

# SECURITIES & EXCHANGE COMMISSION EDGAR FILING

## ACORN ENERGY, INC.

**Form: 10-Q**

**Date Filed: 2013-05-09**

Corporate Issuer CIK: 880984

Symbol: ACFN

SIC Code: 8711

Fiscal Year End: 12/31

---

---

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

**FORM 10-Q**

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

**For the quarterly period ended March 31, 2013**

Commission file number: **0-19771**

**ACORN ENERGY, INC.**

(Exact name of registrant as specified in charter)

**Delaware**  
(State or other jurisdiction of incorporation or organization)

**22-2786081**  
(I.R.S. Employer Identification No.)

**3903 Centerville Road, Wilmington, Delaware**  
(Address of principal executive offices)

**19807**  
(Zip Code)

**302-656-1707**  
(Registrant's telephone number, including area code)

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

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

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

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

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

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class	Outstanding at May 2, 2013
Common Stock, \$0.01 par value per share	18,090,536

---

**ACORN ENERGY, INC.**  
**Quarterly Report on Form 10-Q**  
**for the Quarterly Period Ended March 31, 2013**

**TABLE OF CONTENTS**

	<u>PAGE</u>
<b><u>PART I</u></b>	
<b><u>Financial Information</u></b>	
<u>Item 1. Unaudited Condensed Consolidated Financial Statements:</u>	
<u>Condensed Consolidated Balance Sheets as of December 31, 2012 and March 31, 2013</u>	<u>1</u>
<u>Condensed Consolidated Statements of Operations for the three months ended March 31, 2012 and 2013</u>	<u>2</u>
<u>Condensed Consolidated Statements of Comprehensive Loss for the three month periods ended March 31, 2012 and 2013</u>	<u>3</u>
<u>Condensed Consolidated Statement of Changes in Equity for the three month period ended March 31, 2013</u>	<u>4</u>
<u>Condensed Consolidated Statements of Cash Flows for the three month periods ended March 31, 2012 and 2013</u>	<u>5</u>
<u>Notes to Condensed Consolidated Financial Statements</u>	<u>7</u>
<u>Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	<u>18</u>
<u>Item 3. Quantitative and Qualitative Disclosures About Market Risk</u>	<u>29</u>
<u>Item 4. Controls and Procedures</u>	<u>30</u>
<b><u>PART II</u></b>	
<b><u>Other Information</u></b>	
<u>Item 6. Exhibits</u>	<u>31</u>
<u>Signatures</u>	<u>32</u>

Certain statements contained in this report are forward-looking in nature. These statements are generally identified by the inclusion of phrases such as "we expect", "we anticipate", "we believe", "we estimate" and other phrases of similar meaning. Whether such statements ultimately prove to be accurate depends upon a variety of factors that may affect our business and operations. Many of these factors are described in our most recent Annual Report on Form 10-K as filed with Securities and Exchange Commission.

---

**PART I**

**ACORN ENERGY, INC. AND SUBSIDIARIES**  
**CONDENSED CONSOLIDATED BALANCE SHEETS (UNAUDITED)**  
**(IN THOUSANDS, EXCEPT SHARE AND PER SHARE DATA)**

	<u>As of December 31, 2012</u>	<u>As of March 31, 2013</u>
<b>ASSETS</b>		
<b>Current assets:</b>		
Cash and cash equivalents	\$ 26,147	\$ 20,163
Restricted deposit	699	618
Accounts receivable	5,481	2,593
Unbilled revenue	5,213	6,218
Inventory	5,106	5,363
Other current assets	3,547	3,618
<b>Total current assets</b>	<b>46,193</b>	<b>38,573</b>
Property and equipment, net	927	1,599
Severance assets	3,165	3,241
Restricted deposit	115	118
Intangible assets, net	9,561	9,305
Goodwill	6,630	6,646
Other assets	745	863
<b>Total assets</b>	<b>\$ 67,336</b>	<b>\$ 60,345</b>
<b>LIABILITIES AND EQUITY</b>		
<b>Current liabilities:</b>		
Short-term bank credit and current maturities of long-term debt	\$ 153	\$ 276
Accounts payable	2,631	1,641
Accrued payroll, payroll taxes and social benefits	2,420	2,185
Deferred revenue	3,323	2,309
Other current liabilities	1,708	2,095
<b>Total current liabilities</b>	<b>10,235</b>	<b>8,506</b>
<b>Long-term liabilities:</b>		
Accrued severance	4,491	4,602
Other long-term liabilities	665	763
<b>Total long-term liabilities</b>	<b>5,156</b>	<b>5,365</b>
<b>Commitments and contingencies</b>		
<b>Equity:</b>		
Acorn Energy, Inc. shareholders		
<b>Common stock - \$0.01 par value per share:</b>		
Authorized – 30,000,000 shares; Issued –18,870,526 and 18,892,456 shares at December 31, 2012 and March 31, 2013, respectively	188	188
Additional paid-in capital	83,469	83,210
Warrants	55	44
Accumulated deficit	(29,733)	(34,708)
Treasury stock, at cost – 801,920 shares at December 31, 2012 and March 31, 2013	(3,036)	(3,036)
Accumulated other comprehensive income	716	678
<b>Total Acorn Energy, Inc. shareholders' equity</b>	<b>51,659</b>	<b>46,376</b>
Non-controlling interests	286	98
<b>Total equity</b>	<b>51,945</b>	<b>46,474</b>
<b>Total liabilities and equity</b>	<b>\$ 67,336</b>	<b>\$ 60,345</b>

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

**ACORN ENERGY, INC. AND SUBSIDIARIES**  
**CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)**  
**(IN THOUSANDS, EXCEPT PER SHARE DATA)**

	Three months ended	
	March 31,	
	2012	2013
Revenues:		
Projects	\$ 3,036	\$ 3,582
Products	928	1,707
Services	219	427
Total revenues	<u>4,183</u>	<u>5,716</u>
Cost of sales:		
Projects	2,246	2,449
Products	613	1,039
Services	124	103
Total cost of sales	<u>2,983</u>	<u>3,591</u>
Gross profit	<u>1,200</u>	<u>2,125</u>
Operating expenses:		
Research and development expenses, net of credits	1,318	2,001
Selling, general and administrative expenses	4,229	5,256
Total operating expenses	<u>5,547</u>	<u>7,257</u>
Operating loss	(4,347)	(5,132)
Finance income (expense), net	(23)	14
Loss before income taxes	(4,370)	(5,118)
Income tax expense, net	(75)	(69)
Net loss	(4,445)	(5,187)
Net loss attributable to non-controlling interests	256	212
Net loss attributable to Acorn Energy, Inc. shareholders	<u>\$ (4,189)</u>	<u>\$ (4,975)</u>
Basic and diluted net loss per share attributable to Acorn Energy, Inc. shareholders	<u>\$ (0.24)</u>	<u>\$ (0.28)</u>
Weighted average number of shares outstanding attributable to Acorn Energy, Inc. shareholders – basic and diluted	<u>17,680</u>	<u>18,077</u>
Dividends declared per common share	<u>\$ 0.035</u>	<u>\$ 0.035</u>

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

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

	<b>Three months ended March 31,</b>	
	<b>2012</b>	<b>2013</b>
Net loss attributable to Acorn Energy, Inc. shareholders	\$ (4,189)	\$ (4,975)
Other comprehensive income (loss)		
Foreign currency translation adjustments	201	(48)
Comprehensive loss	(3,988)	(5,023)
Comprehensive (income) loss attributable to non-controlling interests	(6)	10
Comprehensive loss attributable to Acorn Energy, Inc. shareholders	<u>\$ (3,994)</u>	<u>\$ (5,013)</u>

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

**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, 2012	18,871	\$ 188	\$ 83,469	\$ 55	\$ (29,733)	\$ (3,036)	\$ 716	\$ 51,659	\$ 286	\$ 51,945
Net loss	—	—	—	—	(4,975)	—	—	(4,975)	(212)	(5,187)
Differences from translation of subsidiaries' financial statements	—	—	—	—	—	—	(38)	(38)	(10)	(48)
Dividends	—	—	(634)	—	—	—	—	(634)	—	(634)
Dividends in common stock under the Company's Dividend Reinvestment Plan, net of discount (see Note 7(a))	19	—	117	—	—	—	—	117	—	117
Stock option compensation	—	—	247	—	—	—	—	247	—	247
Stock option compensation of subsidiaries	—	—	—	—	—	—	—	—	34	34
Exercise of warrants	3	—	11	(11)	—	—	—	—	—	—
Balances as of March 31, 2013	18,893	\$ 188	\$ 83,210	\$ 44	\$ (34,708)	\$ (3,036)	\$ 678	\$ 46,376	\$ 98	\$ 46,474

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

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

	Three months ended March 31,	
	2012	2013
Cash flows used in operating activities:		
Net loss	\$ (4,445)	\$ (5,187)
Adjustments to reconcile net loss to net cash used in operating activities (see Schedule A)	(269)	453
Net cash used in operating activities	(4,714)	(4,734)
Cash flows provided by (used in) investing activities:		
Acquisitions of property and equipment	(228)	(861)
Restricted deposits	(62)	(53)
Release of restricted deposits	386	132
Amounts funded for severance assets	(84)	(73)
Acquisition of OmniMetrix, net of cash acquired (see Schedule C)	(7,835)	—
Net cash used in investing activities	(7,823)	(855)
Cash flows provided by (used in) financing activities:		
Proceeds from employee stock option and warrant exercises	1,293	—
Short-term bank credit, net	(208)	158
Proceeds from borrowings of long-term debt	16	—
Repayments of long-term debt	(52)	(38)
Dividends paid	(1,496)	(517)
Net cash used in financing activities	(447)	(397)
Effect of exchange rate changes on cash and cash equivalents	105	2
Net decrease in cash and cash equivalents	(12,879)	(5,984)
Cash and cash equivalents at the beginning of the period	34,280	26,147
Cash and cash equivalents at the end of the period	<u>\$ 21,401</u>	<u>\$ 20,163</u>

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

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

		<b>Three months ended March</b>	
		<b>31,</b>	
		<b>2012</b>	<b>2013</b>
A.	Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
	Depreciation and amortization	\$ 294	\$ 379
	Increase in accrued severance	112	98
	Stock-based compensation	142	281
	Deferred taxes	(221)	(34)
	Other	34	12
	Change in operating assets and liabilities:		
	Decrease in accounts receivable, unbilled work-in process, other current and other assets	1,035	1,730
	Increase in inventory	(537)	(255)
	Decrease in accounts payable, accrued payroll, payroll taxes and social benefits, advances from customers, other current liabilities and other liabilities	(1,128)	(1,758)
		<u>\$ (269)</u>	<u>\$ 453</u>
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	\$ 273	
	Value of shares issued under dividend reinvestment plan	<u>\$ 69</u>	<u>\$ 117</u>
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	
		<u>\$ (7,835)</u>	

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

**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 three month period ended March 31, 2013 are not necessarily indicative of the results that may be expected for the year ending December 31, 2013.

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

Certain reclassifications have been made to the Company's condensed consolidated financial statements for the three month period ended March 31, 2012 to conform to the current period's condensed consolidated financial statement presentation. 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, 2012.

As reported in the Company's Form 10-K report for the year ended December 31, 2012, results have been corrected for those previously reported for the first, second and third quarters of 2012 following further analysis of the recognition of certain revenues and costs of OmniMetrix. Revenues and costs of sales have been restated for each of those quarters, as noted below, to recognize such hardware revenues and cost of sales in accordance with the accounting for multiple elements and recognizing those revenues and costs over expected customer life rather than at the delivery of the monitoring unit.

The effect of the restatement on the Company's net loss and basic and diluted loss per share for the three-month periods ended on each of March 31, June 30, and September 30, 2012, the six month period ended June 30, 2012 and the nine month period ended September 30, 2012 are shown below:

	<b>Three months ended</b>	<b>Six months ended</b>	<b>Three months ended</b>	<b>Nine months ended</b>	<b>Three months ended</b>
	<b>March 31, 2012</b>	<b>June 30, 2012</b>	<b>June 30, 2012</b>	<b>September 30, 2012</b>	<b>September 30, 2012</b>
Net loss attributable to Acorn Energy, Inc. shareholders - as reported	\$ (4,178)	\$ (7,290)	\$ (3,112)	\$ (11,040)	\$ (3,750)
Net effect of restatement	(11)	(103)	(92)	(288)	(185)
Net loss attributable to Acorn Energy, Inc. shareholders - restated	\$ (4,189)	\$ (7,393)	\$ (3,204)	\$ (11,328)	\$ (3,935)
Basic and diluted net loss per share attributable to Acorn Energy, Inc. shareholders - as reported	\$ (0.24)	\$ (0.41)	\$ (0.17)	\$ (0.62)	\$ (0.21)
Net effect of restatement	—	(0.01)	(0.01)	(0.01)	(0.01)
Basic and diluted net loss per share attributable to Acorn Energy, Inc. shareholders - restated	\$ (0.24)	\$ (0.42)	\$ (0.18)	\$ (0.63)	\$ (0.22)

**NOTE 2—RECENT AUTHORITATIVE GUIDANCE**

Effective January 1, 2013, the Company adopted the authoritative guidance, issued by the Financial Accounting Standards Board (“FASB”) in February, 2013, related to reclassifications out of accumulated other comprehensive income (“OCI”). Under this update, an entity is required to report, in one place, information about reclassifications out of accumulated OCI and to report changes in its accumulated OCI balances. For significant items reclassified out of accumulated OCI to net income in their entirety in the same reporting period, reporting is required about the effect of the reclassifications on the respective line items in the statement where net income is presented. For items that are not reclassified to net income in their entirety in the same reporting period, a cross reference to other disclosures currently required under GAAP is required in the notes to the financial statements. The adoption of this guidance had no impact on the Company’s consolidated financial statements.

There have been no other recent accounting pronouncements or changes in accounting pronouncements during the three months ended March 31, 2013, that are of material significance, or have potential material significance, to the Company.

**NOTE 3—US SEISMIC SYSTEMS, INC.**

On February 28, 2013, the Company entered into a new Stock Purchase Agreement (the "2013 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 in 2012 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.

Following the February 28, 2013 payment to USSI, the Company owned approximately 95.0% of USSI on an as converted basis. The 2013 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 95.6% of USSI on an as converted basis (which amount would be diluted to approximately 87.9% if all options which could be awarded under USSI's 2012 Stock Purchase Plan were awarded and exercised).

**NOTE 4—NON-CONTROLLING INTERESTS**

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

	<b>Three months ended</b>	
	<b>March 31,</b>	
	<b>2012</b>	<b>2013</b>
Net income attributable to NCI in DSIT	\$ 8	\$ 21
Net loss attributable to NCI in USSI	(264)	(233)
Net loss attributable to NCI	\$ (256)	\$ (212)

**NOTE 5—INVENTORY**

The composition of inventory is as follows:

	<b>As of December 31, 2012</b>	<b>As of March 31, 2013</b>
Raw materials	\$ 3,281	\$ 3,244
Work-in-process	782	1,177
Finished goods	1,043	942
	<u>\$ 5,106</u>	<u>\$ 5,363</u>

**NOTE 6—GOODWILL AND INTANGIBLE ASSETS**

(a) Goodwill

The changes in the carrying amounts of goodwill by segment from December 31, 2012 to March 31, 2013 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, 2012	\$ 541	\$ 2,757	\$ 1,402	\$ 1,517	\$ 413	\$ 6,630
Translation adjustment	7	9	—	—	—	16
Balance as of March 31, 2013	\$ 548	\$ 2,766	\$ 1,402	\$ 1,517	\$ 413	\$ 6,646

\* Results for the Cathodic Protection segment are included in "Other" in Segment Reporting (see Note 9).

(b) Intangibles

The changes in the carrying amounts of and accumulated amortization of intangible assets from December 31, 2012 to March 31, 2013 were as follows:

	Energy & Security Sonar Solutions segment		GridSense segment		USSI segment		Power Generation Monitoring segment		Cathodic Protection segment**		Total
	Cost	A.A.*	Cost	A.A.*	Cost	A.A.*	Cost	A.A.*	Cost	A.A.*	
Balance as of December 31, 2012	\$ 532	\$ (364)	\$ 2,777	\$ (873)	\$ 2,715	\$ (380)	\$ 4,385	\$ (309)	\$ 1,196	\$ (118)	\$ 9,561
Amortization	—	(20)	—	(81)	—	(38)	—	(88)	—	(34)	(261)
Translation adjustment	7	(6)	8	(4)	—	—	—	—	—	—	5
Balance as of March 31, 2013	\$ 539	\$ (390)	\$ 2,785	\$ (958)	\$ 2,715	\$ (418)	\$ 4,385	\$ (397)	\$ 1,196	\$ (152)	\$ 9,305
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 9).

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

\* The Cathodic Protection segment is included in "Other" in Segment Reporting (see Note 9).

Amortization expense for the three months ended March 31, 2012 and 2013 amounted to \$194 and \$261, respectively. Amortization expense with respect to intangible assets is estimated to be \$980, \$960, \$854, \$854 and \$854 for each of the years ending March 31, 2014 through 2018.

**NOTE 7—EQUITY**

## (a) Dividends

On February 7, 2013, the Company announced that its Board of Directors approved a dividend of \$0.035 per share to be paid on March 4, 2013 to common stockholders of record on February 20, 2013. The total dividend payment on March 4, 2013 was \$634 of which \$517 was in cash and \$117 (net of the Dividend Reinvestment Plan ("DRIP") discount of \$6) was in common stock of the Company (representing 18,976 shares of common stock) in accordance with the DRIP.

## (b) Acorn Stock Options

A summary of stock option activity for the three months ended March 31, 2013 is as follows:

	Number of Options (in shares)	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Life	Aggregate Intrinsic Value
Outstanding at December 31, 2012	1,311,397	\$ 5.20		
Granted	46,461	\$ 7.19		
Exercised	—	\$ —		
Forfeited or expired	—	\$ —		
Outstanding at March 31, 2013	1,357,858	\$ 5.27	4.1 years	\$ 3,076
Exercisable at March 31, 2013	1,010,688	\$ 4.40	4.4 years	\$ 2,984

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	1.3%
Expected term of options	6.7 years
Expected annual volatility	57%
Expected dividend yield	2.0%

## (c) Stock-based Compensation Expense

Stock-based compensation expense included in the Company's Condensed Statements of Operations for the three month periods ended March 31, 2012 and 2013 was as follows:

	Three months ended March 31,	
	2012	2013
Research and development expenses, net of credits	\$ —	\$ 10
Selling, general and administrative expenses	142	271
Total stock-based compensation expense	\$ 142	\$ 281

## (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:

	<b>Number of Warrants (in shares)</b>	<b>Weighted Average Exercise Price Per Share</b>	<b>Weighted Average Remaining Contractual Life</b>
Outstanding at December 31, 2012	28,750	\$ 3.68	
Granted	—		
Exercised	(2,954)	\$ 3.68	
Forfeited or expired	(2,796)	\$ 3.68	
Outstanding at March 31, 2013	23,000	\$ 3.68	2.7 years

During the three months ended March 31, 2013, 2,954 warrants were exercised and 2,796 warrants were forfeited in connection with the "net exercise" of 5,750 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 5,750 warrants which were exercised under this method had a weighted average exercise price of \$3.68 per share.

**NOTE 8—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.

	<b>As at March 31, 2013</b>			
	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
Restricted deposits – current and non-current	\$ 736	\$ —	\$ —	\$ 736
Derivative assets	80	—	—	80
<b>Total</b>	<b>\$ 816</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 816</b>

	<b>As at December 31, 2012</b>			
	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
Restricted deposits – current and non-current	\$ 814	\$ —	\$ —	\$ 814
Derivative assets	112	—	—	112
<b>Total</b>	<b>\$ 926</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 926</b>

Derivative assets 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 income (expense), net.

**NOTE 9—SEGMENT REPORTING**

The Company currently operates in four reportable operating segments:

- (1) The Company's Energy & Security Sonar Solutions segment is focused on 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, there are only partial comparative results reported for these activities for the three month period ended March 31, 2012.

Other operations include certain IT activities (protocol management software for cancer patients and billing software) and outsourced consulting activities performed by the Company's DSIT subsidiary and Cathodic Protection activities in the Company's OmniMetrix subsidiary) that do not meet the quantitative thresholds under applicable accounting principles.

	<b>Energy &amp; Security Sonar Solutions</b>	<b>GridSense</b>	<b>USSI</b>	<b>Power Generation Monitoring</b>	<b>Other</b>	<b>Total</b>
<b>Three months ended March 31, 2013</b>						
Revenues from external customers	\$ 3,046	\$ 1,543	\$ 325	\$ 396	\$ 406	\$ 5,716
Intersegment revenues	—	—	39	—	—	39
Segment gross profit (loss)	1,222	661	(168)	236	174	2,125
Depreciation and amortization	57	104	84	88	40	373
Stock compensation expense	—	—	34	—	—	34
Segment net income (loss) before income taxes	252	(1,147)	(1,851)	(381)	12	(3,115)
<b>Three months ended March 31, 2012</b>						
Revenues from external customers	\$ 2,763	\$ 918	\$ 121	\$ 85	\$ 296	\$ 4,183
Intersegment revenues	—	—	—	—	—	—
Segment gross profit (loss)	960	344	(211)	40	67	1,200
Depreciation and amortization	58	96	70	43	25	292
Stock compensation expense	—	—	—	—	—	—
Segment net income (loss) before income taxes	160	(1,199)	(1,715)	(15)	(67)	(2,836)

**Reconciliation of Segment Income (Loss) to Consolidated Net Loss**

	<b>Three months ended</b>	
	<b>March 31,</b>	
	<b>2012</b>	<b>2013</b>
Total net loss before income taxes for reportable segments	\$ (2,769)	\$ (3,127)
Other operational segment net income (loss) before income taxes	(67)	12
Total segment net loss before income taxes	(2,836)	(3,115)
Unallocated cost of corporate headquarters*	(1,460)	(1,392)
Unallocated cost of DSIT and OmniMetrix headquarters	(74)	(611)
Consolidated loss before income taxes	\$ (4,370)	\$ (5,118)

\* Includes stock compensation expense of \$142 and \$247 for the three month periods ending March 31, 2012 and 2013, respectively.

**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, 2012.

**FINANCIAL RESULTS BY COMPANY**

The following table shows, for the periods indicated, the financial results (dollar amounts in thousands) 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 only partial comparative results reported for these activities for the three month period ended March 31, 2012.

	<b>Three months ended March 31, 2013</b>					
	<b>DSIT</b>	<b>OmniMetrix</b>	<b>GridSense</b>	<b>USSI</b>	<b>Acorn</b>	<b>Total</b>
Revenues	\$ 3,315	\$ 533	\$ 1,543	\$ 325	\$ —	\$ 5,716
Cost of Sales	2,011	205	882	493	—	3,591
Gross profit	1,304	328	661	(168)	—	2,125
Gross profit margin	39%	62%	43%	(52)%		37%
R& D expenses, net of credits	271	120	712	898	—	2,001
Selling, general and administrative expenses	836	1,151	1,096	781	1,392	5,256
Operating income (loss)	\$ 197	\$ (943)	\$ (1,147)	\$ (1,847)	\$ (1,392)	\$ (5,132)

  

	<b>Three months ended March 31, 2012</b>					
	<b>DSIT</b>	<b>OmniMetrix</b>	<b>GridSense</b>	<b>USSI</b>	<b>Acorn</b>	<b>Total</b>
Revenues	\$ 3,041	\$ 103	\$ 918	\$ 121	\$ —	\$ 4,183
Cost of Sales	2,014	63	574	332	—	2,983
Gross profit	1,027	40	344	(211)	—	1,200
Gross profit margin	34%	39%	37%	(174)%		29%
R& D expenses, net of credits	176	16	218	908	—	1,318
Selling, general and administrative expenses	723	201	1,248	596	1,461	4,229
Operating income (loss)	\$ 128	\$ (177)	\$ (1,122)	\$ (1,715)	\$ (1,461)	\$ (4,347)

**BACKLOG**

As of March 31, 2013, our backlog of work to be completed was as follows (amounts in millions of U.S. dollars):

DSIT Solutions	\$	8.2
GridSense		0.3
OmniMetrix		1.7
USSI		1.1
Total	\$	<u>11.3</u>

**RECENT DEVELOPMENTS****Resignation of GridSense CEO**

On May 7, 2013, Lindon Shiao, President and CEO of each of our GridSense subsidiaries, tendered his resignation, effective May 10, 2013, from such positions, but will remain a member of the GridSense subsidiaries' boards of directors. In connection with such resignation, GridSense and Mr. Shiao entered into a Separation Agreement and Release pursuant to which Mr. Shiao affirmed his surviving obligations to GridSense under his At-Will Employment, Confidential Information, Non-Solicitation and Invention Assignment Agreement with regard to non-solicitation of GridSense employees, intellectual property and confidential information and committed to assist in transition matters in exchange for severance payments totaling \$120,000, which equates to six months of his annual salary of \$240,000. The parties also released one another from certain legal liability in connection with their past relationship. In addition, Mr. Shiao will maintain the vested portion of his award under the GridSense Employee Incentive Plan, which represents approximately a 3.49% interest in the consideration received upon the sale of all or substantially all of the assets or securities of one or more of the Registrant's GridSense subsidiaries, net of transaction expenses and agreed-upon returns to Acorn on its invested capital in such entities. GridSense has also agreed to pay Mr. Shiao \$40,000 contingent on the receipt of payment from an anticipated customer order developed by Mr. Shiao and concerning which he has agreed to provide on-going efforts. Concurrent with accepting Mr. Shiao's resignation, the Boards of Directors of each of the GridSense subsidiaries appointed Joseph Musanti, who had been serving as such subsidiaries' CFO and Chief Operating Officer, as President and CEO of each of the GridSense subsidiaries and to their respective Boards of Directors. Mr. Musanti will continue to provide services under a previously executed At-Will Employment, Confidential Information, Non-Solicitation and Invention Assignment Agreement.

### **New Acorn Director**

On Wednesday, May 8, 2013, Acorn's Board elected Robert E. McKee, III to fill the board seat vacated by Mr. Musanti in December 2012. Mr. McKee had a 37 year career at ConocoPhillips and Conoco, Inc., including ten years as Executive Vice President, Exploration and Production (1992-2002). He was a senior oil advisor to the Coalition Provisional Authority and the Iraqi Oil Ministry in Iraq to assist with the rebuilding of its oil industry from September 2003 to March 2004. He is also a Director of QEP Resources, an unconventional oil driller, Post Oak Bank and a board member on the Colorado School of Mines Foundation.

Upon his appointment to the Board, pursuant to Acorn's 2006 Stock Option Plan For Non-Employee Directors, Mr. McKee was granted options to purchase 25,000 shares of the Company's common stock at an exercise price of \$7.86 per share (the fair market value on the date of grant), which options shall vest one-third per year, the first third to vest one year following the date of grant, and be exercisable for seven years from the date of grant. In connection with services rendered by Mr. McKee prior to being elected to the Board, he was awarded 10,000 options under Acorn's Amended and Restated 2006 Stock Incentive Plan to purchase shares of the Company's common stock at a price of \$7.86 per share, exercisable immediately and for a term of seven years.

In accordance with the Company's director compensation policy, Mr. McKee will receive an annual retainer of \$40,000 payable quarterly in advance. He will also be eligible for committee fees, but the Board of Directors has not yet determined on which of its committees Mr. McKee will serve.

## 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 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 2013, 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 OmniMetrix subsidiary. As OmniMetrix's activities were acquired in February 2012, there are only partial comparative results reported for these activities for the three month period ended March 31, 2012.

The following analysis should be read together with the segment information provided in Note 9 to the interim unaudited condensed consolidated financial statements included in this quarterly report.

### *DSIT Solutions*

DSIT reported increased revenues in the first three months of 2013 as compared to the first three months of 2012 as well as increased gross profit, gross margin and net income. DSIT's revenues of \$3.3 million for the first three months of 2013 represents an increase of approximately \$0.3 million or 9% as compared to the first three months of 2012. First quarter 2013 revenues of \$3.3 million reflected a decrease of \$0.3 million or 8% compared to fourth quarter 2012 revenues of \$3.6 million.

The increased revenues for the first three months of 2013 was due to increased revenues (\$0.3 million or 10%) in our Energy & Sonar Security Solutions segment which reported first quarter 2013 revenues of \$3.0 million. The increase in revenues was due to revenue recognized on new projects received. The decrease compared to the fourth quarter of 2012 is primarily attributable to poor weather conditions which delayed the installation of AquaShield™ Diver Detection Sonar systems.

The balance of DSIT's revenues of \$0.3 million were derived from DSIT's other IT and consulting activities which are included in Acorn's Other segment activities. The revenues of such activities were unchanged from 2012 to 2013.

DSIT's gross profit in the first quarter of 2013 increased by approximately \$0.3 million or 27% compared to the gross profit of the first quarter of 2012. The increase in gross profit was attributable to the abovementioned increase in revenues combined with an increase in the gross margin over the period. Gross margins increased from 34% in the first quarter 2012 to 39% in the first quarter of 2013. First quarter 2013 gross margin was marginally less (less than 1%) than fourth quarter 2012's gross margin. The increase in the gross margin as compared to the first quarter of 2012 was attributable to higher margin projects being worked on in 2013 as compared to 2012.

During the first quarter of 2013, DSIT recorded approximately \$0.3 million of Research and Development (R&D) expense, an increase of approximately \$0.1 million compared to the first quarter of 2012 and in line with fourth quarter 2012 R&D expense of \$0.3 million. DSIT's increased R&D expense is related to work on the joint development (with USSI) of the PAUSS next generation integrated passive/active threat detection system for underwater site protection and efforts to expand DSIT's portfolio of products to include land-based security fiber-optic solutions.

DSIT is currently negotiating with USSI a transfer of technology agreement whereby DSIT would receive from USSI an exclusive world-wide license to use USSI technology to provide systems, devices, installations and methods for monitoring ground sites, facilities, locations and perimeters and against land-based security threats for government and non-government customers for defense, security or military and safety applications. We expect the agreement to be finalized in the near future.

During the first three months of 2013, DSIT recorded approximately \$0.8 million of selling, general and administrative (SG&A) expense; approximately \$0.1 million above the \$0.7 million recorded in the first three months of 2012 and \$0.2 million below the SG&A recorded in the fourth quarter of 2012. The increase compared to the first quarter of 2012 is attributable to increased salary costs and increased marketing expenses. The decrease compared to the fourth quarter of 2012 is primarily attributable to the higher than normal level of certain marketing activities and product demonstrations at the end of 2012.

At December 31, 2012, DSIT had a project backlog of approximately \$9.6 million. During the first three months of 2013, we received new orders totaling approximately \$1.6 million and at the end of March 2013 had a backlog of approximately \$8.2 million.

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

### *GridSense*

In the first three months of 2013, GridSense reported revenues of \$1.5 million, an increase of \$0.6 million (68%) compared to first three month 2012 revenues of \$0.9 million. First quarter 2013 revenues of \$1.5 million also represents an increase of \$0.8 million (98%) compared to fourth quarter 2012 revenues. The increase in 2013 revenues was wholly attributable to increased revenues from GridSense's U.S. operations which saw its revenues increase from \$0.5 million in 2012 (both first and fourth quarters) to \$1.2 million in 2013. The increase in GridSense's U.S. operations revenue was offset by a decrease in GridSense's Australian operations revenue which decreased in 2013 to \$0.3 million from \$0.4 million in 2012. First quarter revenues from GridSense's Australian operations were unchanged from the fourth quarter of 2012. The increased revenues in the United States was attributable to an order GridSense was awarded in late 2012 for 800 Transformer IQ<sup>®</sup> units from a California based investor owned utility. This order was partially fulfilled in 2012 with the balance being completed in the first quarter of 2013. The decrease in Australian revenues in 2013 was attributable to timing of purchases related to the PowerMonic<sup>®</sup>.

While GridSense sees some improvement in the overall business environment in the utility industry and expects utility spending 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 45 around the globe. We plan to focus our continued sales efforts in 2013 and into 2014 only on those products that have already shown the most traction in the marketplace such as the Transformer IQ<sup>®</sup>, the Line IQ<sup>®</sup> and GridInSite<sup>™</sup> and to work towards a goal of being cash flow neutral by year-end.

GridSense's gross profit in the first three months of 2013 increased by approximately \$0.3 million or 92% compared to first three months 2012 gross profit and increased by approximately \$0.9 million compared to fourth quarter 2012's negative gross profit. The increase in gross profit was attributable to the abovementioned increase in revenues combined with a increase in gross margins. Gross margins increased in the first quarter of 2013 to 43% as compared to 37% in the first quarter of 2012 and as compared to the negative 35% margin in the fourth quarter of 2012. The increase in the gross margin compared to the first quarter 2012 gross margin was due to 2012 revenues absorbing higher shipping costs, both outbound and inbound, and raw materials purchases in smaller lot sizes. The increase compared to the fourth quarter negative gross margin was due to the fourth quarter 2012 gross margin absorbing the impact of an inventory charge of approximately \$350,000 to write-off of obsolete inventory and an increase in the reserve for obsolete inventory as well as one-time additional costs incurred as the company shifted production from its Sydney facility to its Sacramento facility. We expect gross margins to continue at current or higher levels as we continue to work towards managing inventory more efficiently, improve forecasting for purchasing and procurement, and reduce production cycle times.

In the first quarter of 2013, GridSense recorded \$0.7 million of R&D expense as compared to \$0.2 million in the first quarter of 2012 and \$0.5 million in the fourth quarter of 2012. The increased R&D expense is due to the growth in GridSense's its engineering team in 2012 in order to accelerate the development of some key products that GridSense believes will lead to the generation of new revenues.

During the first quarter of 2013, GridSense recorded approximately \$1.1 million of SG&A expense representing a decrease of approximately \$0.2 million (12%) compared to first quarter 2012 SG&A expense. First quarter SG&A expense reflected a slight increase (5%) compared to fourth quarter 2012 SG&A expense. The decreased SG&A costs in the first quarter of 2013 as compared to the first quarter of 2012 is attributable to personnel changes that were executed in the third quarter of 2012. During his tenure as CFO/COO at GridSense, Joe Musanti has undertaken inventory management and customer service improvements. He further plans to meet in the near future with company personnel to identify areas where cost savings might be implemented in order to position the company to meet its cash flow goals.

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 April 30, 2013, Acorn provided GridSense \$650,000 for its working capital needs (out of a total committed 2013 investment of \$1.5 million (the "GridSense Commitment") - see Liquidity and Capital Resources). In August 2012, GridSense signed a Loan and Security Agreement with a bank to provide it with up to a \$1.0 million revolving line of credit (subject to a calculated borrowing base). In February 2013, GridSense made its first draw on the line of credit (\$150,000) and its outstanding balance as of April 30, 2013 is \$400,000. The line-of-credit is subject to certain financial and other covenants. 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.

On April 30, 2013, GridSense had cash on hand of approximately \$0.3 million. We have no assurance that GridSense will increase its sales or reduce its need for additional financing to support its working capital needs following the remaining funding by us under the GridSense Commitment. Additional working capital support may be in the form of an additional or expanded bank line, new investment by others, additional investment or loans by Acorn, or a combination of the above. There is no assurance that GridSense will be able to obtain an additional or expanded 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 GridSense 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 only partial comparative results reported for OmniMetrix for the three month period ended March 31, 2012.

In the first quarter of 2013, OmniMetrix recorded revenues of \$533,000 (\$396,000 in its Power Generation Monitoring ("PG") segment and \$137,000 in its Cathodic Protection segment) as compared to \$103,000 recorded in the first quarter of 2012 following our acquisition. The increase in revenues is driven by the increase in the number of units being monitored.

As of January 1, 2013, OmniMetrix, had 3,421 PG units in service. During the first quarter of 2013, OmniMetrix added an additional 854 units (net of units removed from service) to bring the total number of PG units in service to 4,275; an increase of 25% (an increase of 118% over the 1,958 PG units in service when we acquired OmniMetrix). Since our acquisition, and primarily towards the end of 2012, OmniMetrix has engaged in developing and implementing a major marketing and promotion program to increase the penetration rate of its PG monitoring products into the market. We view the growth in PG units in service in the first quarter of 2013 as an initial indication of our marketing and promotion program gaining traction. We anticipate that this promotion program, under which OmniMetrix provides its PG monitoring units to certain customers below cost and/or provides monitoring services at discounted prices, will provide sufficient monitoring cash flow to cover the working capital requirements of subsidizing PG monitoring units by the end of 2014.

First quarter gross profit was \$328,000 reflecting a gross margin of 62% on the quarter's revenues. The gross margin was driven by margins on monitoring revenue which was 71% during the quarter. As monitoring revenue continues to grow, we expect these margins to increase as certain fixed costs (amortization of acquired technology) is spread over a greater revenue base.

During the first quarter of 2013, OmniMetrix recorded approximately \$120,000 of research and development costs. We anticipate that these costs will increase as we expand our product offering and develop solutions for other markets.

During the first quarter of 2013, OmniMetrix recorded approximately \$1.2 million of SG&A costs of which approximately \$0.5 million was related to sales and marketing. During the fourth quarter of 2012, OmniMetrix recorded approximately \$1.0 million of SG&A costs of which approximately \$0.3 million was related to sales and marketing. We anticipate that our SG&A costs will stabilize near or at current levels over the balance of 2013 as we believe we developed our infrastructure to accommodate

expected growth and expand our market presence. While we anticipate continued personnel growth, we expect that the pace of personnel growth will taper off 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 \$3.0 million in OmniMetrix over 2013, of which \$1.0 million has been invested through April 30, 2013 with the balance expected to be funded over the balance of 2013 as needed. Acorn's planned investment in OmniMetrix in 2013 is expected to be used to grow its inventory of PG monitoring units in anticipation of increased deliveries of PG units to customers as well as the recent investment in new facilities for expected growth and the development of OmniMetrix's network operation center.

As of April 30, 2013, 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 \$3.0 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. OmniMetrix 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 OmniMetrix may be limited by the working capital needs of our corporate activities and other operating companies.

### *USSI*

In the first three months of 2013, USSI reported revenues of \$325,000, an increase of \$204,000 (169%) compared to first three months 2012 revenues of \$121,000 and an increase of \$178,000 (121%) from the fourth quarter 2012 revenues of \$147,000 . The increased 2013 revenues compared to 2012 revenues was attributable to the revenue recognized upon delivery to a super-major oil company of an order recently received for USSI's down-hole seismic fiber-optic array sensing system. This system is designed for use by one of the world's largest integrated oil companies in a permanent down-hole monitoring application to enable on-going and high-resolution sub-surface imaging of oil and gas reservoirs. It will be utilized in a competitive full scale field evaluation by the customer for potential use as their primary sensing system for permanent downhole monitoring of their vast unconventional oilfield holdings.

In the first three months of 2013, gross profit continued to be negative (\$168,000) as it was in the first three months of 2012 (\$211,000). The negative gross profit is primarily due to large amounts of up front non-recurring engineering ("NRE") design costs that accompanied USSI's other proof of concept projects in 2012 and continue to do so in 2013.

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 and product designs that will ultimately result in less man-hours required for each product sold. We expect that the impact of these improved production processes and product designs will ultimately produce improved gross margins in the second half of 2013. We believe that upon receipt of a follow-up order on one of our proof-of-concept projects, we will realize significantly greater efficiencies in production.

In the first quarter of 2013, USSI recorded approximately \$0.9 million of research and development ("R&D") expense, similar to the \$0.9 million of R&D expense recorded in the first quarter of 2012 and the fourth quarter of 2012. We expect R&D expense to continue at levels seen in the first quarter of 2013 as USSI continues to internally develop more efficient production versions of its current products and adds additional engineering headcount to continue its development of multiple product offerings.

In the first quarter of 2013, USSI recorded approximately \$0.8 million of SG&A expense representing an increase of approximately \$0.2 million (31%) compared to the first quarter of 2012. The increase from the first quarter of 2012 is due to increases in salary expense as a result of added headcount and increased spending relating to sales and marketing activities. First quarter 2013 SG&A expense reflects a decrease of \$0.4 million from fourth quarter 2012 SG&A expense of \$1.2 million. The decrease from the fourth quarter of 2012 is due to increased allocation of certain expenses to cost of sales and research and development.

As at March 31, 2012, USSI's backlog of projects was approximately \$1.1 million which is primarily comprised of its SR2020 proof-of-concept project. USSI anticipates recognizing the revenue associated with this project in the second and third quarters of 2013. Actual revenue recognition for this project is dependent upon the timing of final proof of concept designs and actual delivery. We continue to anticipate significant growth in orders, particularly from new customers related to our 4D reservoir and shale gas monitoring systems following the demonstrations performed during 2012 and prior years as well as follow-on projects from our current "proof-of-concept" projects.

We believe that each of these proof-of-concept projects has the potential for annual multi-million dollar follow-up orders as early as the second half of 2013. During 2013, we grew our employee base from 43 full-time employees (inclusive of consultants) at the end of 2012 to 57 full-time employees (inclusive of consultants) as of April 30, 2013. We also anticipate a leveling off of our growing personnel costs as the pace of our personnel growth is expected to slow down.

We expect that USSI will continue to require working capital support while it continues to transition from development to production and as it continues to work on refining its manufacturing capabilities. During 2013 we invested \$2.5 million in USSI to support its working capital requirements under our 2013 USSI Purchase Agreement. We anticipate that we will purchase an additional \$2.5 million in USSI Preferred Stock in the next few months.

While USSI has reached agreement with a bank for a \$1 million line-of-credit in 2012, we have no assurance that USSI's future capital needs will not exceed the amount of the credit line or the amounts of Acorn's investment commitment to USSI or that USSI will generate sufficient cash flow in the future to fund its operations in the absence of additional funding sources. Furthermore, we have no assurance whether and to what extent USSI will have access to the entire \$1.0 million bank facility given that the availability is subject to certain financial and other covenants. USSI may need additional funds if revenues fail to meet projections or to fund a rapid expansion to meet product demand, respond to competitive pressures or acquire complementary products, businesses or technologies. Additional financing for USSI may be in the form of an expanded bank line, new investment by others, a loan or investment by Acorn, or a combination of the above. Should additional funds be needed, there can be no assurance that additional financing will be available on terms acceptable to USSI. 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.

#### *Corporate*

Corporate general and administrative expense of \$1.4 million in the first quarter of 2013 reflected a slight decrease of \$0.1 million as compared to the \$1.5 million of expense in the first quarter of 2012 and an increase of \$0.2 million compared to the \$1.2 million recorded in the fourth quarter of 2012. The decrease compared to the first quarter of 2012 is primarily attributable to a decrease in professional fees (the first quarter of 2012 included approximately \$300,000 of professional fees and costs incurred associated with our acquisition of OmniMetrix) which were partially offset by increased non-cash stock compensation and personnel costs. The increase compared to fourth quarter 2012's SG&A was primarily due to increased compensation costs and professional fees. In coming quarters, we expect our corporate general and administrative costs to approximate our current levels or decrease slightly as we expect to incur less investor relation expenses going forward.

#### **Results of Operations**

The following table sets forth certain information with respect to the consolidated results of operations of the Company for the three month periods ended March 31, 2012 and 2013, 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 components. For segment data see Note 9 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 only partial comparative results reported for these activities for the three month period ended March 31, 2012.

	Three months ended March 31,				Change from 2012 to 2013
	2012		2013		
	(\$,000)	% of revenues	(\$,000)	% of revenues	
Revenues	\$ 4,183	100%	\$ 5,716	100%	37%
Cost of sales	2,983	71%	3,591	63%	20%
Gross profit	1,200	29%	2,125	37%	77%
R&D expenses	1,318	32%	2,001	35%	52%
SG&A expenses	4,229	101%	5,256	92%	24%
Operating loss	(4,347)	(104)%	(5,132)	(90)%	18%
Finance income (expense), net	(23)	(1)%	14	—%	(161)%
Loss before taxes on income	(4,370)	(104)%	(5,118)	(90)%	17%
Income tax benefit	(75)	(2)%	(69)	(1)%	(8)%
Net loss	(4,445)	(106)%	(5,187)	(91)%	17%
Net loss attributable to non-controlling interests	256	6%	212	4%	(17)%
Net loss attributable to Acorn Energy Inc.	\$ (4,189)	(100)%	\$ (4,975)	(87)%	19%

**Revenues.** Revenues in the first quarter of 2013 increased by \$1.5 million or 37% from \$4.2 million in the first quarter of 2012 to \$5.7 million in the first quarter of 2013. All companies recorded increased revenues in the first quarter of 2013 as compared to the first quarter of 2012. DSIT revenues increased by \$0.3 million (9%) to \$3.3 million compared to first quarter 2012 revenues of \$3.0 million. GridSense revenues increased by \$0.6 million (68%) to \$1.5 million compared to first quarter 2012 revenues of \$0.9 million. USSI revenues increased by \$204,000 (169%) to \$325,000 compared to first quarter 2012 revenues of \$121,000. In addition, OmniMetrix recorded approximately \$533,000 in 2013 as compared to the \$103,000 of revenues in 2012 recorded in the period since our acquisition of it.

The increase in DSIT revenues was primarily due to revenue recognized on new projects received. The increase in GridSense revenues was due to increased sales activity from U.S. operations which was attributable to the fulfillment of an order for 800 Transformer IQ<sup>®</sup> units from a California based investor owned utility that was received in late 2012. The increased 2013 revenues compared to 2012 revenues for USSI was attributable to the revenue recognized upon delivery to a super-major oil company of an order recently received for USSI's down-hole seismic fiber-optic array sensing system. In the first quarter of 2013, OmniMetrix recorded revenues of \$533,000 (\$396,000 in its Power Generation Monitoring ("PG") segment and \$137,000 in its Cathodic Protection segment) as compared to \$103,000 recorded in the period since our acquisition in the first quarter of 2012. The increase in revenues is driven by the increase in the number of units being monitored.

#### *Gross profit.*

Gross profit in the first quarter of 2013 reflected an increase of \$925,000 (77%) as compared to the first quarter of 2012. DSIT's first quarter 2013 gross profit increased by \$277,000 (27%) over first quarter 2012 gross profit. The increase in DSIT's gross profit was attributable to both increased revenues and increased gross margins which improved from 34% in 2012 to 39% in 2013. DSIT's increased gross margins in 2013 were due to higher margin projects being worked on in 2013 as compared to 2012. GridSense's first quarter 2013 gross profit increased by \$317,000 (92%) over first quarter 2012 gross profit. The increase in GridSense's gross profit was also attributable increased revenues combined with increased gross margins which improved from 37% in 2012 to 43% in 2013. GridSense's increased gross margins in 2013 were attributable to cost reductions and efficiencies secured during the last two quarters of 2012 combined with decreased shipping costs as compared to first quarter 2012. USSI continued to show a negative gross profit in 2013 (\$168,000) as it continues to incur increased engineering and production costs as it transitions from development of its products to production in its proof-of-concept projects. In addition, OmniMetrix recorded gross profit of \$328,000 (reflecting a 62% gross margin) in 2013 as compared to the \$40,000 gross profit (at 39% gross margin) recorded in period since our acquisition of OmniMetrix in February 2012. The increased gross margin at OmniMetrix reflects the increasing levels monitoring revenue recorded which are high margin revenues.

**Research and development ("R&D") expenses.** R& D expenses increased \$0.7 million from \$1.3 million in the first quarter of 2012 to \$2.0 million in the first quarter of 2013. The bulk of the increase in R&D expenses was at GridSense whose R&D expense increased \$0.5 million as compared to the first quarter of 2012. The increase at GridSense was due to the growth

in GridSense's engineering team over the course of 2012 in order to accelerate the development of some key products. Both DSIT and OmniMetrix recorded increases in R&D expense of \$0.1 million each as compared to the first quarter of 2012 (OmniMetrix's R&D expense in 2012 was only for the period since our acquisition in February 2012). USSI's R&D expense in the first quarter of 2013 was unchanged compared to the first quarter of 2012. DSIT's increased R&D expense is related to work on the joint development (with USSI) of the PAUSS next generation integrated passive/active threat detection system for underwater site protection and efforts to expand DSIT's portfolio of products to include land-based security fiber-optic solutions.

*Selling, general and administrative ("SG&A") expenses.* SG&A costs in the first quarter of 2013 increased by \$1.0 million as compared to the first quarter of 2012. The increased SG&A was attributable to increases recorded at OmniMetrix, DSIT and USSI while GridSense SG&A and corporate costs decreased in the first quarter of 2013 as compared to the first quarter of 2012. OmniMetrix recorded \$1.2 million of SG&A in the current period as compared to \$0.2 million for the period in 2012 following our acquisition. The increase in SG&A costs at OmniMetrix is due to the increased personnel costs (primarily in sales and marketing) and other costs associated with developing the necessary infrastructure for expected growth. DSIT's SG&A increased from \$0.7 million in 2012 to \$0.8 million in 2013. DSIT's increase SG&A was related to increased salary costs as well as increased marketing expenses. USSI's SG&A increased from \$0.6 million in 2012 to \$0.8 million in 2013. USSI's increased SG&A expense was attributable to increased salary expense as a result of added headcount and increased spending related to sales and marketing activities. In 2013, GridSense recorded a decrease of \$0.2 million of SG&A expense to \$1.1 million. GridSense's decreased SG&A expense was attributable to organization changes that were executed in the third quarter of 2012. Corporate general and administrative costs also decreased slightly from \$1.5 million in 2012 to \$1.4 million in 2013 due to a decrease in professional fees (the first quarter of 2012 included approximately \$300,000 of professional fees and costs incurred associated with our acquisition of OmniMetrix) which were partially offset by increased non-cash stock compensation and personnel costs.

*Net loss attributable to Acorn Energy.* We had a net loss attributable to Acorn Energy of \$5.0 million in the first quarter of 2013 compared a net loss \$4.2 million in the first quarter of 2012. Our loss in 2013 was primarily due to GridSense, USSI and OmniMetrix losses of \$1.1 million, \$1.9 million and \$0.9 million, respectively with corporate expenses contributing an additional \$1.4 million. These losses were offset by DSIT's profit of approximately \$0.1 million for the first quarter of 2013 and the non-controlling interest's share of our operations of approximately \$0.2 million.

## **Liquidity and Capital Resources**

As of March 31, 2013, we had working capital of \$30.0 million. Our working capital includes \$20.2 million of cash and cash equivalents and restricted deposits of approximately \$0.6 million. Net cash decreased during the three months ended March 31, 2013 by \$6.0 million, of which approximately \$4.7 million was used in operating activities. The primary use of cash in operating activities during the first three months of 2013 was the cash used in operations by our subsidiaries (\$3.0 million, \$0.8 million and \$0.4 million used by USSI, GridSense, and OmniMetrix, respectively) in their operations combined with the \$1.1 million of cash used in our corporate operating activities. This was partially offset by the cash generated from operations at DSIT of \$0.6 million.

Cash used in investment activities of \$0.9 million was primarily due to the acquisition of property and equipment (\$0.9 million). The net cash released from restricted deposits (\$0.1 million) were offset by the cash used to fund severance liabilities (\$0.1 million).

Net cash of \$0.4 million was used in financing activities, primarily from the payment of dividends during the first three months of 2013 (\$0.5 million) which was partially offset by the net change in short and long-term debt (\$0.1 million).

At March 31, 2013, DSIT had approximately \$1.4 million of unrestricted cash in banks and NIS 4 million (approximately \$1.1 million) in Israeli credit lines available to it from two Israeli banks (approximately \$540,000 from each bank), none of which was then being used. The lines-of-credit are subject to maintaining certain financial covenants. At March 31, 2013, DSIT was in compliance with its financial covenants.

As at March 31, 2013, DSIT also had an outstanding term loan from an Israeli bank in the amount of approximately \$110,000. 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 \$82,000 as a non-current restricted deposit. In addition to this restricted deposit, DSIT has also deposited with two Israeli banks approximately \$654,000 as collateral for various performance and bank guarantees for various projects as well as for its credit facilities at the banks. As restricted deposits are released, DSIT generally expects to redeposit these funds again as collateral for new guarantees for new projects and for renewing its credit facilities.

On April 30, 2013, DSIT had approximately \$1.5 million of cash of which approximately \$0.7 million was restricted (\$0.6 million current and \$0.1 million non-current) and was not utilizing any of its lines-of-credit. DSIT and Acorn are currently negotiating an agreement pursuant to which Acorn would convert a prior loan and accrued interest into additional ordinary (common) shares of DSIT. Acorn would also convert \$2.8 million of loans and advances and make an aggregate further investment in DSIT of up to \$2.2 million to purchase shares the DSIT Preferred Stock. We believe that DSIT will have sufficient liquidity to finance its activities from cash flows from its own operations over the next 12 months based on its current cash balance, continued utilization of its lines-of-credit, the expected investment from Acorn and its operating results.

In August 2012, GridSense signed a Loan and Security Agreement with a bank to provide it with up to a \$1.0 million revolving line of credit (subject to a calculated borrowing base). GridSense made its first draw on the line of credit in February 2013 (\$150,000). Advances from the line-of-credit bear interest at a variable annual interest rate equal to the greater of 3.25% above the Prime Rate in effect (3.25% at March 31, 2013) or 6.5%. The line-of-credit is also subject to certain financial covenants. GridSense is in compliance with its financial covenants. As of April 30, 2013, GridSense was utilizing \$400,000 of this line-of-credit.

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. On February 26, 2013, we committed to fund an additional \$1.5 million to GridSense (the "GridSense Commitment"), of which \$650,000 has already been funded in 2013 through April 30, 2013. The GridSense Commitment will be funded in increments as we deem necessary during the balance of 2013.

On April 30, 2013, GridSense had cash on hand of approximately \$0.3 million. We have no assurance that GridSense will meet its goal of being cash flow neutral in the second half of 2013 or increase its sales and reduce its need for additional financing to support its working capital needs following the remaining funding by us under the GridSense Commitment. Additional working capital support may be in the form of an additional or expanded bank line, new investment by others, additional investment or loans by Acorn, or a combination of the above. There is no assurance that GridSense will be able to obtain an additional or expanded 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 GridSense may be limited by the working capital needs of our corporate activities and other operating companies.

OmniMetrix currently has no other sources of financing other than its internally generated sales and investments by Acorn. On February 26, 2013, we committed to fund an additional \$3.0 million to OmniMetrix (the "OmniMetrix Commitment"), of which \$1.0 million has already been funded in 2013 through April 30, 2013. The OmniMetrix Commitment will be funded in increments as we deem necessary during the balance of 2013.

As of April 30, 2013, OmniMetrix had cash on hand of approximately \$0.6 million. OmniMetrix 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. We have no assurance that OmniMetrix will not need additional financing for working capital after we complete our \$3.0 million investment under the OmniMetrix Commitment. 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.

We expect that USSI will continue to require working capital support as it continues to work on transitioning from development to production and as it continues to work on refining its manufacturing capabilities. USSI's sources of financing are its internally generated sales, investments by Acorn and its non-formula revolving line of credit. Acorn continues to provide funds for USSI's working capital needs and expects to do so in the future. On February 26, 2013, we agreed to purchase an additional \$5.0 million of USSI Preferred Stock in accordance with the 2013 USSI Purchase Agreement of which \$2.5 million was immediately funded.

In November 2012, USSI signed a Loan and Security Agreement with a bank to provide it with up to a \$1.0 million non-formula revolving line of credit. The Loan and Security Agreement expires on November 7, 2013. Advances from the line-of-credit bear interest at a variable annual interest rate equal to the greater of 1.0% above the Prime Rate in effect or 6.5%. The line-of-credit is also subject to certain financial covenants. At March 31, 2013, USSI was in compliance with its financial covenants.

As of April 30, 2013, USSI had cash on hand of approximately \$0.1 million prior to a \$960,000 draw on the line of credit on May 1, 2013. 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 an additional or expanded bank line, new investment by others, a loan or investment by Acorn, or a combination of the above. While USSI's cash needs cannot be determined at this time, we

anticipate the need to make on-going investments in order to support USSI's operations through the end of 2013. 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.

As of April 30, 2013, the Company's corporate operations (not including cash at any of our subsidiaries) had a total of approximately \$16.3 million in cash and cash equivalents (\$10.3 million in U.S. banks and \$6.0 million in Israeli banks (all of which can be repatriated without any tax consequence)) representing a decrease of \$1.3 million from our balance as of March 31, 2013. During the month of April we invested \$0.5 million investment in OmniMetrix and \$0.2 million in GridSense and incurred approximately \$0.6 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. In order to position ourselves to take advantage of potential market expansion or complimentary acquisitions for our existing businesses, we are contemplating whether and on what terms we may offer additional securities for sale in the future. We currently expect that we may conduct such an offering sometime during 2013, the amount and terms of which cannot be determined at this time.

## Contractual Obligations and Commitments

The table below provides information concerning obligations under certain categories of our contractual obligations as of March 31, 2013.

### CASH PAYMENTS DUE TO CONTRACTUAL OBLIGATIONS

	Years Ending March 31, (in thousands)				
	Total	2014	2015 - 2016	2017 - 2018	2019 and thereafter
Bank and other debt, utilized lines-of-credit and capital leases	\$ 276	\$ 276	\$ —	\$ —	\$ —
Operating leases	1,961	663	840	340	118
Potential severance obligations (1)	4,602	41	1,492	—	3,069
Minimum royalty payments (2)	450	50	100	100	200
Purchase commitments (3)	—	—	—	—	—
Total contractual cash obligations	\$ 7,289	\$ 1,030	\$ 2,432	\$ 440	\$ 3,387

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 March 31, 2013, we accrued a total of \$4.6 million for potential severance obligations to our Israeli employees of which approximately \$3.2 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.

(3) OmniMetrix has an agreement with a third party equipment assembler, pursuant to which it commits to purchase a specified amount of product based upon its submitted forecasted needs. The table above does not reflect OmniMetrix's obligations under the agreement as these amount cannot be determined.

**ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK**

*Foreign Currency Risk*

Our non-US dollar monetary assets and liabilities (net assets of approximately \$0.1 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 \$0.3 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, restricted deposits, trade receivables and unbilled revenue. The counterparty to a significant portion of our cash and cash equivalents (\$10.5 million) is in 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 (\$0.7 million) and approximately \$8.4 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. Approximately 29% (\$740,000) of the trade accounts receivable at March 31, 2013 was due from two customers that pay 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 74% of the balance in unbilled revenue at March 31, 2013 was due from three customers that have historically paid 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 (\$1.1 million available) and term loan (\$0.1 million balance at March 31, 2013) to finance our operations in Israel. Such lines-of-credit and loan bear interest at interest rates that are linked to the Israeli prime rate (3.25% at March 31, 2013).

In addition, both GridSense and USSI have lines-of-credit (\$1.0 million each) which bear interest at interest rates which are linked to the Prime Rate in effect (3.25% at March 31, 2013).

**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**

With the exception of the inclusion of OmniMetrix in management's assessment of internal controls effective January 1, 2013, 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.

**PART II**

**ITEM 6. EXHIBITS.**

- #10.1\* GridSense Employee Incentive Plan.
- #10.2\* Form of award for GridSense Employee Incentive Plan.
- #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 March 31, 2013, filed on May 9, 2013, 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.

**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: May 9, 2013

By: /s/ MICHAEL  
BARTH

---

Michael Barth  
Chief Financial  
Officer

**GRIDSENSE**

**EMPLOYEE INCENTIVE PLAN**

**CONFIDENTIAL**

---

1	Definitions and Interpretation	3
2	Awards	6
3	Vesting and Entitlement	6
4	Payment of Awards	6
5	Process for Payments to Participants	6
6	Lapsing of Rights	7
7	Overriding Restrictions on Grant and Exercise of Rights	7
8	Miscellaneous	7

---

## Definitions and Interpretation

1. In this *Plan* the following words and expressions have the following meanings:

*'Applicable Law'* means any or all, as the context requires of:

- (a) the *Corporations Act 2001 (Cth)*;
- (b) the *Listing Rules*;
- (c) the constitution of the *Australian Company*;
- (d) the Articles of Incorporation of the *US Company*;
- (e) the United States *Internal Revenue Code of 1986*;
- (f) the United States *Securities Act of 1933*;
- (g) the United States *Exchange Act of 1934*;
- (h) the *Income Tax Assessment Act 1936 (Cth)*;
- (i) the *Income Tax Assessment Act 1997 (Cth)*;
- (j) the *Fringe Benefits Tax Act 1986 (Cth)*;
- (k) the *Fringe Benefits Tax Assessment Act 1986 (Cth)*;
- (l) any other applicable laws, statutes, rules, requirements or regulations;
- (m) any practice note, policy statement, class order, declaration, rule, regulation, guideline, policy or procedure pursuant to the provisions of which either the Australian Securities and Investments Commission or ASX is authorized or entitled to regulate, implement or enforce either directly or indirectly, the provisions of any of the foregoing statutes, regulations, rules, deeds or agreements or any conduct or proposed conduct of any person;

*'ASX'* means ASX Limited ACN 008 624 691;

*'Australian Company'* means GridSense Pty. Ltd. ACN 130 672 767;

*'Australian Participants'* means *Participants* not subject to the income tax laws of the United States;

*'Award'* means a promise to provide a benefit to an individual under the rules of this *Plan*;

*'Board'* means the board of directors of the *Australian Company* or the *US Company* and includes any committee of directors or person appointed by either board to exercise their powers in relation to this *Plan*;



'*Bonus Pool*' means, with respect to any *Qualified Transaction*, 17% of the amount determined by subtracting (Y) from (X), where (X) is the *Net Consideration* and (Y) is *Invested Capital*, in each case with respect to the *Group Company* or *Group Companies* that are the subject of such *Qualified Transaction*.

'*Cash Value*' of an *Award* means the cash determined by dividing the *Bonus Pool* by the outstanding and vested number of *Units* held by all *Participants* and multiplying the result by the number of vested *Units* held by the *Participant* holding such *Award*.

'*GAAP*' means United States generally accepted accounting principles, consistently applied.

'*Group Company*' means the *Australian Company*, the *US Company*, or CHK GridSense Pty Ltd.;

'*IPO*' means an underwritten initial public offering of shares in any *Group Company* as determined by the *Board*;

'*Invested Capital*' means the Applicable Multiple of all monies used by Acorn Energy, Inc. to purchase securities of any *Group Company* or otherwise invested by it therein, net of any previously returned capital, where 'Applicable Multiple' means 1x in the case of the initial \$12.656 million investment, 1.5X in the case of amounts up to \$3 million in excess of such initial capital to the extent invested for up to 24 months prior to the closing of the *Qualified Transaction*, and 2x in the case of such excess amounts invested longer than 24 months prior to the closing of the *Qualified Transaction*, and such other multiple of any additional cash investment (i.e., beyond \$15.656 million) as the *Board* and Acorn Energy, Inc. shall agree.

'*Listing Rules*' means the official listing rules of the ASX, or any other stock exchange on which shares are listed, as varied from time to time;

'*Net Consideration*' means the cash or fair market value, as determined by the *Board*, of any other property received by the applicable seller upon the sale of all or substantially all of the assets or securities of one or more of the *Group Companies* in a single or series of related transactions outside the ordinary course of business, net of all transaction related expenses as determined by the *Board* in accordance with *GAAP*.

'*Participant*' means a person who is given an *Award* under this *Plan*;

'*Plan*' means the GridSense Employee Incentive Plan as described in these terms and conditions;

'*Qualified Transaction*' means a transaction producing *Net Consideration*.

'*Section 409A*' means Section 409A of the *Internal Revenue Code of 1986* and the United States Department of Treasury Regulations and other interpretive guidance promulgated thereunder;

'*Unit*' means an equal interest in the *Bonus Pool* the value of which shall be determined by reference to the total units outstanding.

'*United States Participants*' means *Participants* subject to the income tax laws of the United States;

---

'US Company' means GridSense Inc., a Colorado corporation; and

'Vesting Commencement Date' means, with respect to an *Award*, the date designated as the *Vesting Commencement Date* in the grant deed for such *Award*.

2. Words importing the singular include the plural and vice versa and words importing one gender shall include all other genders.
3. References to:
  - (a) this *Plan* include its schedules and annexures;
  - (b) a part, clause, exhibit, annexure or schedule is a reference to an item of that type in this *Plan*;
  - (c) 'includes' or 'including' means 'includes without limitation' and 'including without limitation' respectively;
  - (d) this *Plan* or another document include a reference to it as novated, altered or replaced;
  - (e) '\$' are US dollars;
  - (f) a group of persons are to all of them or any two or more of them jointly and each of them severally;
  - (g) a party includes the executors, administrators, permitted assigns and successors in title to that party; and
  - (h) legislation includes any amendment to it and any consolidation, re-enactment or replacement of it or any subordinate legislation made under it.
4. If a party comprises more than one person or entity, all agreements, covenants, warranties or terms binding upon that party apply jointly and severally to each of those persons and entities.
5. Headings contained in this agreement are for reference purposes only, are not to be taken into account in interpreting this agreement and shall not be taken as any indication of the meaning of the clauses and sub-clauses to which they relate.

#### 1 **Awards**

1. Subject to clause 2.2, the *Board* may from time to time in its absolute discretion make an *Award* to an employee of a *Group Company* or an individual contractor providing personal services to a *Group Company* on the terms set out in this *Plan* and on such other terms as the *Board* may specify.
2. In no event shall *Awards* made under this *Plan* exceed 17,000,000 *Units*. Any *Units* forfeited by a Participant pursuant to the applicable *Award* agreement shall again become available under this *Plan*.
- 2.3 An *Award* made to an individual under the *Plan* shall be a conditional right, subject to the terms and conditions of this *Plan*, to be paid a cash sum calculated by reference to a certain number of *Units* specified by the *Board*. When a *Qualified Transaction* closes, a *Participant* shall not be entitled to receive any shares in any *Group Company* or be required to pay any price for any *Unit* under this *Plan*.

#### 2 **Vesting and Entitlement**

1. Subject to the provisions of this *Plan*, an *Award* will vest as determined by the *Board* and reflected in the agreement establishing the *Award*.

#### 3 **Payment of Awards**

1. No *Award* shall be paid unless it has vested in accordance with clause 3.1.

2. Each *Participant* shall be paid the *Cash Value* of his or her vested *Units* as soon as practicable following, but no later than March 15 of the year following, the closing of a *Qualified Transaction*. If less than all of the *Group Companies* are involved in such transaction, then the *Awards* shall remain outstanding subject to the terms of clause 3.
-

#### 4 **Process for Payments to Participants**

1. Notwithstanding clause 4.2, the payment under clause 4.2 need not be made until completion and payment of proceeds of any *Qualified Transaction*; provided that, in the case of *United States Participants* and without regard to any other provision in this *Plan*, (i) the *Qualified Transaction* constitutes a change in the ownership of the *US Company* or a change in the ownership of a substantial portion of the assets of the *US Company* under Section 409A and (ii) payment is made in accordance with United States Department of Treasury Regulation Section 1.409A-3(i)(5)(iv)(A). Each *Participant's* employer shall be responsible for paying the *Award* amount and such obligations shall be several and not joint among any *Group Companies*.
2. The *Group Companies* shall have the authority and the right to deduct or withhold, or require a *Participant* to remit to his or her employer, an amount sufficient to satisfy any income tax, fringe benefits tax or other statutory taxes or charges (including, in the case of *United States Participants*, such *Participant's* share of Federal Insurance Contributions Act, employment tax or other social security contribution obligation, and in the case of *Australian Participants*, any similar amounts including in respect of Superannuation Guarantee Contributions), in each case as required by *Applicable Law* to be withheld or paid with respect to any taxable event concerning a *Participant* arising as a result of the *Plan*. Further, the cash payment with regard to any *Units* held by an *Australian Participant* shall be reduced by the amount of Superannuation payments with respect to the *Award* by any *Group Company* made for the benefit of such *Participant*.

#### 5 **Lapsing of Rights**

1. If any *Participant* dies when such *Participant* is an employee of a *Group Company* any *Award* held by such *Participant* at the time of such *Participant's* death shall be eligible to be paid to such *Participant's* legal personal representative within 12 months after such *Participant's* death, provided that the *Award* has vested in accordance with clause 3 as of the date of death and subject to the conditions of clause 4. Any such *Award* shall lapse and cease to be payable on the date which is 12 months after the death of the *Participant*.

#### 6 **Overriding Restrictions on Grant and Exercise of Rights**

1. Notwithstanding any other provision of this *Plan*, the *Board* reserves the right to change, vary or amend all rights and entitlements attaching to any *Award* or of a *Participant* under this *Plan* to the extent necessary to comply with the *Applicable Laws* that apply to a reorganization of the capital of any *Group Company*, in connection with an *IPO*, capital restructure or exchange listing.
2. No *Award* may be granted or exercised if to do so would contravene the *Applicable Laws*.

#### 7 **Miscellaneous**

1. The rights and obligations of any individual under the terms of their office or employment with a *Group Company* shall not be affected by their participation in this *Plan*. *Participants* waive any and all rights to compensation or damages following termination of their employment for any reason as far as those rights to compensation or damages arise from their ceasing to have rights under this *Plan* or any *Award* because of that termination.
  2. If there is any dispute or disagreement about the interpretation of the *Plan*, or as to any question or right arising from or related to the *Plan*, the decision of the *Board* shall be final and binding on all persons.
  3. The *Board* may at any time, and at its complete discretion, suspend or terminate the *Plan* without notice to the *Participants*. The suspension or termination of *Plan* shall not affect any existing *Award* already made under the *Plan* and the terms of the *Plan* shall continue to apply to that *Award*.
  4. Any notice or other communication under or in connection with the *Plan* may be given by personal delivery or by sending it by post, email or fax, in the case of a company to its registered office (or any other address notified
-

by that company from time to time) or the email address or fax number (if any) of that registered office, and in the case of an individual to their last known address, email address or fax number or, if they are a director or employee of a *Group Company*, either to their last known address, email address or fax number or to the address of the place of business at which they carry out all or most of their duties, or to the email address or fax number relating to that address.

5. This *Plan* and all *Awards* made under it shall be governed by and construed in accordance with the law of New South Wales with regard to *Australian Participants* and the law of California, with regard to *United States Participants*, in each case without regard to the conflict of laws principles thereof.
6. With respect to *United States Participants*, to the extent applicable, the *Plan* and all *Awards* made under it shall be interpreted in accordance with *Section 409A*. Notwithstanding any provision of the *Plan* to the contrary, in the event that the *Board* determines that any *Award* may be subject to *Section 409A*, the *Board* may adopt such amendments to the *Plan* and the applicable grant deed or adopt other policies and procedures (including amendments, policies and procedures with retroactive effect), or take any other actions, that the *Board* determines are necessary or appropriate to (a) exempt the *Award* from *Section 409A* and/or preserve the intended tax treatment of the benefits provided with respect to the *Award*, or (b) comply with the requirements of *Section 409A* and thereby avoid the application of penalty taxes under *Section 409A*.

[signature pages follow]

---

Executed as a Deed Poll:

**EXECUTED** by **GRIDSENSE PTY LIMITED** by its authorized officers in accordance with section 127 of the Corporations Act:

\_\_\_\_\_  
Signature of director

\_\_\_\_\_  
Signature of director/secretary

\_\_\_\_\_  
Name

\_\_\_\_\_  
Name

**GRIDSENSE INC.**

By:

Name:

Title:

DATED: January 1, 2013

## DEED REGARDING AWARD

**THIS DEED** is made the day of

BETWEEN [Name of Participant]  
of [Address]

("the Participant")

AND **GRIDSENSE PTY LTD (ACN 130 672 767)** or **GRIDSENSE INC.**

("the Company")

### RECITAL

- A. The Company has determined to make an Award to the Participant under the terms of the Company's Employee Incentive Plan dated January 1, 2013 ("**the Plan**"), a copy of which is annexed hereto, subject to the Participant entering into this Deed.
- B. The parties wish to evidence the making of the Award, subject to the following terms.

### OPERATIVE PART

1. Unless specified otherwise, terms defined in the Plan shall have the same meaning in this Deed.
  2. In accordance with and subject to the terms of the Plan and this Deed, the Company hereby makes an Award under the Plan in favor of the Participant by reference to the grant to the Participant of a number of Units set out in item 1 of the Schedule to this Deed.
  3. The Award shall vest and be exercisable only as provided in item 3 of the Schedule to this Deed. [For the purposes of the Plan, the Vesting Commencement Date of the Award under this Deed is the date set out in item 2 of the Schedule to this Deed.]
  4. The Participant confirms that he or she has been supplied with a copy of the Plan and in consideration of the Company making the Award in favor of the Participant, covenants with the Company to observe, perform and be bound by all the terms of the Plan.
  5. [If the Participant voluntarily terminates his or her employment or services with his or her employing Group Company for any reason, or if such Group Company terminates the Participant's employment or services without Cause, then the then-vested portion of the Award shall remain outstanding and eligible to be payable in connection with a future Qualifying Transaction, and the remainder shall immediately be forfeited.
  6. If the applicable employing Group Company terminates the Participant's employment or services for Cause (as defined below), the Participant shall immediately forfeit the entire Award.
  7. For the purposes of clauses 5 and 6 of this Deed, "Cause" means:
    - a. The Participant's failure to perform the duties of his or her position;
    - b. The Participant's failure to follow the written legal directions of the Board after written notice thereof;
    - c. The Participant's willful misconduct with regard to the employing Group Company (including violations of securities or other laws) having a material adverse impact on the Group Company;
    - d. The Participant's conviction of, or pleading guilty or *nolo contendere* to, a felony or crime involving moral turpitude, fraud or embezzlement; or
    - e. The Participant's material breach of any employment agreement with any Group Company or of any fiduciary duties the Participant has to any Group Company,
-

in each case unless cured within twenty (20) calendar days of the Participant's receipt of written notice by the Board of its determination to terminate the participant with Cause, to the extent curable.]<sup>1</sup>

8. The address of the Participant for the purposes of the Plan shall be the address set out above.
9. This Deed, together with any documents referred to in this Deed, comprises the entire agreement between the Participant and any Group Company with respect to any issue of shares or rights relating to shares in any Group Company and supersedes all prior understandings, agreements, representations and correspondence between the Participant and any other party or parties to this Deed with respect to the same ("Prior Arrangements"). With the exception of the Plan and any other agreements or arrangements specified in Item 4 of the Schedule to this Deed, all Prior Arrangements are hereby terminated and any rights of the Participant pursuant to any such Prior Arrangements are hereby released by the Participant once and for all.
10. The rights of the Participant under this Deed and the Plan are personal to the Participant and may not be assigned or transferred, save as may be expressly provided under the terms of the Plan in the event of the death of the Participant.
11. This deed shall be governed by and construed in accordance with the laws of the State of [New South Wales/California].

**EXECUTED** as a deed.

**EXECUTED** for and on behalf of **GRIDSENSE PTY LTD (ACN 130 672 767)** in accordance with Section 127(1) of the Corporations Act 2001 *by authority of the Directors: or GRIDSENSE INC.*

Signature of Director/Officer

##  
Name of Director

Signature of Director/Secretary

##  
Name of Director/Secretary

**SIGNED SEALED & DELIVERED** by **[Participant]** in the presence of:

Signature of Witness

Print Name of Witness

)  
)

Signature

---

1 - Section 5 through 7 are for executives/board only. Delete for non-executives and replace with the following language added to Section 3: "If the Participant's employment with his or her employing Group Company is terminated for any reason by Participant or the Group Company prior to the date the Award is vested, then the Participant shall immediately forfeit the entire Award."

**SCHEDULE TO DEED REGARDING AWARD**

**Number of Units for Award (clause 2)** [insert number]  
**Vesting Commencement Date for Award (clause 3)** [DATE] or [N/A]

**[One half of the total number of Units shall vest in 48 equal monthly installments over four years from Vesting Commencement Date, subject to continued employment through each such monthly vesting date provided the Award shall be deemed fully vested upon occurrence of a Qualifying Transaction, subject to continued employment through such Qualifying Transaction] For executives/board.**

**Dates for vesting of Award** [Upon the occurrence of a Qualifying Transaction, subject to continued employment through such Qualifying Transaction] For rank-and-file employees.  
**Additional Prior Arrangements to be preserved** [specify or "Nil."]

---

**ANNEXURE**  
**(attach copy of EMPLOYEE INCENTIVE PLAN)**