "USSI 2012 Plan") under which key employees, directors and consultants of USSI may receive options to purchase up to an aggregate of 1,180,000 shares of USSI Common Stock on such terms as the USSI 2012 Plan provides and as determined by USSI's board of directors or by such committee designated by USSI's board to administer the USSI 2012 Plan, if any. If options to purchase all shares of USSI Common Stock available under the USSI 2012 Plan are granted and exercised, the Company would own approximately 81% of USSI on a fully diluted basis. To date, no options have been issued under the USSI 2012 Plan.

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NOTE 5—NON-CONTROLLING INTERESTS

The composition of the net income (loss) attributable to non-controlling interests (“NCI”) is as follows:

	Six months ended June 30,		Three months ended June 30,	
	2011	2012	2011	2012
Net income (loss) attributable to NCI in DSIT	$(23)	$65	$(24)	$57
Net loss attributable to NCI in USSI	(280)	(526)	(143)	(262)
Net loss attributable to NCI	$(303)	$(461)	$(167)	$(205)

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NOTE 6—INVENTORY

The composition of inventory is as follows:

	As of December 31, 2011	As of June 30, 2012
Raw materials	$1,663	$1,696
Work-in-process	481	540
Finished goods	—	416
	$2,144	$2,652

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NOTE 7—GOODWILL AND INTANGIBLE ASSETS

(a) Goodwill

The changes in the carrying amounts of goodwill by segment from December 31, 2011 to June 30, 2012 were as follows:

	Energy & Security Sonar Solutions segment	GridSense segment	USSI segment	Power Generation Monitoring segment	Cathodic Protection segment*	Total
Balance as of December 31, 2011	$527	$2,708	$1,402	$—	$—	$4,637
Goodwill recorded in the acquisition of OmniMetrix (see Note 3)	—	—	—	1,517	413	1,930
Translation adjustment	(14)	9	—	—	—	(5)
Balance as of June 30, 2012	$513	$2,717	$1,402	$1,517	$413	$6,562

* Results for the Cathodic Protection segment are included in "Other" in Segment Reporting (see Note 11).

(b) Intangibles

The changes in the carrying amounts of and accumulated amortization of intangible assets from December 31, 2011 to June 30, 2012 were as follows:

	Energy & Security Sonar Solutions segment		GridSense segment		USSI segment		Power Generation Monitoring segment		Cathodic Protection segment**		
	Cost	A.A.*	Cost	A.A.*	Cost	A.A.*	Cost	A.A.*	Cost	A.A.*	Total
Balance as of December 31, 2011	$519	$(274)	$2,748	$(543)	$2,565	$(235)	$—	$—	$—	$—	$4,780
Acquisition of license	—	—	—	—	150	—	—	—	—	—	150
Intangibles recorded in the acquisition of OmniMetrix (see Note 3)	—	—	—	—	—	—	4,385	—	1,196	—	5,581
Amortization	—	(41)	—	(162)	—	(70)	—	(132)	—	(51)	(456)
Cumulative translation adjustment	(13)	9	6	(1)	—	—	—	—	—	—	1
Balance as of June 30, 2012	$506	$(306)	$2,754	$(706)	$2,715	$(305)	$4,385	$(132)	$1,196	$(51)	$10,056
Weighted average estimated useful lives in years	6		10		20		13		9		

* Accumulated amortization
** Results for the Cathodic Protection segment are included in "Other" in Segment Reporting (see Note 11).

The composition of intangibles in each of the Company's segments are as follows:

Segment	Type of Intangible
Energy & Security Sonar Solutions	Naval technologies
GridSense	Software and customer relationships
USSI	Sensor technologies and license
Power Generation Monitoring	Technologies, customer relationships and non-compete agreements
Cathodic Protection*	Technologies and customer relationships

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* The Cathodic Protection segment is included in "Other" in Segment Reporting (see Note 11).

In April 2012, USSI and Northrop Grumman Guidance and Electronics Company, Inc. signed a license agreement involving several of Northrop Grumman’s fiber-optic technology patents. The license agreement calls for an initial payment of $150 and for a royalty payment of 10% of the net selling price of each unit of licensed products used or sold during the term of the agreement, subject to an annual minimum royalty of $50 for the first ten years of the license term.

Amortization expense for each of the six months ended June 30, 2011 and 2012 amounted to $267 and $456, respectively. Amortization expense with respect to intangible assets is estimated to be $1,023, $975, $925, $852 and $852 for each of the years ending June 30, 2013 through 2017.

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NOTE 8—EQUITY

(a) Dividends

On February 7, 2012, the Company announced that its Board of Directors approved a first quarter 2012 dividend of $0.035 per share which was paid on March 1, 2012 to common stockholders of record on February 20, 2012. On April 19, 2012, the Company's Board of Directors approved a second quarter 2012 dividend of $0.035 per share which was paid on June 1, 2012 to common stockholders of record on May 15, 2012. The dividends are a continuation of the Company's policy to pay a regular quarterly dividend. The March 1, 2012 dividend payment was $620 while the June 1, 2012 dividend payment was $628. See Note 12 - Subsequent Events.

(b) Acorn Stock Options

A summary of stock option activity for the six months ended June 30, 2012 is as follows:

	Number of Options (in shares)	Weighted Average Exercise Price Per Share	Weighed Average Remaining Contractual Life	Aggregate Intrinsic Value
Outstanding at December 31, 2011	1,388,333	$4.17		
Granted	115,000	$7.60		
Exercised	(133,333)	$1.89		
Forfeited or expired	(25,000)	$2.96		
Outstanding at June 30, 2012	1,345,000	$4.71	3.4 years	$4,756
Exercisable at June 30, 2012	1,154,375	$4.39	4.4 years	$4,361

The weighted average grant date fair value of the 115,000 stock options granted during the first six months of 2012 was $3.19 per share. The fair value of the options granted was estimated on the grant date using the Black-Scholes option-pricing model with the following weighted average assumptions:

Risk-free interest rate	1.4	%
Expected term of options, in years	6.5	
Expected annual volatility	58	%
Expected dividend yield	2.0	%

(c) Stock-based Compensation Expense

Stock-based compensation expense included in the Company's Condensed Statements of Operations was $265 and $181 for the six months ended June 30, 2011 and 2012, respectively ($133 and $39 for the three months ended June 30, 2011 and 2012, respectively) and was included in Selling, general and administrative expense.

(d) Warrants

The Company previously issued warrants at exercise prices equal to or greater than market value of the Company's common stock at the date of issuance. A summary of warrant activity follows:

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	Number of Warrants (in shares)	Weighted Average Exercise Price Per Share	Weighed Average Remaining Contractual Life
Outstanding at December 31, 2011	313,806	$ 4.29	
Granted	—		
Exercised	(269,808)	$ 4.39	
Forfeited or expired	(15,248)	$ 3.68	
Outstanding at June 30, 2012	28,750	$ 3.68	3.5

During the six months ended June 30, 2012, 36,502 warrants were exercised and 15,248 warrants were forfeited in connection with the “net exercise” of 51,750 warrants. In a net exercise of a warrant, the Company does not require a payment of the exercise price of the warrant from the warrant holder, but reduces the number of shares of common stock issued upon the exercise of the warrant by the smallest number of whole shares that has an aggregate fair market value equal to or in excess of the aggregate exercise price for the warrants covered by the warrants exercised. The 51,750 options which were exercised under this method had a weighted average exercise price of $3.68 per share.

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NOTE 9—WARRANTY PROVISION

The changes in the warranty provision from December 31, 2011 to June 30, 2012 was as follows:

	Gross Carrying Amount
Balance at December 31, 2011*	$188
Warranties issued	—
Adjustment of warranty provision	39
Warranty claims	—
Balance at June 30, 2012*	$227

* The balance at December 31, 2011 is included in other current liabilities ($37) and other long-term liabilities ($151). At June 30, 2012, the balance is included in other current liabilities ($32) and other long-term liabilities ($195).

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NOTE 10—FAIR VALUE MEASUREMENTS

Financial items measured at fair value are classified in the table below in accordance with the hierarchy established in applicable accounting principles.

	As at June 30, 2012			
	Level 1	Level 2	Level 3	Total
Short-term deposits	$18,015	$—	$—	$18,015
Restricted deposits – current and non-current	2,157	—	—	2,157
Funds held in escrow	5,961	—	—	5,961
Derivative liabilities	(57)	—	—	(57)
Total	$26,076	$—	$—	$26,076

	As at December 31, 2011			
	Level 1	Level 2	Level 3	Total
Short-term deposits	$18,000	$—	$—	$18,000
Restricted deposits – current and non-current	2,494	—	—	2,494
Funds held in escrow	5,961	—	—	5,961
Derivative liabilities	(18)	—	—	(18)
Total	$26,437	$—	$—	$26,437

Derivative assets and liabilities are forward contracts for the purchase of New Israeli Shekels for which market prices are readily available. Unrealized gains or losses from forward contracts are recorded in Finance expense, net.

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NOTE 11—SEGMENT REPORTING

The Company currently operates in four operating segments:

(1) Energy & Security Sonar Solutions whose activities are focused on the following areas – sonar and acoustic related solutions for energy, defense and commercial markets and includes other real-time and embedded hardware & software development and production. Energy & Security Sonar Solutions activities are provided through the Company's DSIT Solutions Ltd. subsidiary.

(2) The Company's GridSense segment provides Smart Grid Distribution Automation products and services through its GridSense subsidiaries.

(3) The Company's USSI segment's focus is to develop and produce fiber optic sensing systems for the energy and security markets. These activities are performed through the Company's USSI subsidiary.

(4) The Company's Power Generation Monitoring segment provides products and services which deliver critical, real-time machine information to customers, while its Smart Service™ software provides remote diagnostics that give users real control over their equipment. These activities are performed through the Company's OmniMetrix subsidiary. As these activities were acquired in February 2012 (see Note 3), there are no comparative results reported for these activities for the three and six month periods ended June 30, 2011.

Other operations include various operations in DSIT and OmniMetrix that do not meet the quantitative thresholds under applicable accounting principles.

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	Energy & Security Sonar Solutions	GridSense	USSI	Power Generation Monitoring	Other	Total
Six months ended June 30, 2012						
Revenues from external customers	$6,182	$1,907	$1,083	$301	$662	$10,135
Intersegment revenues	—	—	—	—	—	—
Segment gross profit (loss)	2,297	817	(605)	49	231	2,789
Depreciation and amortization	116	189	153	132	66	656
Segment net income (loss) before income taxes	581	(2,057)	(3,802)	(228)	(65)	(5,571)
Six months ended June 30, 2011						
Revenues from external customers	$4,032	$2,140	$248	$—	$782	$7,202
Intersegment revenues	—	—	—	—	—	—
Segment gross profit (loss)	1,386	996	(297)	—	436	2,521
Depreciation and amortization	98	180	109	—	13	400
Segment net income (loss) before income taxes	(270)	(1,058)	(1,254)	—	235	(2,347)
Three months ended June 30, 2012						
Revenues from external customers	$3,419	$989	$962	$172	$358	$5,900
Intersegment revenues	—	—	—	—	—	—
Segment gross profit (loss)	1,337	473	(394)	3	159	1,578
Depreciation and amortization	58	93	83	89	41	364
Segment net income (loss) before income taxes	421	(858)	(2,087)	(219)	(3)	(2,746)
Three months ended June 30, 2011						
Revenues from external customers	$2,006	$1,499	$205	$—	$397	$4,107
Intersegment revenues	—	—	—	—	—	—
Segment gross profit (loss)	673	726	(288)	—	236	1,347
Depreciation and amortization	48	91	52	—	6	197
Segment net income (loss) before income taxes	(239)	(236)	(738)	—	117	(1,096)

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Reconciliation of Segment Income (Loss) to Consolidated Net Loss

	Six months ended June 30,		Three months ended June 30,	
	2011	2012	2011	2012
Total net loss before income taxes for reportable segments	$(2,582)	$(5,506)	$(1,213)	$(2,743)
Other operational segment net income (loss) before income taxes	235	(65)	117	(3)
Total segment net loss before income taxes	(2,347)	(5,571)	(1,096)	(2,746)
Unallocated cost of corporate, DSIT and OmniMetrix headquarters*	(1,690)	(3,169)	(765)	(1,635)
Income tax benefit (expense) **	(39)	989	26	1,064
Non-controlling interests (see Note 5)	303	461	167	205
Gain on sale of HangXing	492	—	—	—
Loss from discontinued operations, net of income taxes	(1,404)	—	(568)	—
Non-controlling interest share of loss from discontinued operations	389	—	157	—
Consolidated net loss attributable to Acorn Energy, Inc. shareholders	$(4,296)	$(7,290)	$(2,079)	$(3,112)

* Includes stock compensation expense of $265 and $181 for the six month periods ending June 30, 2011 and 2012, respectively. Includes stock compensation expense of $133 and $39 for the three month periods ending June 30, 2011 and 2012, respectively.

** In 2012, includes an income tax benefit of $1,100 recorded with respect to net operating loss carryback of the Company's expected consolidated tax loss in the United States.

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NOTE 12—SUBSEQUENT EVENTS

Additional Investment in USSI

On July 30, 2012, the Company entered into another Stock Purchase Agreement (the “Summer USSI Purchase Agreement”) with USSI pursuant to which the Company made a payment to USSI of $2,500 to purchase additional shares of USSI Preferred Stock. The USSI Preferred Stock is the same class of shares that the Company acquired earlier this year (see Note 4) and provides that upon any future liquidation of USSI, to the extent funds are available for distribution to USSI's stockholders after the satisfaction of any USSI liabilities at that time, USSI would first repay the Company for the purchase price of its USSI Preferred Stock. Thereafter, the Company would receive a further payment for such shares ratably with all other USSI Common Stock holders as though the Company's shares of USSI Preferred Stock were the same number of shares of USSI Common Stock. In connection with this investment, the Company also entered into a Second Amended and Restated Stockholders Agreement with USSI and its other stockholders providing for certain rights and obligations to purchase or sell our USSI securities and with regard to the management of USSI.

Following the July 30, 2012 payment to USSI, the Company owned approximately 93.6% of USSI on a fully diluted basis. The Summer USSI Purchase Agreement contemplates that the Company may make an additional investment of $2,500 later this year in exchange for more shares of USSI Preferred Stock. If the Company fully funds that investment, it will own approximately 94.4% of USSI on a fully diluted basis (which amount would be diluted to approximately 85.1% if all options which could be awarded under USSI's 2012 Stock Purchase Plan were awarded and exercised).

Dividends

On July 10, 2012, the Company's Board of Directors approved a third quarter 2012 dividend of $0.035 per share to be paid on September 4, 2012 to common stockholders of record on August 17, 2012.

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ACORN ENERGY, INC.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion includes statements that are forward-looking in nature. Whether such statements ultimately prove to be accurate depends upon a variety of factors that may affect our business and operations. Certain of these factors are discussed in this report and in our Annual Report on Form 10-K for the year ended December 31, 2011.

REVENUES BY COMPANY

The following table shows, for the periods indicated, the dollar amount (in thousands) of the consolidated revenues attributable to each of our consolidated companies. The financial results of OmniMetrix are included in our consolidated financial statements effective February 15, 2012. Accordingly, there are no comparative results reported for these activities for the three and six month periods ended June 30, 2011.

	Six months ended June 30,		Three months ended June 30,	
	2011	2012	2011	2012
DSIT Solutions	$4,814	$6,763	$2,403	$3,722
GridSense	2,140	1,907	1,499	989
OmniMetrix	—	382	—	227
USSI	248	1,083	205	962
Total	$7,202	$10,135	$4,107	$5,900

BACKLOG

As of June 30, 2012, our backlog of work to be completed was as follows (amounts in millions of U.S. dollars):

DSIT Solutions	$9.5
GridSense	0.5
OmniMetrix	0.3
USSI	0.9
Total	$11.2

RECENT DEVELOPMENTS

(1) Additional Investment in USSI

On July 30, 2012, Acorn entered into another Stock Purchase Agreement (the “Summer USSI Purchase Agreement”) with USSI pursuant to which we made a payment to USSI of $2.5 million to purchase additional shares of USSI Preferred Stock. The USSI Preferred Stock is the same class of shares that we acquired earlier this year and provides that upon any future liquidation of USSI, to the extent funds are available for distribution to USSI's stockholders after the satisfaction of any USSI liabilities at that time, USSI would first repay Acorn for the purchase price of its USSI Preferred Stock. Thereafter, the Company would receive a further payment for such shares ratably with all other USSI Common Stock holders as though the Company's shares of USSI Preferred Stock were the same number of shares of USSI Common Stock. In connection with this investment, the Company also entered into a Second Amended and Restated Stockholders Agreement with USSI and its other stockholders providing for certain rights and obligations to purchase or sell our USSI securities and with regard to the management of USSI.

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Following the July 30, 2012 payment to USSI, the Company owned approximately 93.6% of USSI on a fully diluted basis. The Summer USSI Purchase Agreement contemplates that we may make an additional investment of $2.5 million later this year in exchange for more shares of USSI Preferred Stock. If we fully fund that investment, we will own approximately 94.4% of USSI on a fully diluted basis (which amount would be diluted to approximately 85.1% if all options which could be awarded under USSI's 2012 Stock Purchase Plan were awarded and exercised).

(2) Dividends

On July 10, 2012, the Company's Board of Directors approved a third quarter 2012 dividend of $0.035 per share to be paid on September 4, 2012 to common stockholders of record on August 17, 2012.

(3) BIRD Development Grant

In June 2012, two of the Acorn Energy's companies, DSIT Solutions Ltd. and US Seismic Systems, Inc., were awarded a joint grant of up to $900,000 from the U.S. Binational Industrial Research and Development ("BIRD") Foundation. The grant was awarded for the joint development of the next generation integrated passive/active threat detection system for underwater site protection. The BIRD Foundation provides funding money for projects involving joint innovation and development between American and Israeli companies. The grant calls for the signing of a Cooperation and Project Funding Agreement between the companies and the BIRD Foundation within three months to enable commencement of the funding. Grants received from the BIRD Foundation are subject to repayment upon the commercial success of the integrated passive/active threat detection system.

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OVERVIEW AND TREND INFORMATION

Acorn Energy, Inc. ("Acorn" or "the Company") is a holding company focused on technology driven solutions for energy infrastructure asset management.

Through our majority or wholly-owned operating subsidiaries we provide the following services and products:

· Energy & Security Sonar Solutions . We provide sonar and acoustic related solutions for energy, defense and commercial markets with a focus on underwater site security for strategic energy installations and other advanced acoustic systems and real-time embedded hardware and software development and production through our DSIT Solutions Ltd. ("DSIT") subsidiary.

· Smart Grid Distribution Automation. These products and services are provided by our GridSense subsidiaries (GridSense Inc. in the United States and GridSense Pty Ltd. and CHK GridSense Pty Ltd. in Australia - collectively "GridSense") which develop, market and sell remote monitoring and control systems to electric utilities and industrial facilities worldwide.

· Energy and Security Sensor Systems. These products and services are provided by our US Seismic Systems, Inc. subsidiary ("USSI") which develops and produces “state of the art” fiber optic sensing systems for the energy, commercial security and defense markets worldwide.

· Power Generation (PG) Monitoring. These products and services are provided by our newly acquired OmniMetrix subsidiary. OmniMetrix's PG products and services deliver critical, real-time machine information to customers and provide remote diagnostics that give users real control over their equipment.

During 2012, each of the four abovementioned activities represented a reportable segment. In addition, our “Other” segment represents IT and consulting activities at our DSIT subsidiary as well as Cathodic Protection activities in our newly acquired OmniMetrix subsidiary. As OmniMetrix's activities were acquired in February 2012, there are no comparative results reported for these activities for the three and six month periods ended June 30, 2011.
The following analysis should be read together with the segment information provided in Note 11 to the interim unaudited condensed consolidated financial statements included in this quarterly report.

DSIT Solutions
DSIT reported increased revenues in the first half of 2012 as compared to the first half of 2011 as well as increased gross profit and net income. DSIT's revenues of $6.8 million for the first half of 2012 quarter represents an increase of approximately $1.9 million or 40% as compared to the first half of 2011. Second quarter 2012 revenues of $3.7 million also reflected an increase ($0.7 million or 22%) compared to first quarter 2012 revenues of $3.0 million. The increase in revenues from the first half of 2011 was due to increased revenues in our Energy & Sonar Security Solutions segment which reported first half 2012 revenues of $6.2 million compared to $4.0 million in the first half of 2011. The increase in revenues was due to the receipt of a major AquaShield™ Diver Detection Sonar ("DDS") project (valued at $12.3 million) in the end of 2011 and the subsequent work on that project. The increase in revenues as compared to the first quarter of 2012 was due to increased progress on the large project received in late 2011.

DSIT's gross profit in the first half of 2012 increased by approximately $0.7 million or 37% compared to first half 2011 gross profit. The increase in gross profit was attributable to the abovementioned increase in revenues which was partially offset by slightly reduced gross margins. Gross margins decreased in the first half of 2012 to 37% as compared to 38% in the first half of 2011. The decrease in gross margin was attributable to lower margin projects being worked on in 2012 as compared to 2011.

During the first half of 2012, DSIT recorded approximately $0.5 million of Research and Development expense, an increase of approximately $0.2 million compared to the first half of 2011. The increase is attributable in part to preliminary work on joint development (with USSI) of the next generation integrated passive/active threat detection system for underwater site protection.

During the first half of 2012, DSIT recorded approximately $1.5 million of selling, general and administrative (SG&A) expense; slightly below the $1.6 million recorded in the first half of 2011. The decrease is due to decreased marketing costs in 2012 as the first half of 2011 had a relatively high number of product demonstrations as well as a weaker New Israeli Shekel (NIS) during the period which decreased our NIS expenses when reported in U.S. dollars.

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At December 31, 2011, DSIT had a backlog of approximately $13.6 million. During the first half of 2012, we received new orders totaling approximately $1.9 million and at the end of June 2012 had a backlog of approximately $9.5 million. DSIT expects to continue to show revenue growth in 2012 compared to 2011 and expects 2012 to be profitable as well. The level of profitability, however, is expected to be dependent upon anticipated increased levels of marketing and development costs planned for the balance of 2012.

As noted in Recent Developments, in June 2012, DSIT together with USSI were awarded a joint $900,000 grant from the BIRD Foundation for the joint development of the next generation integrated passive/active threat detection system for underwater site protection. The grant calls for the signing of a Cooperation and Project Funding Agreement between the companies and the BIRD Foundation within three months to enable commencement of the funding. DSIT anticipates receipt of a majority (approximately 60%) of the grant based on the expected allocation of project costs between DSIT and USSI.

DSIT has also recently received Israeli government approval for a program which provides funds to facilitate marketing in Asia. DSIT expects to receive approximately $300,000 of government participation in certain marketing expenses over the next three years.

The lease for DSIT's current operating facilities in the Tel Aviv, Israel metropolitan area expires in August 2012. DSIT is currently negotiating an extension of the lease and does not anticipate a material change in its annual rent.

GridSense

In the first half of 2012, GridSense reported revenues of $1.9 million, a decrease of $0.2 million (11%) compared to first half 2011 revenues and a slight increase ($0.1 million or 8%) compared to first quarter 2012 revenues. The decreased first half 2012 revenues compared to first half 2011 revenues was primarily attributable to revenues recorded in 2011 with respect to the beginning of the fulfillment of an order of over 2,000 transformers monitors to a southeastern US electric utility which began in the second quarter of 2011. While Gridsense sees a general improvement in the overall business environment in the utility industry and expects utility spending to continue to increase in future quarters, the timing of such spending on products such as those that GridSense provides cannot be predicted with certainty due to the sales cycle of electric utilities which is typically long and requires much technical and application support. To address these long sales cycles, GridSense has expanded its customer pilot programs from just a handful to over twenty around the globe. We expect that many of these paid pilot projects will result is substantial commercial rollouts, possibly as early as late in 2012.

GridSense's gross profit in the first half of 2012 decreased by approximately $0.2 million or 18% compared to first half 2011 gross profit. The decrease in gross profit was attributable to the abovementioned decrease in revenues combined with a decrease in gross margins. Gross margins decreased in the first half of 2012 to 43% as compared to 47% in the first half of 2011. The decrease in gross margin was attributable to higher shipping costs and raw materials costs due to purchases in smaller lot sizes in 2012 as well certain fixed costs being spread over a larger revenue base in 2011. Gross margin, however, increased in the second quarter of 2012 to 48% from 37% in the first quarter of 2012. The increase is attributable to design stabilization, buying in better economic order quantities and placing blanket purchase orders with multiple release dates to obtain better pricing.

During the first half of 2012, GridSense recorded approximately $2.2 million of SG&A expense representing an increase of approximately $0.5 million (29%) compared to the first half of 2011. The increased SG&A costs are primarily due to additional staff in sales, marketing, administrative and accounting. During 2012, GridSense's employee count has increased by eight full-time positions. In response to improving industry conditions, GridSense expects to continue to expand its sales and support capabilities. We expect further increases in SG&A costs as

additional employee positions (primarily in sales) are expected to be filled during the remainder of 2012.

GridSense is also adding to its engineering team in order to accelerate the development of some key projects that GridSense believe will lead to the generation of new revenues and anticipates increased research and developments expenses going forward (approximately $0.7 million in the first half of 2012).

We expect that GridSense will continue to require working capital support while it focuses on increasing its sales. Acorn continues to provide funds for GridSense's working capital needs and expects to do so in the future. In the period from January 1 to June 30, 2012, Acorn provided GridSense $2.0 million for its working capital needs. On July 31, 2012, GridSense had cash on hand of approximately $150,000. On August 3, 2012, we committed to fund an additional $3.0 million to GridSense, payable in increments as we deem necessary during the balance of 2012 and during 2013. We have no assurance that GridSense will increase its sales or reduce its need for additional financing to support its working capital needs following this additional funding by us. Additional working capital support may be in the form of a bank line, new investment by others, additional investment or loans

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by Acorn, or a combination of the above. GridSense is currently in discussions with a bank to provide working capital financing; however, there is no assurance that such financing from the bank or any other party will be available in sufficient amounts, in a timely manner or on acceptable terms. The availability and amount of any additional investment from us in GridSense may be limited by the working capital needs of our corporate activities and other operating companies.

USSI

In the first half of 2012, USSI reported revenues of $1.1 million, an increase of $0.8 million (337%) compared to first half 2011 revenues of $248,000 and an increase of $841,000 (695%) compared to first quarter 2012 revenues of $121,000. The increased first half 2012 revenues compared to first half 2011 revenues as well and the increase in the second quarter of 2012 compared to the first quarter of 2012 was attributable to the delivery in the second quarter of the following two large proof of concept projects: 1) The world's largest commercial high temperature down-hole fiber-optic seismic array (40 - level array) which is designed for monitoring wells that use the latest unconventional oil and gas extraction technique known as hydrofracking, and 2) an Ultra-High Sensitivity fiber-optic based marine seismic array for oil and gas exploration to an international service provider for use as a marine array to aid in the collection and interpretation of data in the hostile environment of deep sea oil and gas operations. These two contracts generated 2012 revenue of over $800,000. USSI is moving forward with similar "proof of concept" demonstrations with a number of its other customers, and we expect that USSI's products will be validated via customer field testing, resulting in anticipated follow-on orders.

In the first half of 2012, gross profit continued to be negative ($605,000) as it was in the first half of 2011 ($297,000). The negative gross profit is primarily due to large amounts of up front engineering design costs (non-recurring engineering costs or "NRE") that accompanied the production of the first commercial high temperature down hole fiber optic seismic array (40 - level array). Similar NRE accompanied USSI's other proof of concept projects in the second quarter. USSI is continuing to work to develop cost cutting measures for the manufacturing of its commercial products, including investment in equipment that will make manufacturing more efficient and improving the production process that will ultimately result in less man-hours required for each product sold. USSI expects that its gross margin will improve over the balance of 2012 as it benefits from: 1) Less NRE required on future projects, 2) lower cost production personnel used as opposed to higher cost engineers, and 3) allocating its fixed costs over a larger revenue base.

During the first half of 2012, USSI recorded approximately $1.8 million of research and development ("R&D") expense as compared to $0.3 million in the first half of 2011. The increased R&D expense is due to an increase in engineering headcount as well as an increase in R&D materials used in product development. We expect R&D expense to continue at levels seen in the first half of 2012 as USSI continues to internally develop more efficient production versions of its current products and adds additional engineering headcount to continue it development of multiple product offerings.

During the first half of 2012, USSI recorded approximately $1.4 million of SG&A expense representing an increase of approximately $0.8 million (122%) compared to the first half of 2011. Second quarter 2012 SG&A expense ($0.8 million) also reflects an increase of $0.2 million over first quarter 2012 SG&A expense of $0.6 million. The increased SG&A costs are due to increased sales and marketing activities combined with the costs of additional administrative personnel. For the balance of the year, we expect SG&A costs to level off and remain consistent with levels seen for the second quarter of 2012.

In April 2012, USSI signed a license agreement with Northrop Grumman for several fiber-optic patents from Northrop's Navigation Systems Division. The licensed patents represent extensive research and development by Northrop Grumman. The licensed patents will be used by USSI to refine the next generation of high sensitivity oilfield

fiber-optic geophone systems

As noted in Recent Developments, in June 2012, USSI together with DSIT were awarded a joint $900,000 grant from the BIRD Foundation for the joint development of the next generation integrated passive/active threat detection system for underwater site protection. The grant calls for the signing of a Cooperation and Project Funding Agreement between the companies and the BIRD Foundation within three months to enable commencement of the funding. USSI anticipates receipt of approximately 40% of the grant based on the expected allocation of project costs between DSIT and USSI.

We continue to anticipate significant growth in orders in 2012, particularly from new customers related to our 4D reservoir and shale gas monitoring systems following the numerous demonstrations performed during the year as well as follow-on projects from our existing "proof-of-concept" projects, each of which has the potential for annual multi-million dollar follow-up orders. We also anticipate significantly increased costs as we have grown our employee base from 28 full-time employees (inclusive of consultants) at the end of 2011 to 51 full-time employees (inclusive of consultants) as of July 31, 2012.

We expect that USSI will continue to require working capital support while it works on transitioning from development to production and as it works on refining its manufacturing capabilities. USSI currently has no other sources of financing other

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than its internally generated sales and investments by Acorn. As noted in Recent Developments, On July 30, 2012, Acorn entered into the Summer USSI Purchase Agreement with USSI pursuant to which we made a payment to USSI of $2.5 million to purchase additional shares of USSI Preferred Stock. The Summer USSI Purchase Agreement contemplates that we may make an additional investment of $2.5 million later this year in exchange for more shares of USSI Preferred Stock. On July 31, 2012, USSI had cash on hand of approximately $2.3 million. We have no assurance that USSI will not need additional financing from time-to-time to finance its working capital needs beyond our current investment. Additional financing for USSI may be in the form of a bank line, new investment by others, a loan or investment by Acorn, or a combination of the above. USSI is currently engaged in discussions with a bank in order to obtain a line-of-credit. There is no assurance that USSI will be able to obtain the line-of-credit or other support in sufficient amounts, in a timely manner or on acceptable terms. The availability and amount of any additional investment from us in USSI may be limited by the working capital needs of our corporate activities and other operating companies.

OmniMetrix

In accordance with applicable accounting standards, we began consolidating the results of OmniMetrix beginning February 15, 2012, the date we acquired OmniMetrix. Accordingly, there are no comparative results reported for OmniMetrix for the three month period ended June 30, 2011.

During the period following our acquisition, we reported revenues of approximately $382,000 ($227,000 in the second quarter) and a net loss of $830,000 ($660,000 in the second quarter) with respect to OmniMetrix activities. Since our acquisition, OmniMetrix has engaged in developing a major marketing and promotion program to increase the penetration rate of its Power Generator monitoring products into the market. We anticipate that this promotion program, which began in the second quarter, will negatively impact OmniMetrix's gross profit and gross margin in the near term, but expect the gross profit and gross margin to increase as the penetration rate of its Power Generator monitoring products into the market increases.

Since our acquisition, OmniMetrix has hired additional personnel growing from 11 employees (one of which was in sales) to 25 employees (inclusive of consultants) at July 31, 2012, seven of which are sales and marketing personnel. We expect that OmniMetrix will continue to expand its sales and marketing team in the coming months.

OmniMetrix currently has no other sources of financing other than its internally generated sales and investments by Acorn. To support OmniMetrix's marketing and promotion program, Acorn has committed to invest $2.5 million into OmniMetrix of which $0.5 million has been invested through July 31, 2012 with the balance expected to be funded over the balance of 2012. As of July 31, 2012, OmniMetrix had cash on hand of approximately $0.6 million. We have no assurance that OmniMetrix will not need additional financing for working capital after we complete our $2.5 million additional investment. Additional financing for OmniMetrix may be in the form of a bank line, new investment by others, a loan or investment by Acorn, or a combination of the above. There is no assurance that such support will be available from such sources in sufficient amounts, in a timely manner or on acceptable terms. The availability and amount of any additional investment from us in OmniMetrix may be limited by the working capital needs of our corporate activities and other operating companies.

Corporate

Corporate general and administrative expense in the first half of 2012 reflected a $1.2 million increase to $2.7 million as compared to $1.5 million of expense in the first half of 2011. The increase is due primarily to professional fees and costs incurred associated with our acquisition of OmniMetrix (approximately $300,000) in February 2012 as well as increased investor relation activities and personnel costs and bonuses . Second quarter 2012 corporate general and administrative expense ($1.5 million) was approximately $0.2 million less than first quarter 2012's expense of $1.3

million primarily due to lower professional fees associated with our acquisition of OmniMetrix. We expect our corporate general and administrative costs to stay near its current level as we are maintaining a higher level of investor relation activities than we have historically.

In 2012, Acorn recorded an income tax benefit of $1.1 million with respect to an expected net operating loss carryback of its expected consolidated tax loss in 2012.

Results of Operations

The following table sets forth certain information with respect to the consolidated results of operations of the Company for the three and six month periods ended June 30, 2011 and 2012, including the percentage of total revenues during each period attributable to selected components of the operations statement data and for the period to period percentage changes in such

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components. For segment data see Note 11 to the Unaudited Condensed Consolidated Financial Statements included in this quarterly report.

The financial results of OmniMetrix are included in our condensed consolidated financial statements effective February 15, 2012. Accordingly, there are no comparative results reported for these activities for the three and six month period ended June 30, 2011. In August 2011, we sold our interests in CoaLogix. Those results are reflected below as discontinued operations.

	Six months ended June 30,					Three months ended June 30,				
	2011		2012		Change	2011		2012		Change
	($,000)	% of revenues	($,000)	% of revenues	from 2011 to 2012	($,000)	% of revenues	($,000)	% of revenues	from 2011 to 2012
Revenues	$7,202	100 %	$10,135	100 %	41 %	$4,107	100%	$5,900	100%	44%
Cost of sales	4,681	65 %	7,346	72 %	57 %	2,760	67%	4,322	73%	57%
Gross profit	2,521	35 %	2,789	28 %	11 %	1,347	33%	1,578	27%	17%
R&D expenses	874	12 %	3,017	30 %	245 %	384	9%	1,699	29%	342%
SG&A expenses	5,467	76 %	8,619	85 %	58 %	2,724	66%	4,390	74%	61%
Operating loss	(3,820)	(53)%	(8,847)	(87)%	132 %	(1,761)	(43)%	(4,511)	(76)%	156%
Finance expense, net	(217)	(3)%	107	1 %	(149)%	(100)	(2)%	130	2%	(230)%
Gain on sale of HangXing	492	7 %	—	— %	(100)%	—	—%	—	—%	
Loss before taxes on income	(3,545)	(49)%	(8,740)	(86)%	147 %	(1,861)	(45)%	(4,381)	(74)%	135%
Taxes on income	(39)	(1)%	989	10 %	(2,636)%	26	1%	1,064	18%	3,992%
Loss from continuing operations	(3,584)	(50)%	(7,751)	(76)%	116 %	(1,835)	(45)%	(3,317)	(56)%	81%
Loss from discontinued operations, net of income taxes	(1,404)	(19)%	—	— %	(100)%	(568)	(14)%	—	—%	(100)%
Non-controlling interest share of loss from discontinued operations	389	5 %	—	— %	(100)%	157	4%	—	—%	(100)%
Net loss	(4,599)	(64)%	(7,751)	(76)%	69 %	(2,246)	(55)%	(3,317)	(56)%	48%
Net loss attributable to non-controlling interests	303	4 %	461	5 %	52 %	167	4%	205	3%	23%
Net loss attributable to Acorn Energy Inc.	$(4,296)	(60)%	$(7,290)	(72)%	70 %	$(2,079)	(51)%	$(3,112)	(53)%	50%

Revenues. Revenues in the first half of 2012 increased by $2.9 million or 41% from $7.2 million in the first half of 2011 to $10.1 million in the first half of 2012. The increased revenues was driven primarily by increased revenues at DSIT whose revenues increased by $1.9 million (40%) to $6.8 million compared to first half 2011 revenues of $4.8

million and USSI revenues which increased by $0.8 million (337%) to $1.1 million compared to first half 2011 revenues of $0.2 million. In addition, we recorded approximately $0.4 million of revenues associated with our newly acquired OmniMetrix subsidiary. GridSense revenues decreased by $0.2 million (11%) to $1.9 million compared to first half 2011 revenues of $2.1 million.

The increase in DSIT revenues was primarily due to progress on a major AquaShield™ DDS order (valued at $12.3 million) which was received in the end of 2011. The increase in USSI revenues was due to the delivery in the second quarter of two large proof of concept projects: 1) the world's largest commercial high temperature down-hole fiber-optic seismic array (40 - level array) which is designed for monitoring wells that use the latest unconventional oil and gas extraction technique known as hydrofracking, and 2) a fiber-optic based marine seismic array for oil & gas exploration to an international service provider. The decrease in GridSense revenues was primarily due to 2011 revenues including the beginning of the fulfillment a major order of transformer monitors to a southeastern US electric utility which began in the second quarter of 2011 and ended in the fourth quarter of 2011.
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Gross profit. Gross profit in the first half of 2012 reflected an increase of $0.3 million (11%) as compared to the first half of 2011 as gross profit increased from $2.5 million to $2.8 million. DSIT's first half 2012 gross profit increased by $0.7 million

(37%) over first half 2011 gross profit. The increase in DSIT's gross profit was attributable to increased revenues. DSIT's gross margin deteriorated slightly from 38% in 2011 to 37% in 2012. DSIT's decreased gross margin in 2012 was due to lower margin projects being worked on in 2012 as compared to 2011. GridSense's first half 2012 gross profit decreased by $179,000 (18%) compared to first half 2011 gross profit. The decrease in GridSense's gross profit was attributable to decreased revenues as well as reduced gross margins which deteriorated to 43% in 2012 from 47% in 2011. GridSense's decreased gross margins in 2012 was attributable to higher shipping costs and raw materials costs due to purchases made in smaller lot sizes in 2012 as well as certain fixed costs being spread over a larger revenue base in 2011. USSI continued to show a negative gross profit ($605,000, an increase of $308,000 compared to the negative gross profit in the first half of 2011) as it continues to incur large amounts of up front engineering design costs (non-recurring engineering costs or "NRE") that accompanied the production of the first commercial high temperature down hole fiber optic seismic array (40 level array). Similar NRE accompanied USSI's other proof of concept projects in the second quarter. In addition, we recorded approximately $75,000 of gross profit associated with our newly acquired OmniMetrix subsidiary.

Research and development ("R&D") expenses. R& D expenses increased $2.1 million from $0.9 million in the first half of 2011 to $3.0 million in the first half of 2012. R&D expenses increased at all companies with most of the increase ($1.5 million) being attributed to USSI from an increase in its engineering headcount as well as an increase in R&D materials used in product development. Increased R&D expense at GridSense ($0.4 million) and at DSIT ($0.2 million) were due to GridSense adding to its engineering team in order to accelerate development of projects and DSIT's preliminary work on joint development (with USSI) of the next generation integrated passive/active threat detection system for underwater site protection.

Selling, general and administrative expenses ("SG&A"). SG&A costs in the first half of 2012 increased by $3.2 million as compared to the first half of 2011. DSIT's SG&A decreased slightly ($1.6 million in the first half of 2011 compared to $1.5 million in the first half of 2012), the decrease being attributable to decreased marketing costs and a weakening of the NIS. Both GridSense and USSI recorded increases in SG&A expenses. GridSense recorded an increase of $0.5 million (29%) while USSI recorded an increase of $0.8 million (121%). GridSense's increased SG&A expense was attributable to increased personnel costs as it increased its employee count by eight full-time employees. USSI's increased SG&A expense was attributable to increased sales and marketing activities combined with the costs of additional personnel. Corporate general and administrative costs increased by $1.2 million from $1.5 in the first half of 2011 to $2.7 million in the first half of 2012 primarily due to professional fees and costs incurred in the acquisition of OmniMetrix (approximately $300,000) as well as increased investor relations and personnel costs. Additionally, $0.8 million of the increase in SG&A costs is due to the inclusion of OmniMetrix SG&A costs in the first half of 2012.

Gain on sales of HangXing. In March 2011, we sold our 25% interest in HangXing International Automation Engineering Co. Ltd. ("HangXing") back to the majority owner, China Aero-Polytechnology Establishment for $492,000.

Taxes on income. In 2012, Acorn recorded an income tax benefit of $1.1 million with respect to an expected net operating loss carryback of its expected consolidated tax loss in 2012.

Loss from discontinued operations. In August 2011, we sold our entire investment in CoaLogix. Accordingly, all of CoaLogix' activity for the first six months of 2011 (a loss of $1.4 million prior to attribution of $0.4 million to non-controlling interests) is presented as a loss from discontinued operations.

Net loss. We had a net loss of $7.3 million in the first half of 2012 compared with net loss of $4.3 million in the first half of 2011. Our loss in 2012 was primarily due to GridSense, USSI and OmniMetrix (in the period since our acquisition) losses of $2.1 million, $3.8 million and $0.8 million, respectively with corporate expenses contributing an additional $2.7 million. These losses were offset by DSIT's profit of approximately $0.4 million for the first half of 2012, Acorn's income tax benefit of $1.1 million with respect to its expected net operating loss carryback and the non-controlling interest's share of our operations of approximately $0.5 million.

Liquidity and Capital Resources

As of June 30, 2012, we had working capital of $45.6 million. Our working capital includes $14.8 million of cash and cash equivalents, $18.0 million of short-term deposits, $6.0 million of funds held in escrow which are expected to be released in August 2012 and restricted deposits of approximately $1.9 million. Net cash decreased during the six months ended June 30, 2012 by $19.5 million, of which approximately $9.9 million was used in operating activities. The primary use of cash in operating activities during the first six months of 2012 was the cash used in operations by our subsidiaries ($4.1 million, $2.0 million, $0.6 million and $0.3 million used by USSI, GridSense, DSIT and OmniMetrix, respectively) in their operations combined with the $2.9 million of cash used in our corporate operating activities.

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Cash used in investment activities of $8.2 million was primarily due to the net cash used in the acquisition of OmniMetrix ($7.8 million), the acquisition of property and equipment and a license ($0.5 million) and amounts used to fund severance liabilities ($0.2 million). These uses of cash were partially offset by the release, net of approximately $0.3 million of restricted deposits during the first six months.

Net cash of $1.4 million was used in financing activities, primarily from the payment of dividends during the first six months of 2012 ($2.1 million) and the repayment of short and long-term debt, net of new borrowings ($0.5 million) which was partially offset by the proceeds from the exercise of options ($1.3 million).

At June 30, 2012, DSIT had approximately $0.1 million of unrestricted cash in banks and NIS 4 million (approximately$1.0 million) in Israeli credit lines available to it from two Israeli banks (approximately $510,000 from each bank), none of which was then being used. The lines-of-credit are subject to maintaining certain financial covenants. At June 30, 2012, DSIT was in compliance with its financial covenants.

As at June 30, 2012, DSIT also had an outstanding term loan from an Israeli bank in the amount of approximately $202,000. The loan is denominated in NIS and bears interest at the rate of the Israeli prime rate per annum plus 0.9%. The loan is to be repaid in equal payments of approximately $12,000 per month (principal and interest) through December 2013.

As collateral for the term-loan, DSIT has deposited with an Israeli bank approximately $81,000 as a non-current restricted deposit. In addition to this restricted deposit, DSIT has also deposited with two Israeli banks approximately $2.1 million as collateral for various performance and bank guarantees for various projects as well as for its credit facilities at the banks. DSIT expects that most of these deposits will be released during the next twelve months, but expects to redeposit a majority of these funds again as collateral for new guarantees for new projects and for renewing its credit facilities.

On July 31, 2012, DSIT had approximately $2.3 million of cash of which $2.2 million was restricted ($1.9 million current and $0.3 million non-current) and was utilizing approximately $0.1 million of its lines-of-credit. We believe that DSIT will have sufficient liquidity to finance its current level of activities from cash flows from its own operations over the next 12 months. This is based on continued utilization of its line-of-credit and its operating results. However, from time to time, DSIT may encounter cash flow difficulties arising from the timing of its milestones which triggers a billing. In addition, DSIT may require additional financing for a planned expansion of its marketing and development programs for the balance of 2012 and into 2013. This financing may be in the form of an expansion of a bank line, new investment by others, additional investment or loan by Acorn, or a combination of the above. The availability and amount of any additional investment from us in DSIT may be limited by the working capital needs of our corporate activities and the financing requirements of our other operating companies. On July 30, 2012, Acorn transferred $0.5 million to DSIT for working capital support and to help finance the expansion of its marketing and development programs. This follows a $1.0 million transfer to DSIT in May 2012.

As at July 31, 2012, GridSense had approximately $150,000 of cash on hand. We expect that GridSense will continue to require working capital support while it works on increasing its sales. Acorn continues to provide funds for GridSense's working capital needs and expects to do so in the future. During the period from January 1 to July 31, 2012, Acorn provided GridSense $2.0 million for its working capital needs. On July 31, 2012, GridSense had cash on hand of approximately $150,000. On August 3, 2012, we committed to fund an additional $3.0 million to GridSense, payable in increments as we deem necessary during the balance of 2012 and during 2013. We have no assurance that GridSense will increase its sales or reduce its need for additional financing to support its working capital needs following this additional funding by us. This support may be in the form of a bank line, new investment by others, additional investment or loan by Acorn, or a combination of the above. GridSense is currently in discussions with a bank to provide working capital financing; however, there is no assurance that such financing from the bank or any other party will be available in sufficient amounts, in a timely manner or on acceptable terms. The availability and amount of any additional investment from us in GridSense may be limited by the working capital needs of our corporate activities and the financing requirements of our other operating companies.

We expect that USSI will continue to require working capital support while it works on transitioning from development to production and as it works on refining its manufacturing capabilities. USSI currently has no other

sources of financing other than its internally generated sales and investments by Acorn. In July 2012, we purchased additional USSI Preferred Stock in accordance with the Summer USSI Purchase Agreement and invested an additional $2.5 million in USSI (see Recent Developments). This followed an earlier investments in USSI during 2012 of $5.25 million. As of July 31, 2012, USSI had cash on hand of approximately $2.3 million. We have no assurance that USSI will not need additional financing from time-to-time to finance its working capital needs. Additional financing for USSI may be in the form of a bank line, new investment by others, a loan or investment by Acorn, or a combination of the above. USSI has begun discussions with a bank to provide working capital financing; however, there is no assurance that such financing from the bank or any other party will be available in sufficient amounts, in a timely manner or on acceptable terms. The availability and amount of any additional investment from us in USSI may be limited by the working capital needs of our corporate activities and the financing requirements of our other operating companies.

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OmniMetrix currently has no other sources of financing other than its internally generated sales and investments by Acorn. To support OmniMetrix's marketing and promotion program, Acorn has committed to invest $2.5 million into OmniMetrix of which $0.5 million has been invested through July 31, 2012 with the balance expected to be funded over the balance of 2012. As of July 31, 2012, OmniMetrix had cash on hand of approximately $0.6 million. We have no assurance that OmniMetrix will not need additional financing for working capital after we complete our $2.5 million additional investment. Additional financing for OmniMetrix may be in the form of a bank line, new investment by others, a loan or investment by Acorn, or a combination of the above. There is no assurance that such support will be available from such sources in sufficient amounts, in a timely manner or on acceptable terms. The availability and amount of any additional investment from us in OmniMetrix may be limited by the working capital needs of our corporate activities and other operating companies.
As at July 31, 2012, the Company's corporate operations (not including cash at any of our subsidiaries) had a total of approximately $13.1 million in cash and cash equivalents, virtually unchanged from our balance as of June 30, 2012. During the month of July, we received $4.0 million proceeds from a maturing CDAR. During the month, we also made an additional investment in USSI of $2.5 million (see Recent Developments), $0.5 million investment in OmniMetrix, advanced $0.5 million to DSIT and incurred approximately $0.5 million of corporate expenses.
We believe that our current cash plus the cash generated from operations and borrowing from available lines of credit, if necessary, will provide more than sufficient liquidity to finance the operating activities of Acorn and the operations of its operating subsidiaries at their current level of operations for the foreseeable future and for the next 12 months in particular.

Contractual Obligations and Commitments

The table below provides information concerning obligations under certain categories of our contractual obligations as of June 30, 2012.

CASH PAYMENTS DUE TO CONTRACTUAL OBLIGATIONS

	Years Ending June 30, (in thousands)				
	Total	2013	2014 - 2015	2016 - 2017	2018 and thereafter
Bank and other debt, utilized lines-of-credit and capital leases	$224	$149	$75	$—	$—
Operating leases	1,992	849	900	239	4
Potential severance obligations (1)	3,949	—	951	321	2,677
Minimum royalty payments (2)	500	50	100	100	250
Total contractual cash obligations	$6,665	$1,048	$2,026	$660	$2,931

We expect to finance these contractual commitments from cash currently on hand and cash generated from operations.

(1) Under Israeli law and labor agreements, DSIT is required to make severance payments to dismissed employees and to employees leaving employment under certain other circumstances. The obligation for severance pay benefits, as determined by the Israeli Severance Pay Law, is based upon length of service and last salary. These obligations are substantially covered by regular deposits with recognized severance pay and pension funds and by the purchase of insurance policies. As of June 30, 2012, we accrued a total of $3.9 million for potential severance obligations to our Israeli employees of which approximately $2.7 million was funded.

(2) In April 2012, USSI and Northrop Grumman signed a license agreement involving several of Northrop Grumman's fiber-optic technology patents. The license agreement is subject to an annual minimum royalty payment of 10% of the

net selling price of each unit of licensed products used or sold during the term of the agreement. The agreement also calls for a minimum annual payment of $50,000 for the first ten years of the agreement beginning in 2012. The table above includes as a royalty payment only the minimum payment due.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

Foreign Currency Risk

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Our non-US dollar monetary assets and liabilities (net liabilities of approximately $1.3 million) in Israel at our DSIT subsidiary are exposed to fluctuations in exchange rates. In addition, our non-US dollar monetary assets and liabilities (net liability of approximately $0.6 million) in Australia at our GridSense subsidiary are also exposed to fluctuations in exchange rates. Our DSIT subsidiary enters into various hedging contracts which do not qualify as hedging instruments under accounting principles to try to mitigate its foreign currency exposure risks. GridSense does not employ specific strategies, such as the use of derivative instruments or hedging, to manage its foreign currency exchange rate exposures.

Concentrations of Credit Risk

Financial instruments, which potentially subject us to concentrations of credit risk, consist principally of cash and cash equivalents, short-term deposits, escrowed funds, restricted deposits and trade receivables. The counterparty to a large majority of our cash and cash equivalents ($6.1 million) is a money market of a major financial institution. We do not believe there is significant risk of non-performance by this counterparty. The counterparty to our restricted deposits ($2.2 million) and approximately $7.1 million of our cash and equivalents are two major Israeli banks. We do not believe there is significant risk of non-performance by these counterparties. Short-term deposits ($18.0 million) are in FDIC insured certificates of deposit through the Certificate of Deposit Account Registry Service. The Company does not believe there is significant risk of non-performance by the counterparties. The counterparty to our escrowed funds is a major financial institution. We do not believe there is significant risk of non-performance by this counterparty. Approximately 41% ($1.8 million) of the trade accounts receivable at June 30, 2012 was due from one customers that pays over usual credit periods. Credit risk with respect to the balance of trade receivables is generally diversified due to the number of entities comprising our customer base. Approximately 67% of the balance in unbilled revenue at June 30, 2012 was due from two customers that when billed, pay their trade receivables over usual credit periods. Credit risk with respect to the balance of unbilled revenue is generally diversified due to the number of entities comprising our customer base.

Fair Value of Financial Instruments

Fair values of financial instruments included in current assets and current liabilities are estimated to approximate their book values due to the short maturity of such investments. Fair value for long-term debt and long-term deposits are estimated based on the current rates offered to us for debt and deposits with similar terms and remaining maturities. The fair value of our long-term debt and non-current restricted deposits are not materially different from their book values.

Interest Rate Risk

In the normal course of business, we are exposed to fluctuations in interest rates on our lines-of-credit ($1.0 million available) and term loan ($0.2 million balance at June 30, 2012) to finance our operations in Israel. Such lines-of-credit and loans bear interest at interest rates that are linked to the Israeli prime rate (3.75% at June 30, 2012).

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ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As of the end of the period covered by this report, we carried out an evaluation, under the supervision and with the participation of our management, including the Chief Executive Officer and the Chief Financial Officer, of the design and operation of our disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level at end of the period covered by this report to ensure that the information required to be disclosed by us in the reports we file or submit under the Exchange Act is (i) accumulated and communicated to our management (including our Chief Executive Officer and Chief Financial Officer) in a timely manner, and (ii) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms.

Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting (as such term is defined in Rule 13a-15(f) under the Exchange Act) during the period covered by this report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

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PART II

PART II – OTHER INFORMATION

ITEM 1A. RISK FACTORS

The following risk factors supplement those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2011.

RISKS RELATED TO OMNIMETRIX

OmniMetrix is a relatively small company with limited resources compared to some of its current and potential competitors, which may hinder its ability to compete effectively.

Some of OmniMetrix's current and potential competitors have significantly greater resources and broader name recognition than it does. As a result, these competitors may have greater credibility with OmniMetrix's existing and potential customers. They also may be able to adopt more aggressive pricing policies and devote greater resources to the development, promotion and sale of their products which would allow them to respond more quickly to new or emerging technologies or changes in customer requirements.

OmniMetrix may not be able to access sufficient capital to support growth.

OmniMetrix is dependent on Acorn's ability and willingness to provide funding to support its business and growth strategy. OmniMetrix will be competing with other Acorn subsidiaries for access to Acorn capital and credit support. Whether Acorn will have the resources necessary to provide funding, or whether alternative funds, such as third-party loans, will be available at the time and on terms acceptable to Acorn and OmniMetrix cannot be determined.

OmniMetrix is dependent on the services of certain key personnel.

OmniMetrix's success is largely dependent on the skills, experience and efforts of its senior management team and other key personnel. In particular, its success depends on the continued efforts of Deena Redding, its CEO, and Harold Jarrett, a founder and its most experienced engineer. The loss of the services of either of these key employees could materially harm OmniMetrix's business, financial condition, future results and cash flow. OmniMetrix does not maintain “key person” life insurance policies on its employees other than for Mr. Jarrett. Although to date OmniMetrix has been successful in retaining the services of senior management and has entered into employment agreements with Ms. Redding and Mr. Jarrett, they may terminate their employment agreements without cause and with various notice periods. OmniMetrix may also not be able to locate or employ on acceptable terms qualified replacements for its senior management or key employees if their services were no longer available.

OmniMetrix has a very small sales force and whether it can recruit a successful sales team cannot be determined. Failure to do so will adversely affect its ability to grow revenues and introduce new products to the marketplace.

OmniMetrix is in the process of increasing its sales staff, but presently retains a very small sales force. This limits its ability to reach existing and potential customers. Whether it will be able to attract, employ and retain sales personnel who can successfully grow revenues cannot be determined and failure to do so will negatively impact future revenues.

OmniMetrix sells equipment and services which monitor third-party products, thus its revenues are dependent on the continued sales of such third-party products.

OmniMetrix's end-user customer base is comprised exclusively of parties who have chosen to purchase either generators or cathodic protection systems. OmniMetrix has no ability to control the rate at which new generators or CP protection systems are acquired. When purchases of such products decline, the associated need for OmniMetrix's products and services is expected to decline as well.

If OmniMetrix is unable to keep pace with changing market or customer-mandated product and service improvements, OmniMetrix's results of operations and financial condition may suffer.

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Many of OmniMetrix's existing products may require ongoing engineering and upgrades in conjunction with market developments as well as specific customer needs. There can be no assurance that OmniMetrix will continue to be successful in its engineering efforts regarding the development of its products and future technological difficulties could adversely affect its business, results of operations and financial condition.

The cellular networks used by OmniMetrix are also subject to periodic technical updates that may require corresponding updates to, or replacement of, OmniMetrix's monitoring equipment.

Cellular networks have evolved over time to offer more robust technical capabilities in both voice and data transmission. At the present time, the changes from the so-called "2G" to "3G" and "4G" service have resulted in only limited service interruptions. OmniMetrix anticipates, however, that as these new capabilities come online, it will be necessary to have equipment that can readily interface with the newer cellular networks to avoid negative impacts on customer service. Not all of the costs associated with OmniMetrix's corresponding equipment upgrades can be passed on to customers and the increased expenses are expected to have a negative impact on OmniMetrix's operating results.

A substantial portion of OmniMetrix's revenues are generated not from product sales, but from periodic monitoring fees and thus it is continually exposed to risks associated with its customers' financial stability.

OmniMetrix sells on-going monitoring services to both PG and CP customers. It is therefore dependent on these customers continuing to timely pay service fees on an on-going basis. If a significant portion of these fees are not renewed from year-to-year, OmniMetrix can expect to experience deterioration in its financial condition.

OmniMetrix's ability to provide, and to collect revenues from, monitoring services is dependent on the reliability of cellular networks not controlled by OmniMetrix.

OmniMetrix provides monitoring services through the use of cellular technology utilizing the networks of third-party providers. These providers generally do not warrant their services to either OmniMetrix or the end users and any dropped transmissions could result in the loss of customer renewals and potential claims against OmniMetrix. While OmniMetrix uses contractual measures to limit its liability to customers, there is no assurance that such limitations will be enforced or that customers will not cancel monitoring services due to network issues.

OmniMetrix's business is dependent on its ability to reliably store and manage data, but there can be no guarantee that it has sufficient capabilities to mitigate potential data loss in all cases.

The efficient operation of OmniMetrix's business is dependent on its information technology systems. In addition, OmniMetrix's ability to assist customers in analyzing data related to the performance of such customers' power and cathodic protection monitoring systems is an important component of its customer value proposition. OmniMetrix utilizes off-site data servers, housed within a commercial data center utilizing standard state-of-the-art data and power processes, but whether a data loss can be avoided cannot be assured in every case. OmniMetrix's information technology systems are vulnerable to damage or interruption from natural disasters, sabotage (including theft and attacks by computer viruses or hackers), power outages; and computer systems, Internet, telecommunications or data network failure. Any interruption of OmniMetrix's information technology systems could result in decreased revenue, increased expenses, increased capital expenditures, customer dissatisfaction and potential lawsuits, any of which could have a material adverse effect on its results of operations and financial condition.

OmniMetrix is currently dependent on a single subcontractor for the assembly of its products.
OmniMetrix's ability to deliver its products to its customers on a timely basis is dependent on the production processes of its selected subcontractor. Financial or production difficulties by such subcontractor could have a negative impact

on OmniMetrix's ability to deliver its products timely and cause a loss of customer confidence. Although more than one subcontractor may be qualified to produce OmniMetrix components, OmniMetrix may not be able to successfully make a change in a timely manner or on acceptable terms. Any difficulties OmniMetrix encounters as a result of its reliance on a subcontractor could have a material adverse effect on its operations and financial condition.

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ITEM 6. EXHIBITS.

#10.1	At-Will Employment, Confidential Information, Non-Solicitation and Invention Assignment Agreement by and between Registrant and Lindon Shiao dated June 11, 2012*
#31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
#31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
#32.1	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
#32.2	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
#101.1	The following financial statements from Acorn Energy's Form 10-Q for the quarter ended June 30, 2012, filed on August 9, 2012, formatted in XBRL (eXtensible Business Reporting Language): (i) Condensed Consolidated Balance Sheets, (ii) Condensed Consolidated Statements of Operations, (iii) Condensed Consolidated Statements of Comprehensive Loss, (iv) Condensed Consolidated Statements of Changes in Equity, (v) Condensed Consolidated Statements of Cash Flows and (vi) Notes to Condensed Consolidated Financial Statements, tagged as blocks of text.

*	This exhibit includes a management contract, compensatory plan or arrangement in which one or more directors or executive officers of the Registrant participate.
#	This exhibit is filed or furnished herewith.

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SIGNATURES

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

ACORN ENERGY, INC.

Dated: August 9, 2012

By: /s/ MICHAEL BARTH
Michael Barth
Chief Financial Officer

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