

ACORN ENERGY, INC.  
Form 10-Q  
August 07, 2013  
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UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

FORM 10-Q  
QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 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

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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 August 2, 2013
Common Stock, \$0.01 par value per share	18,090,536

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ACORN ENERGY, INC.  
 Quarterly Report on Form 10-Q  
 for the Quarterly Period Ended June 30, 2013

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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.



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## PART I

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

	As of December 31, 2012	As of June 30, 2013
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$26,147	\$13,349
Restricted deposit	699	598
Accounts receivable, net	5,481	3,270
Unbilled revenue	5,213	6,614
Inventory	5,106	6,145
Other current assets	3,547	3,343
Total current assets	46,193	33,319
Property and equipment, net	927	2,049
Severance assets	3,165	3,363
Restricted deposit	115	—
Intangible assets, net	9,561	7,846
Goodwill	6,630	6,407
Other assets	745	1,012
Total assets	\$67,336	\$53,996
<b>LIABILITIES AND EQUITY</b>		
Current liabilities:		
Short-term bank credit and current maturities of long-term debt	\$153	\$251
Accounts payable	2,631	2,154
Accrued payroll, payroll taxes and social benefits	2,420	2,052
Deferred revenue	3,323	1,943
Other current liabilities	1,708	3,163
Total current liabilities	10,235	9,563
Long-term liabilities:		
Accrued severance	4,491	4,759
Other long-term liabilities	665	691
Total long-term liabilities	5,156	5,450
Commitments and contingencies		
Equity:		
Acorn Energy, Inc. shareholders		
Common stock - \$0.01 par value per share:		
Authorized – 30,000,000 shares; Issued – 18,870,526 and 18,892,456 shares at December 31, 2012 and June 30, 2013, respectively	188	188
Additional paid-in capital	83,469	83,494
Warrants	55	44
Accumulated deficit	(29,733)	(41,882)
Treasury stock, at cost – 801,920 shares at December 31, 2012 and June 30, 2013	(3,036)	(3,036)
Accumulated other comprehensive income	716	319
Total Acorn Energy, Inc. shareholders' equity	51,659	39,127

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Non-controlling interests	286	(144	)
Total equity	51,945	38,983	
Total liabilities and equity	\$67,336	\$53,996	

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

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

	Six months ended June 30,		Three months ended June 30,	
	2012	2013	2012	2013
Revenues:				
Projects	\$7,618	\$7,241	\$4,582	\$3,659
Products	1,951	2,875	1,023	1,168
Services	341	833	122	406
Total revenues	9,910	10,949	5,727	5,233
Cost of sales:				
Projects	5,773	5,563	3,527	3,114
Products	1,200	1,770	587	731
Services	251	219	127	116
Total cost of sales	7,224	7,552	4,241	3,961
Gross profit	2,686	3,397	1,486	1,272
Operating expenses:				
Research and development expenses, net of credits	3,017	4,117	1,699	2,116
Selling, general and administrative expenses	8,619	10,226	4,390	4,970
Impairment of intangibles	—	1,116	—	1,116
Restructuring and related charges	—	594	—	594
Total operating expenses	11,636	16,053	6,089	8,796
Operating loss	(8,950 )	(12,656 )	(4,603 )	(7,524 )
Finance income, net	107	89	130	75
Loss before income taxes	(8,843 )	(12,567 )	(4,473 )	(7,449 )
Income tax benefit (expense), net	989	(85 )	1,064	(16 )
Net loss	(7,854 )	(12,652 )	(3,409 )	(7,465 )
Net loss attributable to non-controlling interests	461	503	205	291
Net loss attributable to Acorn Energy, Inc. shareholders	\$(7,393 )	\$(12,149 )	\$(3,204 )	\$(7,174 )
Basic and diluted net loss per share attributable to Acorn Energy, Inc. shareholders	\$(0.42 )	\$(0.67 )	\$(0.18 )	\$(0.40 )
Weighted average number of shares outstanding attributable to Acorn Energy, Inc. shareholders – basic and diluted	17,796	18,084	17,912	18,091
Dividends declared per common share	\$0.070	\$0.035	\$0.035	\$—

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

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

	Six months ended June 30,		Three months ended June 30,	
	2012	2013	2012	2013
Net loss attributable to Acorn Energy, Inc. shareholders	\$ (7,393)	\$ (12,149 )	\$ (3,204 )	\$ (7,174 )
Other comprehensive income (loss):				
Foreign currency translation adjustments	(1 )	(392 )	(202 )	(344 )
Comprehensive loss	(7,394 )	(12,541 )	(3,406 )	(7,518 )
Comprehensive (income) loss attributable to non-controlling interests	—	(5 )	6	(15 )
Comprehensive loss attributable to Acorn Energy, Inc. shareholders	\$ (7,394)	\$ (12,546 )	\$ (3,400)	\$ (7,533 )

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



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

	Acorn Energy, Inc. Shareholders									
	Number of Shares	Common Stock	Additional Paid-In Capital	Warrants	Accumulated Deficit	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Edal Acorn Energy, Inc. Shareholders' Equity	Non-control- ling 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	—	—	—	—	(12,149 )	—	—	(12,149 )	(503 )	(12,652 )
Differences from translation of subsidiaries' financial statements	—	—	—	—	—	—	(397 )	(397 )	5	(392 )
Dividends Dividends in common stock under the Company's Dividend Reinvestment Plan, net of discount (see Note 8(a))	—	—	(634 )	—	—	—	—	(634 )	—	(634 )
Stock option compensation	—	—	531	—	—	—	—	531	—	531
Stock option compensation of subsidiaries	—	—	—	—	—	—	—	—	68	68
Exercise of warrants	3	—	11	(11 )	—	—	—	—	—	—
Balances as of June 30, 2013	18,893	\$ 188	\$ 83,494	\$ 44	\$ (41,882 )	\$ (3,036)	\$ 319	\$ 39,127	\$ (144 )	\$ 38,983

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

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

	Six months ended June 30,	
	2012	2013
Cash flows used in operating activities:		
Net loss	\$(7,854 )	\$(12,652 )
Adjustments to reconcile net loss to net cash used in operating activities (see Schedule A)	(2,054 )	1,665
Net cash used in operating activities	(9,908 )	(10,987 )
Cash flows provided by (used in) investing activities:		
Acquisitions of property and equipment	(370 )	(1,419 )
Acquisition of license	(150 )	—
Restricted deposits	(45 )	(23 )
Release of restricted deposits	386	240
Amounts funded for severance assets	(169 )	(100 )
Maturity of short-term deposits	8,000	—
Short-term deposits	(8,015 )	—
Acquisition of OmniMetrix, net of cash acquired (see Schedule C)	(7,835 )	—
Net cash used in investing activities	(8,198 )	(1,302 )
Cash flows provided by (used in) financing activities:		
Proceeds from employee stock option and warrant exercises	1,303	—
Short-term bank credit, net	(510 )	171
Proceeds from borrowings of long-term debt	16	—
Repayments of long-term debt	(95 )	(77 )
Dividends paid	(2,123 )	(517 )
Net cash used in financing activities	(1,409 )	(423 )
Effect of exchange rate changes on cash and cash equivalents	(12 )	(86 )
Net decrease in cash and cash equivalents	(19,527 )	(12,798 )
Cash and cash equivalents at the beginning of the period	34,280	26,147
Cash and cash equivalents at the end of the period	\$14,753	\$13,349

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

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

	Six months ended June 30,	
	2012	2013
A. Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation and amortization	\$661	\$773
Impairment of intangible assets	—	1,116
Abandonment of fixed assets	—	39
Inventory write-off	—	455
Increase in accrued severance	211	135
Stock-based compensation	181	599
Deferred taxes	(240	) (104
Other	(35	) 39
Change in operating assets and liabilities:		
Decrease (increase) in accounts receivable, unbilled revenue, other current and other assets	(1,047	) 802
Increase in inventory	(275	) (1,530
Decrease in accounts payable, accrued payroll, payroll taxes and social benefits, advances from customers, other current liabilities and other liabilities	(1,510	) (659
	\$(2,054	) \$1,665
B. Non-cash investing and financing activities:		
Adjustment of additional paid-in-capital and non-controlling interests from additional investment by Acorn in USSI	\$975	\$—
Value of shares issued under dividend reinvestment plan	\$69	\$117
C. Assets/liabilities acquired in the acquisition of OmniMetrix		
Accounts receivable	\$(328	)
Inventory	(234	)
Other current assets	(10	)
Property and equipment	(26	)
Intangible assets	(5,581	)
Goodwill	(1,930	)
Current liabilities	274	
	\$(7,835	)

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

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NOTE 1— BASIS OF PRESENTATION

The accompanying unaudited condensed consolidated financial statements of Acorn Energy, Inc. and its subsidiaries (the “Company”) have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information and with the instructions to Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by accounting principles generally accepted in the United States of America for complete consolidated financial statements. In the opinion of management, all adjustments (consisting of normal recurring adjustments) considered necessary for a fair presentation have been included. Operating results for the six month period ended June 30, 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 six month period ended June 30, 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.

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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 six months ended June 30, 2013, that are of material significance, or have potential material significance, to the Company.

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NOTE 3— INVESTMENTS IN US SEISMIC SYTEMS, INC. ("USSI")

On February 28, 2013, the Company entered into a new Stock 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. In May, the Company made another payment 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 May payment to USSI, the Company owned 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).

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## NOTE 4— RESTRUCTURING AND RELATED CHARGES

During the second quarter of 2013, following a change in its management, the Company's GridSense segment made a decision to restructure operations in both its USA and Australian entities. This action was taken primarily in order to improve efficiency based on GridSense's revenue mix and skills mix. Accordingly, GridSense recorded a restructuring charge of \$302 related to severance and other termination benefits for 17 employees whose positions were made redundant both in the United States and in Australia. In addition, in connection with downsizing its Australian operations, GridSense decided to move its operations to a smaller facility and recorded a restructuring charge of \$101, consisting of contractual rental commitments and related moving costs. In connection with that move, GridSense recorded a loss of \$39 reflecting the remaining book value of abandoned fixed assets. Following the restructuring, GridSense's Australian operations no longer have a production line and have minimal research and development activities. All product production and development will take place at GridSense's U.S. operations facility in Sacramento. As a result of the cessation of production activities in Australia, GridSense also recorded a provision of \$152 related to products which had been produced in Australia, but will no longer be produced or supported by U.S. operations.

The following table summarizes the restructuring charges during the six months ended June 30, 2013:

Employee severance and termination benefits	\$ 302
Facilities costs	101
Abandonment of fixed assets	39
Inventory obsolescence	152
Total	\$ 594

The following table presents activity during the six months ended June 30, 2013 related to GridSense's restructuring:

	Employee severance and termination benefits	Facilities	Inventory and fixed asset impairments	Total
Balance at December 31, 2012	\$—	\$—	\$—	\$—
Provision	302	101	191	594
Cash payments	(149	) —	—	(149
Non-cash settlements	—	—	(191	) (191
Balance at June 30, 2013	\$ 153	\$ 101	\$—	\$ 254

The total remaining accrued restructuring balance of \$254 is expected to be paid in full by December 31, 2013 and is included in Other current liabilities on the condensed consolidated balance sheets.

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## NOTE 5—NON-CONTROLLING INTERESTS

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

	Six months ended June		Three months ended June	
	30,		30,	
	2012	2013	2012	2013
Net income attributable to NCI in DSIT	\$65	\$22	\$57	\$1
Net loss attributable to NCI in USSI	(526	) (525	) (262	) (292
Net loss attributable to NCI	\$(461	) \$(503	) \$(205	) \$(291



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## NOTE 6—INVENTORY

The composition of inventory is as follows:

	As of December 31, 2012	As of June 30, 2013
Raw materials	\$3,281	\$3,025
Work-in-process	782	1,834
Finished goods	1,043	1,286
	\$5,106	\$6,145

The inventory balances at June 30, 2013 are net of provisions for obsolete inventory recorded in 2013 at USSI (\$282), OmniMetrix (\$21) and a restructuring obsolescence provision at GridSense (\$152) (see Note 4).

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## NOTE 7—GOODWILL AND INTANGIBLE ASSETS

## (a) Goodwill

The changes in the carrying amounts of goodwill by segment from December 31, 2012 to June 30, 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	16	(239 )	—	—	—	(223 )
Balance as of June 30, 2013	\$557	\$2,518	\$1,402	\$1,517	\$413	\$6,407

\* Results for the Cathodic Protection segment are included in "Other" in Segment Reporting (see Note 10).

## (b) Intangibles

The changes in the carrying amounts and accumulated amortization of intangible assets from December 31, 2012 to June 30, 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
Impairment	—	—	—	—	—	—	(1,116 )	—	—	—	(1,116 )
Amortization	—	(41 )	—	(137 )	—	(75 )	—	(177 )	—	(67 )	(497 )
Translation adjustment	17	(14 )	(145 )	40	—	—	—	—	—	—	(102 )
Balance as of June 30, 2013	\$549	\$(419)	\$2,632	\$(970 )	\$2,715	\$(455)	\$3,269	\$(486 )	\$1,196	\$(185)	\$7,846
Weighted average estimated useful lives in years	6		10		20		12		9		

\* Accumulated amortization

\*\* Results for the Cathodic Protection segment are included in "Other" in Segment Reporting (see Note 10).

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, customer relationships and trade name
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 10).

During the second quarter of 2013, a customer with whom OmniMetrix had a significant on-going relationship at the time of the Company's acquisition of OmniMetrix in February 2012, indicated that they would be disconnecting all of their power

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generator monitoring units over a period of time. Accordingly, the Company recorded an impairment of the customer relationship intangible asset associated with that customer in its Power Generation Monitoring segment of \$1,116.

Amortization expense for the six months ended June 30, 2012 and 2013 amounted to \$456 and \$497, respectively. Amortization expense with respect to intangible assets is estimated to be \$917, \$848, \$756, \$756 and \$754 for each of the years ending June 30, 2014 through 2018.

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## NOTE 8—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. On May 8, 2013, the Company's Board of Directors agreed to halt the Company's dividend in favor of investing in Acorn's portfolio companies.

## (b) Acorn Stock Options

A summary of stock option activity for the six months ended June 30, 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	81,461	\$ 7.48		
Exercised	—	\$ —		
Forfeited or expired	—	\$ —		
Outstanding at June 30, 2013	1,392,858	\$ 5.34	3.7 years	\$ 4,426
Exercisable at June 30, 2013	1,039,237	\$ 4.52	4.4 years	\$ 4,096

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	1.2	%
Expected term of options	6.7 years	
Expected annual volatility	57	%
Expected dividend yield	1.1	%

## (c) Stock-based Compensation Expense

Stock-based compensation expense included in the Company's Condensed Statements of Operations for the three and six month periods ended June 30, 2012 and 2013 was as follows:

	Six months ended June 30,		Three months ended June 30,	
	2012	2013	2012	2013
Research and development expenses, net of credits	\$ —	\$ 21	\$ —	\$ 11
Selling, general and administrative expenses	181	578	39	307
Total stock-based compensation expense	\$ 181	\$ 599	\$ 39	\$ 318



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## (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:

	Number of Warrants (in shares)	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Life
Outstanding at December 31, 2012	28,750	\$3.68	
Granted	—		
Exercised	(2,954	) \$3.68	
Forfeited or expired	(2,796	) \$3.68	
Outstanding at June 30, 2013	23,000	\$3.68	2.5 years

During the six months ended June 30, 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.

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## NOTE 9—FAIR VALUE MEASUREMENTS

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

	As at June 30, 2013			Total
	Level 1	Level 2	Level 3	
Restricted deposits – current and non-current	\$598	\$—	\$—	\$598
Derivative assets	14	—	—	14
Total	\$612	\$—	\$—	\$612

  

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

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.



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NOTE 10—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 six month period ended June 30, 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 as well as Cathodic Protection activities in the Company's OmniMetrix subsidiary that do not meet the quantitative thresholds under applicable accounting principles.

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	Energy & Security Sonar Solutions	GridSense	USSI	Power Generation Monitoring	Other	Total
Six months ended June 30, 2013						
Revenues from external customers	\$6,186	\$2,474	\$635	\$804	850	\$10,949
Intersegment revenues	—	—	39	—	—	39
Segment gross profit (loss)	2,335	1,050	(850 )	439	423	3,397
Impairment of intangibles (see Note 7(b))	—	—	—	1,116	—	1,116
Restructuring and related charges (see Note 4)	—	594	—	—	—	594
Depreciation and amortization	117	189	169	177	80	732
Stock compensation expense	—	—	68	—	—	68
Segment net income (loss) before income taxes	314	(2,737 )	(4,170 )	(1,832 )	11	(8,414 )
Six months ended June 30, 2012						
Revenues from external customers	\$6,182	1,907	\$1,083	\$115	623	\$9,910
Intersegment revenues	—	—	—	—	—	—
Segment gross profit (loss)	2,297	817	(605 )	(29 )	206	2,686
Depreciation and amortization	116	189	153	132	66	656
Stock compensation expense	—	—	—	—	—	—
Segment net income (loss) before income taxes	581	(2,057 )	(3,802 )	(307 )	(90 )	(5,675 )
Three months ended June 30, 2013						
Revenues from external customers	\$3,140	\$931	\$310	\$408	\$444	\$5,233
Intersegment revenues	—	—	—	—	—	—
Segment gross profit (loss)	1,113	389	(682 )	203	249	1,272
Impairment of intangibles (see Note 7(b))	—	—	—	1,116	—	1,116
Restructuring and related charges (see Note 4)	—	594	—	—	—	594
Depreciation and amortization	60	85	85	89	40	359
Stock compensation expense	—	—	34	—	—	34
Segment net income (loss) before income taxes	62	(1,590 )	(2,319 )	(1,451 )	(1 )	(5,299 )
Three months ended June 30, 2012						
Revenues from external customers	\$3,419	\$989	\$962	\$30	\$327	\$5,727
Intersegment revenues	—	—	—	—	—	—
Segment gross profit (loss)	1,337	473	(394 )	(69 )	139	1,486
Depreciation and amortization	58	93	83	89	41	364
Stock compensation expense	—	—	—	—	—	—
Segment net income (loss) before income taxes	421	(858 )	(2,087 )	(292 )	(23 )	(2,839 )

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## Reconciliation of Segment Income (Loss) to Consolidated Net Loss Before Income Taxes

	Six months ended		Three months ended	
	June 30,		June 30,	
	2012	2013	2012	2013
Total net loss before income taxes for reportable segments	\$(5,585 )	\$(8,425 )	\$(2,816 )	\$(5,298 )
Other operational segment net income (loss) before income taxes	(90 )	11	(23 )	(1 )
Total segment net loss before income taxes	(5,675 )	(8,414 )	(2,839 )	(5,299 )
Unallocated cost of corporate headquarters*	(2,727 )	(2,755 )	(1,267 )	(1,363 )
Unallocated cost of DSIT and OmniMetrix headquarters	(441 )	(1,398 )	(367 )	(787 )
Consolidated loss before income taxes	\$(8,843 )	\$(12,567 )	\$(4,473 )	\$(7,449 )

\*Includes stock compensation expense of \$181 and \$531 for the six month periods ended June 30, 2012 and 2013, respectively.

Includes stock compensation expense of \$39 and \$284 for the three month periods ended June 30, 2012 and 2013, respectively.

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NOTE 11 — SUBSEQUENT EVENTS

Acorn Investment in DSIT

Effective July 1, 2013, the Company entered into a new Stock Purchase Agreement with DSIT pursuant to which the Company converted a prior loan into additional ordinary (common) shares of DSIT. The Company converted \$2,800 in advances and loans into DSIT's Participating Preferred Stock (the "DSIT Preferred Stock"). At the closing, Acorn purchased an additional \$800 of DSIT Preferred Stock and committed to purchasing an additional \$1,400 of DSIT Preferred Stock as follows:

\$300 upon the earlier of October 1, 2013 or the completion of a certain milestone in a Transfer of Engineering Data Agreement ("TED") between DSIT and USSI which is currently being negotiated.

\$500 on October 1, 2013.

\$300 upon the earlier of January 1, 2014 or the completion of a certain milestone in the TED agreement.

\$300 upon the earlier of April 1, 2014 or the completion of a certain milestone in the TED agreement.

The DSIT Preferred Stock provides that upon any future liquidation of DSIT, to the extent funds are available for distribution to DSIT's stockholders after the satisfaction of any DSIT liabilities at that time, DSIT would first repay the Company for the purchase price of our DSIT Preferred Stock. Thereafter, the Company would receive a further payment for such shares ratably with all other DSIT ordinary stock holders as though the Company's shares of DSIT Preferred Stock were the same number of DSIT ordinary shares.

The Company currently owns approximately 88.3% of DSIT on an as converted basis. If all the above investments are made, the Company would own approximately 89.1% of DSIT on an as converted basis. If all the options to purchase all shares of DSIT ordinary stock available under the DSIT Option Plan are granted and exercised and all above investments are made, the Company would own approximately 78.8% of DSIT on a fully diluted as converted basis.

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ACORN ENERGY, INC.

ITEM MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF  
2. 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 six month period ended June 30, 2012.

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	Six months ended June 30, 2013						
	DSIT	OmniMetrix	GridSense	USSI	Acorn	Total	
Revenues	\$6,779	\$1,061	\$2,474	\$635	\$—	\$10,949	
Cost of Sales	4,183	460	1,424	1,485	—	7,552	
Gross profit	2,596	601	1,050	(850)	—	3,397	
Gross profit margin	38	% 57	% 42	% (134)	)%	31	%
R& D expenses, net of credits	723	268	1,426	1,700	—	4,117	
Selling, general and administrative expenses	1,647	2,367	1,847	1,610	2,755	10,226	
Impairment of intangibles	—	1,116	—	—	—	1,116	
Restructuring and related charges	—	—	594	—	—	594	
Operating income (loss)	\$226	\$(3,150)	\$(2,817)	\$(4,160)	\$(2,755)	\$(12,656)	
	Six months ended June 30, 2012						
	DSIT	OmniMetrix	GridSense	USSI	Acorn	Total	
Revenues	\$6,763	\$157	\$1,907	\$1,083	\$—	\$9,910	
Cost of Sales	4,260	186	1,090	1,688	—	7,224	
Gross profit	2,503	(29)	817	(605)	—	2,686	
Gross profit margin	37	% (18)	)% 43	% (56)	)%	27	%
R& D expenses, net of credits	456	71	687	1,803	—	3,017	
Selling, general and administrative expenses	1,474	834	2,189	1,393	2,729	8,619	
Operating income (loss)	\$573	\$(934)	\$(2,059)	\$(3,801)	\$(2,729)	\$(8,950)	
	Three months ended June 30, 2013						
	DSIT	OmniMetrix	GridSense	USSI	Acorn	Total	
Revenues	\$3,464	\$528	\$931	\$310	—	\$5,233	
Cost of Sales	2,172	255	542	992	—	3,961	
Gross profit	1,292	273	389	(682)	—	1,272	
Gross profit margin	37	% 52	% 42	% (220)	)%	24	%
R& D expenses, net of credits	452	148	714	802	—	2,116	
Selling, general and administrative expenses	811	1,216	751	829	1,363	4,970	
Impairment of intangibles	—	1,116	—	—	—	1,116	
Restructuring and related charges	—	—	594	—	—	594	
Operating income (loss)	\$29	\$(2,207)	\$(1,670)	\$(2,313)	\$(1,363)	\$(7,524)	
	Three months ended June 30, 2012						
	DSIT	OmniMetrix	GridSense	USSI	Acorn	Total	
Revenues	\$3,722	\$54	\$989	\$962	—	\$5,727	
Cost of Sales	2,246	123	516	1,356	—	4,241	
Gross profit	1,476	(69)	473	(394)	—	1,486	
Gross profit margin	40	% (128)	)% 48	% (41)	)%	26	%
R& D expenses, net of credits	280	55	469	895	—	1,699	
Selling, general and administrative expenses	751	633	941	797	1,268	4,390	
Operating income (loss)	\$445	\$(757)	\$(937)	\$(2,086)	\$(1,268)	\$(4,603)	



Table of Contents**BACKLOG**

As of June 30, 2013, our backlog of work to be completed was as follows (amounts in millions of U.S. dollars):

DSIT Solutions	\$6.2
GridSense	1.2
OmniMetrix	1.8
USSI	1.0
Total	\$10.2

**RECENT DEVELOPMENTS****Acorn Investment in DSIT**

Effective July 1, 2013, Acorn entered into a new Stock Purchase Agreement with DSIT pursuant to which Acorn converted a prior loan into additional ordinary (common) shares of DSIT. Acorn also converted \$2.8 million in advances and loans into DSIT's Participating Preferred Stock (the "DSIT Preferred Stock"). At the closing, Acorn purchased an additional \$800,000 of DSIT Preferred Stock and committed to purchasing an additional \$1.4 million of DSIT Preferred Stock as follows:

\$300,000 upon the earlier of October 1, 2013 or the completion of a certain milestone in a Transfer of Engineering Data Agreement ("TED") between DSIT and USSI which is currently being negotiated.

\$500,000 on October 1, 2013.

\$300,000 upon the earlier of January 1, 2014 or the completion of a certain milestone in the TED agreement.

\$300,000 upon the earlier of April 1, 2014 or the completion of a certain milestone in the TED agreement.

The DSIT Preferred Stock provides that upon any future liquidation of DSIT, to the extent funds are available for distribution to DSIT's stockholders after the satisfaction of any DSIT liabilities at that time, DSIT would first repay Acorn for the purchase price of its DSIT Preferred Stock. Thereafter, Acorn would receive a further payment for such shares ratably with all other DSIT ordinary stock holders as though Acorn's shares of DSIT Preferred Stock were the same number of DSIT ordinary shares.

Acorn currently owns approximately 88.3% of DSIT on an as converted basis. If all the above investments are made, Acorn would own approximately 89.1% of DSIT on an as converted basis. If all the options to purchase all shares of DSIT ordinary stock available under the DSIT Option Plan are granted and exercised and all above investments are made, Acorn would own approximately 78.8% of DSIT on a fully diluted as converted basis.

**GridSense Order**

In June 2013, GridSense received a purchase order valued in excess of \$1 million for 700 units of its Distribution IQ™ and Line IQ® units that are each enabled by Grid InSite™ software. The order came from a major national utility based on a partnership with a regional smart grid company and is expected to be processed and shipped in the third quarter of 2013.

**GridSense and OmniMetrix under Unified Management**

On July 31, 2013, Acorn announced that Joe Musanti will be named President and CEO of a new company which will operate both its GridSense and OmniMetrix businesses in order to leverage the engineering and marketing activities of GridSense and OmniMetrix into a single operating unit. Mr. Musanti was named President and CEO of OmniMetrix following Deena Redding's departure in July. GridSense and OmniMetrix will continue to report operating results in their own respective segments. This decision will allow Mr. Musanti to exploit synergies that exist in multiple administrative functions between both companies and that are expected to accelerate a path to market for their products, grow sales and attain critical mass.





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Executive Vice President of Acorn

On July 25, 2013, Richard Rimer was appointed as Executive Vice President of Acorn Energy and signed a Consulting Agreement with Acorn, which is effective as of August 1, 2013 (the "Rimer CA"). Mr. Rimer has served on the Acorn Energy Board of Directors since 2006 and was named Vice-Chairman of Acorn Energy in 2012, a position he held until his election as Executive Vice President.

Under the Rimer CA, Mr. Rimer will receive a payment of \$215,040 for services rendered by him during 2013 prior to the effective date of the agreement. The Rimer CA provides that Mr. Rimer will serve as Executive Vice President for an annualized fee of \$368,640, payable in equal monthly installments of \$30,720. The term of the Rimer CA expires on March 31, 2014 unless earlier terminated. Mr. Rimer may earn a bonus up to \$272,000 for the accomplishment of agreed-upon goals by December 31, 2013 as set by the Compensation Committee. If Mr. Rimer's engagement is terminated without cause or by him for good reason, he is entitled to be paid the fees otherwise due him through the scheduled term end, plus a prorated bonus based on months worked, if earned. Acorn is obligated to inform Mr. Rimer by January 1, 2014 whether the Compensation Committee has elected not to initiate negotiations with Mr. Rimer for continuation of consulting services or the terms of an employment relationship. If the engagement is still in effect at January 1, 2014, Mr. Rimer will receive options to purchase shares of the Acorn's common stock with a Black-Scholes valuation of \$200,000 and at an exercise price equal to the closing price on the NASDAQ Global Market as of the last trading day of 2013.

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OVERVIEW AND TREND INFORMATION

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

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

- Energy & Security Sonar Solutions . We provide sonar and acoustic related solutions for energy, defense and commercial markets with a focus on underwater site security for strategic energy installations and other advanced acoustic systems and real-time embedded hardware and software development and production through our DSIT Solutions Ltd. ("DSIT") subsidiary.
- Smart Grid Distribution Automation. These products and services are provided by our GridSense subsidiaries (GridSense Inc. in the United States and GridSense Pty Ltd. and CHK GridSense Pty Ltd. in Australia - collectively "GridSense") which develop, market and sell remote monitoring and control systems to electric utilities and industrial facilities worldwide.
- Energy and Security Sensor Systems. These products and services are provided by our US Seismic Systems, Inc. subsidiary ("USSI") which develops and produces "state of the art" fiber optic sensing systems for the energy, commercial security and defense markets worldwide.
- Power Generation (PG) Monitoring. These products and services are provided by our 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 six month period ended June 30, 2012.

The following analysis should be read together with the segment information provided in Note 10 to the interim unaudited condensed consolidated financial statements included in this quarterly report.

DSIT Solutions

DSIT revenues of \$6.8 million in the first six months of 2013 were unchanged as compared to the first six months of 2012 while gross profit and gross margin both increased slightly. Operating income decreased, primarily as a result of increased research and development costs during the year. DSIT's revenues of \$3.5 million for the second quarter of 2013 represents a decrease of approximately \$0.3 million or 7% as compared to the second quarter of 2012. In addition, second quarter 2013 revenues reflected an increase of \$0.1 million or 4% compared to first quarter 2013 revenues of \$3.3 million.

Revenues in our Energy & Sonar Security Solutions segment were unchanged at \$6.2 million for both the first six months of 2013 and the first six months of 2012. Revenues from DSIT's other IT and consulting activities which are included in Acorn's Other segment activities decreased slightly in 2013 (from \$0.7 million to \$0.6 million). Second quarter 2013 Energy & Sonar Security Solutions revenues of \$3.1 million were \$0.3 million or 8% lower than second quarter 2012 revenues due to slowdown in revenue recognition in one of the company's major projects as it nears completion without a similar size project replacing it in the company's backlog. Second quarter 2013 revenues from

DSIT's other IT and consulting activities were relatively unchanged from 2012 to 2013.

DSIT's gross profit in the first six months of 2013 increased by approximately \$0.1 million or 4% compared to the gross profit of the first six months of 2012. The increase in gross profit was attributable to a slight increase in the gross margin over the period. Gross margin increased from 37% in the first six months of 2012 to 38% in the first six months of 2013. The increase in the gross margin in the first six months of 2013 was due to the mix of projects worked on during the quarter. Second quarter 2013 gross margin of 37% reflected a decrease from 40% in the second quarter of 2012 and from 39% in the first quarter of 2013. The decrease in the gross margin in the second quarter of 2013 compared to the second quarter of 2012 and the first quarter of 2013 was due to increased projected installation costs for one of the company's AquaShield™ Diver Detection Sonar projects.

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During the first six months of 2013, DSIT recorded approximately \$0.7 million of Research and Development (R&D) expense, an increase of approximately \$0.3 million compared to the first six months 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. In 2013, such R&D expense is net of approximately \$0.2 million of participation from the Israel-U.S. Binational Industrial Research and Development ("BIRD") Foundation in the project. In addition, DSIT is continuing to expend resources to expand DSIT's portfolio of products to include land-based security fiber-optic solutions.

DSIT is currently negotiating with USSI a TED 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 against land-based security threats for government and non-government customers for defense, security or military and safety applications.

During the first six months of 2013, DSIT recorded approximately \$1.6 million of selling, general and administrative (SG&A) expense with approximately \$0.8 million being recorded in both the first and second quarters of 2013. The 2013 SG&A expense is approximately \$0.2 million above the SG&A recorded in the first six months of 2012. The increase compared to the first six months of 2012 is attributable to increased salary costs and increased marketing expenses. The \$0.8 million of SG&A in the second quarter of 2013 is marginally (\$60,000) above second quarter 2012 SG&A primarily due to increased payroll expenses.

At December 31, 2012, DSIT had a project backlog of approximately \$9.6 million. During the first six months of 2013, we received new orders totaling approximately \$2.8 million and at the end of June 2013 had a backlog of approximately \$6.2 million.

DSIT's growth and profitability for the balance of 2013 is dependent upon pending orders for sonar systems. DSIT is currently awaiting the results of a bid process for a major multi-million dollar project. Results of the bid process are expected shortly, though we have no assurance that we will win the project or that if we do win the project, that we will be able to perform enough work to be able to recognize significant amounts of revenue over the balance of 2013. While DSIT has a significant pipeline, most of its major projects come after a lengthy sales cycle over which it has little control. Should this project not be received or its receipt significantly delayed, DSIT's revenues and profitability will likely decrease over the short term.

In July 2013, DSIT's renewed its lease for its operating facilities in the Tel Aviv, Israel metropolitan area which had expired in August 2012. The current lease expires in June 2016 and has an annual rent of approximately \$285,000. DSIT has an option to renew the lease for an additional three year period with an increase of 6% in the annual rent.

Effective July 1, 2013, Acorn entered into a Stock Purchase Agreement with DSIT pursuant to which Acorn converted a prior loan into additional ordinary (common) shares of DSIT. Acorn also converted \$2.8 million in advances and loans into DSIT's Participating Preferred Stock (the "DSIT Preferred Stock"). At the closing, Acorn purchased an additional \$800,000 of DSIT Preferred Stock and committed to purchasing an additional \$1.4 million of DSIT Preferred Stock as follows:

\$300,000 upon the earlier of October 1, 2013 or the completion of a certain milestone in a TED agreement between DSIT and USSI which is currently being negotiated.

\$500,000 on October 1, 2013.

\$300,000 upon the earlier of January 1, 2014 or the completion of a certain milestone in the TED agreement.

\$300,000 upon the earlier of April 1, 2014 or the completion of a certain milestone in the TED agreement.

The DSIT Preferred Stock provides that upon any future liquidation of DSIT, to the extent funds are available for distribution to DSIT's stockholders after the satisfaction of any DSIT liabilities at that time, DSIT would first repay Acorn for the purchase price of its DSIT Preferred Stock. Thereafter, Acorn would receive a further payment for such shares ratably with all other DSIT ordinary stock holders as though Acorn's shares of DSIT Preferred Stock were the same number of DSIT ordinary shares.

Acorn currently owns approximately 89.1% of DSIT on an as converted basis. If all the above investments are made, Acorn would own approximately 90.2% of DSIT on an as converted basis. If all the options to purchase all shares of DSIT ordinary stock available under the DSIT Option Plan are granted and exercised and all above investments are made, Acorn would own approximately 80.6% of DSIT on a fully diluted as converted basis.

DSIT intends to use these funds from Acorn to support its R&D activities in order to expand DSIT's portfolio of products and expense into land-based security fiber-optic solutions as well as to expand its sales and marketing activities.

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## GridSense

In the first six months of 2013, GridSense reported revenues of \$2.5 million, an increase of \$0.6 million (30%) compared to first six month 2012 revenues of \$1.9 million. Second quarter 2013 revenues of \$0.9 million were slightly (6%) below second quarter 2012 revenues of \$1.0 million. Second quarter 2013 revenues represents a decrease of \$0.6 million (40%) compared to first quarter 2013 revenues of \$1.5 million. The increase in 2013 revenues was attributable to increased revenues from GridSense's U.S. operations which saw its revenues increase from \$1.1 million in 2012 to \$1.6 million in 2013. Revenues from GridSense's Australian operations were relatively unchanged in the first six months of 2013 compared to the same period in 2012 at \$0.8 million. The increased revenue 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 second quarter revenues as compared to first quarter 2013 revenues was due to the fulfillment of this order in the first quarter. Australian revenues in 2013 remain steady attributable to purchases related to the company's PowerMonic<sup>®</sup> product.

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 in 2011 to over 45 ongoing pilots 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.

In June 2013, GridSense secured an order from a major national utility based on a partnership with a regional smart grid company. The order, valued in excess of \$1.0 million, for 700 units of its Distribution IQ<sup>™</sup> and Line IQ<sup>®</sup> units that are each enabled by Grid InSite<sup>™</sup> software. This order represents another conversion of a pilot to an initial commercial order involving over 700 units. As noted above, in the first quarter of 2013, GridSense finalized shipment of an order in excess of \$750,000 from a California based investor owned utility. GridSense anticipates fulfilling the entire order during the third quarter of 2013.

GridSense's gross profit in the first six months of 2013 increased by approximately \$0.2 million or 29% compared to first six months 2012 gross profit and decreased by approximately \$0.3 million compared to first quarter 2013. The increase in gross profit was attributable to the abovementioned increase in revenues with gross margin percentage virtually unchanged from 2012. Gross margins remained relatively steady in the first half of 2013 at 42% as compared to 43% in the first half of 2012 and 43% in the first quarter of 2013. We expect gross margins to continue at current or higher levels as we continue to work towards managing inventory more efficiently, improving forecasting for purchasing and procurement, and reducing production cycle times.

Following the resignation of GridSense's former CEO, Lindon Shiao, in May 2013, Joe Musanti who had been serving as Chief Financial Officer and Chief Operating Officer of GridSense was appointed as President and CEO of GridSense. Following his appointment, Mr. Musanti undertook a number of cost cutting measures in GridSense's U.S. and Australian operations as well as working to improve inventory management and customer service and alignment of engineering and sales. He has also overseen the restructuring of both the Australian and US operations with further plans to continue to identify areas where cost savings might be implemented in order to position the company to meet its cash flow goals. This action was taken primarily in order to improve efficiency based on GridSense's revenue mix and skills mix. As a result, during the second quarter, GridSense recorded a restructuring charge of \$302,000 related to severance and other termination benefits for 17 engineering and administrative employees whose positions were made redundant both in the United States and in Australia. Following the restructuring, GridSense's Australian

operations will no longer have a production line and will have minimal research and development activities. GridSense's U.S. operations will also have a reduced engineering staff and will have reduced research and development activities. In addition, following the decision to downsize its Australian operations, GridSense decided to move its operations to a smaller space and recorded a restructuring charge of \$101,000 consisting of contractual rental commitments and related moving costs. In connection with the move to a smaller space, GridSense also recorded a loss of \$39,000 reflecting the remaining book value of abandoned fixed assets. As a result of the cessation of production activities in Australia, GridSense recorded a provision of \$152,000 related to products which had been produced in Australia, but will no longer be produced and supported by U.S. operations. By the end of July 2013, GridSense had completed the changes implemented in GridSense's total restructuring charge in the second quarter of 2013 was \$594,000.

In the first six months of 2013, GridSense recorded \$1.4 million of R&D expense as compared to \$0.7 million in the same period of 2012. The increased R&D expense is due to the growth in GridSense's 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. Second quarter R&D expense was \$0.7 million following \$0.7 million in the first quarter of 2013. As noted above, following the downsizing



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of GridSense's Australian operations and reduced engineering staff in the U.S., GridSense expects that R&D expense going forward will be significantly lower than in previous quarters.

During the first six months of 2013, GridSense recorded approximately \$1.8 million of SG&A expense representing a decrease of approximately \$0.3 million (16%) compared to the first six months of 2012 SG&A expense. Second quarter 2013 SG&A expense reflected a decrease of \$0.3 million or (31%) compared to first quarter 2013 SG&A expense. The decreased SG&A costs for both periods noted is due to headcount reduction due to role consolidation and cost cutting measures that were commenced in late 2012 and continued into 2013. We expect that this trend will continue through 2013.

Acorn continues to provide funds for GridSense's working capital needs. In the period from January 1 to July 31, 2013, Acorn provided GridSense with \$1.5 million for its working capital needs (the total amount of the "GridSense Commitment" - see Liquidity and Capital Resources) plus an additional \$480,000 to fund the costs of the restructuring noted above. If GridSense is able to meet its sales goals for the second half of 2013, we believe that no additional funding would be required. 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). The outstanding balance as of June 30, 2013 was \$171,000. The line-of-credit is subject to certain financial and other covenants. At June 30, 2013, GridSense was not in compliance with its financial covenants at June 30, 2013 due to the effect of the restructuring. GridSense has received a covenant waiver from its bank. 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 July 31, 2013, GridSense had cash on hand of approximately \$0.1 million. We have no assurance that GridSense will increase its sales or reduce its need for additional financing to support its working capital needs. 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 six month period ended June 30, 2012.

In the first half of 2013, OmniMetrix recorded revenues of \$1.1 million (\$804,000 in its Power Generation Monitoring ("PG") segment and \$257,000 in its Cathodic Protection ("CP") segment) as compared to \$157,000 recorded in the first half of 2012 following our acquisition. The increase in revenues is driven by the increase in the number of units being monitored. Second quarter 2013 revenues of \$528,000 were marginally below first quarter 2013 revenues of \$533,000.

During the second quarter of 2013, a customer with whom OmniMetrix had a significant on-going relationship at the time of Acorn's acquisition of OmniMetrix in February 2012 (over 1,000 power generation units were then being monitored for that customer), indicated that they would be disconnecting their monitoring units over a period of time. At the time of the acquisition, an amortizing customer relationship intangible asset of approximately \$1.3 million was recorded with respect to that customer. Following the decision to disconnect their monitoring units, OmniMetrix recorded an impairment of the intangible asset of approximately \$1.1 million. Through June 30, 2013, 252 of this

customer's units have been disconnected.

As of January 1, 2013, OmniMetrix, had 2,758 PG units generating revenue. Such units have been shipped and activated (revenue recognition begins only following the activation of a shipped unit). During the first half of 2013, OmniMetrix added an additional 834 units (net of 292 units removed from service) to bring the total number of PG units generating revenue to 3,592; an increase of 30% over the past six months. The number of units reported above are on a different basis than previously reported units as we believe that reporting revenue generating units to be more meaningful than units in service which may or may not be actively generating revenue.

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 viewed the growth in PG units generating revenue in the first quarter of 2013 (512 units, net of two disconnects) as an initial indication of our marketing and promotion program gaining traction. However, in the second quarter of 2013, the growth in the

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number of units generating revenue slowed down (322 units, net of 290 disconnects of which 252 were related to a single customer - see above). While we are continuing with this program, we are also refocusing our marketing efforts on several strategic initiatives.

Our end-user customers (in addition to generator dealers) tend to recognize significant value in our offering. Accordingly, we have increased our focus on end-user customers in our marketing strategy. In conjunction with our increased focus on end-user customers, we have created a five-person lead generation team that makes outbound calls to potential end-user customers as well as to generator dealers. In addition, in January 2013, the EPA finalized amendments to the National Emissions Standards for Hazardous Air Pollutants for stationary reciprocating internal combustion engines (generators). Now every commercial generator over a certain size needs to collect and report run times and annual emissions or face significant civil penalties. Consequently, some end-user customers as well as environmental engineering firms, see significant value in our offering due to our ability to assist end-user customers in complying with such environmental regulations. As a result, we have increased our marketing efforts to highlight this value we provide to our customers. We are currently providing reports and information to end-user customers to assist them in their environmental compliance, and we have received positive feedback from these customers.

First half 2013 gross profit was approximately \$600,000 reflecting a gross margin of 57% on revenues compared with a negative gross profit of \$29,000 in the first half of 2012. Second quarter gross profit of \$273,000 reflected a gross margin of 52%, down from the first quarter's gross margin of 62%. The decrease in the gross margin was due to an increased number of units given away. The gross margin continues to be driven by margins on monitoring revenue which was 67% during the period. As monitoring revenue continues to grow, we expect these margins to increase in the long term as certain fixed costs (amortization of acquired technology) are spread over a greater revenue base and the deferred costs associated with the provision of units to certain customers below cost are fully amortized.

During the first half of 2013, OmniMetrix recorded approximately \$268,000 of R&D costs. R&D costs increased slightly in the second quarter to \$148,000 from \$120,000 in the first quarter of 2013. We anticipate that these costs will continue at or above recent levels as we expand our product offering and develop solutions for other markets.

During the first half of 2013, OmniMetrix recorded approximately \$2.4 million of SG&A costs of which approximately \$1.0 million was related to sales and marketing. Such costs were significantly above first half 2012 SG&A costs of \$834,000 (\$226,000 in sales and marketing) since our acquisition of OmniMetrix in February of 2012. The growth in SG&A costs reflects the investment in marketing and back-office infrastructure since our acquisition. Second quarter 2013 SG&A costs of \$1.2 million were slightly above first quarter 2013 SG&A costs reflecting the impact of our move to our new facilities. We anticipate that our SG&A costs have stabilized and will continue 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.

In July 2013, Joe Musanti was named President and CEO of OmniMetrix following the departure of Deena Redding.

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 during 2013, of which \$2.0 million has been invested through July 31, 2013 with the balance expected to be funded over the remainder of 2013 as needed. Acorn's remaining investment in OmniMetrix in 2013 is expected to be for working capital and the continued development of OmniMetrix's network operation center.

As of July 31, 2013, OmniMetrix had cash on hand of approximately \$0.1 million. OmniMetrix will continue to need additional financing for working capital after we complete our \$3.0 million additional investment. The level of additional financing will be dependent upon the level of penetration by OmniMetrix into the power generation monitoring market. 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 half of 2013, USSI received an evaluation order from a super-major oil company for USSI's down-hole seismic fiber optic array sensing system. This system was designed for use in a permanent down-hole monitoring application to enable on-going and high-resolution sub-surface imaging of oil and gas reservoirs. Following USSI's delivery of the system in the second quarter, it was used in a competitive, side-by-side, full scale field evaluation by the customer. The supermajor informed USSI that

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they were using this competitive process to select the technology that will be used for monitoring all of their future unconventional wells. As a result of the competition, the supermajor selected USSI to move on to the next phase of the project.

In the first six months of 2013, USSI reported revenues of \$635,000, a decrease of \$448,000 (41%) compared to first six months 2012 revenues of \$1.1 million. Second quarter revenues of \$310,000 reflect decreases of \$15,000 (5%) and \$652,000 (68%) as compared to first quarter 2012 and second quarter 2012 revenues, respectively. The decreased revenues for each period is due to the timing of the delivery of USSI's sensor systems - in particular the delay in the delivery of a system to SR2020 on a \$1.0 million project. This delay was caused by a manufacturing defect in the high pressure seals used to prevent leakage of high temperature well fluids into the downhole sensor housings. USSI detected the problem during internal qualification testing and is now in the process of qualifying two new suppliers for these seals. Final qualification of the new seals is expected to be completed shortly. It is now expected that this delivery will be made in the third quarter.

In the first six months of 2013, gross profit continued to be negative (\$850,000) as it was in the first six months of 2012 (\$605,000). 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. Approximately \$280,000 of the negative gross profit was attributable to the write-off of inventory to cost of sales.

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 fewer man-hours required for each product sold. We expect that the impact of these improved production processes and product designs will produce improved gross margins in the second half of 2013. We believe that upon receipt of follow-up orders on our proof-of-concept projects, we will realize additional improvements in gross margins as these efficiencies in production are expected to be greater in larger projects where we anticipate being able to utilize our new interrogator technology.

In the first half of 2013, USSI recorded approximately \$1.7 million of R&D expense, slightly less than the \$1.8 million of R&D expense recorded in the first half of 2012. Second quarter R&D expense of \$0.8 million was slightly below the \$0.9 million of R&D expense recorded in the first quarter of 2013 and the second quarter of 2012. We expect R&D expense to continue to approximately those of the levels seen in the first and second quarters 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 half of 2013, USSI recorded approximately \$1.6 million of SG&A expense representing an increase of approximately \$0.2 million (16%) compared to the first half of 2012. The increase from the first half of 2012 is due to increases in salary expense as a result of added headcount and increased spending relating to sales and marketing activities. Second quarter SG&A expense of approximately \$0.8M was relatively unchanged from first quarter 2013 SG&A expense. USSI does not expect SG&A expense to materially change in the coming quarters.

In July 2013, USSI signed an agreement to lease an additional 8,600 square feet of space contiguous to its facilities in Chatsworth, California. The additional space is expected to be used for production of anticipated commercial orders.

As at June 30, 2012, USSI's backlog of projects was approximately \$1.0 million which is primarily comprised of its SR2020 proof-of-concept project. USSI anticipates recognizing the revenue associated with this project in the third quarter of 2013. Actual revenue recognition for this project is dependent upon the timing of the 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 2013 (such as the supermajor noted above) 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 end of 2013. During 2013, we grew our employee base from 43 full-time employees (inclusive of consultants) at the end of 2012 to 58 full-time employees (inclusive of consultants) as of July 31, 2013. Other than production staff, we do not anticipate further significant growth in personnel.

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 \$5.0 million in USSI to support its working capital requirements under our 2013 USSI Purchase Agreement. We expect that USSI's working capital requirements will lessen following the anticipated receipt of the second order from the supermajor and upon receipt of commercial orders. We expect that we will be investing additional funds in USSI before year-end, though the amounts to be invested will be dependent on USSI's needs at that time.

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While USSI 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 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. While USSI has begun discussions with its bank on an expanded bank line, we have no assurance that additional financing from the bank or other sources 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 \$2.8 million in the first half of 2013 reflected a slight increase (less than \$50,000) to the expense in the first half of 2012. Second quarter corporate general and administrative expense of \$1.4 million was virtually unchanged from first quarter corporate general and administrative expense and was slightly (\$0.1 million) more than second quarter 2012 corporate general and administrative expense.

First half 2012 corporate general and administrative expense included approximately \$300,000 of professional fees and costs incurred associated with our acquisition of OmniMetrix. In 2013, these one-time costs were replaced by an increase in non-cash stock compensation expense (an increase of approximately \$350,000 in 2013 compared to 2012). 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.

As of July 31, 2013, the Company's corporate operations (not including cash at any of our subsidiaries) held a total of approximately \$9.7 million in cash and cash equivalents (\$6.0 million in U.S. banks and \$3.7 million in Israeli banks (all of which can be repatriated without any tax consequence). Acorn anticipates receipt of its Federal income tax refund of approximately \$1.7 million during the fourth quarter of 2013. We believe that our current cash plus the cash expected to be generated from operations and borrowing from available lines of credit, if necessary, will provide sufficient liquidity to finance the operating activities of Acorn and the operations of its operating subsidiaries for at least the next 12 months. In order to position ourselves to take advantage of potential market expansion or complementary 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 prior to the end of 2013, the amount and terms of which cannot be determined at this time.

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## Results of Operations

The following table sets forth certain information with respect to the consolidated results of operations of the Company for the three and six month periods ended June 30, 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 10 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 six month period ended June 30, 2012.

	Six months ended June 30, 2012		2013		Change from 2012 to 2013	Three months ended June 30, 2012		2013		Change from 2012 to 2013
	(\$,000)	% of revenues	(\$,000)	% of revenues		(\$,000)	% of revenues	(\$,000)	% of revenues	
Revenues	\$9,910	100%	\$10,949	100%	10%	\$5,727	100%	\$5,233	100%	(9)%
Cost of sales	7,224	73%	7,552	69%	5%	4,241	74%	3,961	76%	(7)%
Gross profit	2,686	27%	3,397	31%	26%	1,486	26%	1,272	24%	(14)%
R&D expenses	3,017	30%	4,117	38%	36%	1,699	30%	2,116	40%	25%
SG&A expenses	8,619	87%	10,226	93%	19%	4,390	77%	4,970	95%	13%
Impairment of intangibles	—	—%	1,116	10%	—	—	—%	1,116	21%	
Restructuring and related charges	—	—%	594	5%	—	—	—%	594	11%	
Operating loss	(8,950 )	(90)%	(12,656 )	(116)%	41%	(4,603 )	(80)%	(7,524 )	(144)%	63%
Finance income, net	107	1%	89	1%	(17)%	130	2%	75	1%	(42)%
Loss before taxes on income	(8,843 )	(89)%	(12,567 )	(115)%	42%	(4,473 )	(78)%	(7,449 )	(142)%	67%
Income tax benefit (expense)	989	10%	(85 )	(1)%	(109)%	1,064	19%	(16 )	—%	(102)%
Net loss	(7,854 )	(79)%	(12,652 )	(116)%	61%	(3,409 )	(60)%	(7,465 )	(143)%	119%
Net loss attributable to non-controlling interests	461	5%	503	5%	9%	205	4%	291	6%	42%
Net loss attributable to Acorn Energy, Inc.	\$(7,393)	(75)%	\$(12,149)	(111)%	64%	\$(3,204)	(56)%	\$(7,174)	(137)%	124%

Revenues. Revenues in the first half of 2013 increased by \$1.0 million or 10% from \$10.0 million in the first half of 2012 to \$10.9 million in the first half of 2013. The increased revenues was driven primarily by increased revenues at OmniMetrix whose reported revenues increased by \$0.9 million to \$1.1 million compared to first half 2012 revenues of \$0.2 million since our acquisition of them in February of 2012 and GridSense revenues which increased by \$0.6 million (30%) to \$2.5 million compared to first half 2012 revenues of \$1.9 million. DSIT's revenues (\$6.8 million) were unchanged in 2013 as compared to 2012 while USSI's revenues decreased by \$0.4 million (41%) to \$0.6 million compared to first half 2012 revenues of \$1.1 million.



OmniMetrix recorded revenues of \$1.1 million were comprised of \$0.8 million in its PG segment and \$0.3 million in its CP segment as compared to \$115,000 and \$43,000, respectively for 2012. The increase in revenues is driven by the increase in the number of units being monitored. 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® units from a California based investor owned utility that was received in late 2012. At DSIT, revenues in its Energy & Sonar Security Solutions segment increased slightly (from \$6.1 million to \$6.2 million). This increase was offset by a slight decrease in DSIT's other IT and consulting activities which are included in Acorn's Other segment activities. The decrease in revenues at USSI was due to the timing of the delivery of USSI's sensor systems - in particular the delay in the delivery of a system to SR2020 on a \$1.0 million project.

#### Gross profit.

Gross profit in the first half of 2013 reflected an increase of \$711,000 (26%) as compared to the first half of 2012. DSIT's first half 2013 gross profit increased by \$95,000 (4%) over first half 2012 gross profit. The increase in DSIT's gross profit was attributable to increased gross margins which improved from 37% in 2012 to 38% 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 half 2013 gross profit increased by \$233,000 (29%) over first half 2012 gross profit. The increase in GridSense's gross profit was attributable to increased

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revenues which offset a slight decrease in gross margins which fell to 42% in 2013 from 43% in 2012. USSI continued to show a negative gross profit in 2013 (\$850,000) 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. Approximately \$280,000 of the negative gross profit was attributable to the write-off of inventory to cost of sales. OmniMetrix recorded gross profit of \$601,000 (reflecting a 57% gross margin) in 2013 as compared to a negative \$29,000 gross profit recorded in period since our acquisition of OmniMetrix in February 2012. The increased gross margin at OmniMetrix reflects the increasing levels monitoring of revenue recorded which are high margin revenues.

Research and development (“R&D”) expenses. R&D expenses increased \$1.1 million from \$3.0 million in the first half of 2012 to \$4.1 million in the first half of 2013. The bulk of the increase in R&D expenses was at GridSense and DSIT whose R&D expense increased \$0.7 million and \$0.3 million, respectively, as compared to the first half 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. 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. OmniMetrix also recorded an increase in R&D expense of \$0.2 million each as compared to the first half of 2012 (OmniMetrix's R&D expense in 2012 was only for the period since our acquisition in February 2012) while USSI's R&D expense in the first half of 2013 was decreased slightly (\$0.1 million) from \$1.8 million to \$1.7 million. Selling, general and administrative (“SG&A”) expenses. SG&A costs in the first half of 2013 increased by \$1.6 million as compared to the first half of 2012. The increased SG&A was attributable to increases recorded at OmniMetrix, DSIT and USSI while GridSense SG&A decreased in the first half of 2013 as compared to the first half of 2012 while corporate general and administrative costs were relatively unchanged. OmniMetrix recorded \$2.4 million of SG&A in the current period as compared to \$0.8 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 \$1.5 million in 2012 to \$1.6 million in 2013. DSIT's increased SG&A was related to increased salary costs as well as increased marketing expenses. USSI's SG&A increased from \$1.4 million in 2012 to \$1.6 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 \$0.3 million of SG&A expense to \$1.8 million. GridSense's decreased SG&A expense was attributable to headcount reduction due to role consolidation and cost cutting measures that were commenced in late 2012 and continued into 2013.

Impairment of intangibles. During the second quarter of 2013, a customer with whom OmniMetrix had a significant on-going relationship at the time of Acorn's acquisition of OmniMetrix in February 2012 indicated that they would be disconnecting all of their monitoring units over a period of time. Following the decision to disconnect their monitoring units, OmniMetrix recorded an impairment of the intangible asset of approximately \$1.1 million.

Restructuring and related charges. Following the change in the top-level management at GridSense, the company undertook a number of cost cutting measures in GridSense's U.S. and Australian operations. This action was taken primarily in order to improve efficiency based on GridSense's revenue mix and skills mix in order to position the company to meet its cash flow goals. As a result, during the second quarter, GridSense recorded a total restructuring charge in the second quarter of 2013 of \$0.6 million.

Net loss attributable to Acorn Energy. We had a net loss attributable to Acorn Energy of \$12.1 million in the first half of 2013 compared to a net loss of \$7.4 million in the first half of 2012. Our loss in 2013 was primarily due to losses at USSI (\$4.2 million), OmniMetrix (\$3.1 million which includes the non-cash loss on the impairment of intangibles of \$1.1 million noted above) and GridSense losses of \$2.7 million (which includes the loss of \$0.6 million on restructuring and related charges noted above) with corporate expenses contributing an additional \$2.8 million. These losses were offset by DSIT's profit of approximately \$0.2 million for the first half of 2013 and the non-controlling interest's share of our operations of approximately \$0.5 million.



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## Liquidity and Capital Resources

As of June 30, 2013, we had working capital of \$23.8 million. Our working capital includes \$13.3 million of cash and cash equivalents and restricted deposits of approximately \$0.6 million. Net cash decreased during the six months ended June 30, 2013 by \$12.8 million, of which approximately \$11.0 million was used in operating activities. The primary use of cash in operating activities during the first six months of 2013 was the cash used in operations by our subsidiaries (\$4.8 million, \$2.1 million, \$1.5 million and \$0.4 million used by USSI, GridSense, OmniMetrix and DSIT, respectively) in their operations combined with the \$2.2 million of cash used in our corporate operating activities. Of USSI's \$4.8 million of cash used in operations, \$1.8 was used for the build-up of inventory.

Cash used in investment activities of \$1.3 million was primarily due to the acquisition of property and equipment (\$1.4 million). Such acquisitions of property and equipment were primarily at OmniMetrix related to leasehold improvements at its new facilities and at USSI for production equipment. The net cash released from restricted deposits (\$0.2 million) were partially 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 six months of 2013 (\$0.5 million) which was partially offset by the net change in short and long-term debt (\$0.1 million). At June 30, 2013, DSIT had approximately \$0.5 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 \$550,000 from each bank), none of which was then being used. The lines-of-credit are subject to maintaining certain financial covenants. At June 30, 2013, DSIT was in compliance with its financial covenants.

As at June 30, 2013, DSIT also had an outstanding term loan from an Israeli bank in the amount of approximately \$75,000. 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 \$12,500 per month (principal and interest) through December 2013.

In accordance with the terms of the loan, DSIT has deposited with an Israeli bank approximately \$75,000 as a restricted deposit. In addition to this restricted deposit, DSIT has also deposited with two Israeli banks approximately \$525,000 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 July 31, 2013, DSIT had approximately \$1.2 million of cash of which approximately \$0.5 million was restricted (all current) and was not utilizing any of its lines-of-credit. In July, DSIT and Acorn entered into an agreement pursuant to which Acorn would convert a prior loan 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 of DSIT Preferred Stock. Acorn invested \$0.8 million of the \$2.2 million in July. 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). 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 June 30, 2013) or 6.5%. The line-of-credit is also subject to certain financial covenants. GridSense was not in compliance with its financial covenants at June 30, 2013 due to the effect of the restructuring. GridSense has received a covenant waiver from its bank. As of July 31, 2013, GridSense was utilizing \$155,000 of this line-of-credit.

In 2013, we committed to fund an additional \$1.5 million to GridSense (the "GridSense Commitment") plus an additional \$480,000 to fund the cost of the restructuring, all of which has already been funded in 2013. Following the restructuring of activities at GridSense, we believe that with a reduced cost structure and improving sales, GridSense will be significantly less reliant on us for working capital support. 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. 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. On July 31, 2013, GridSense had cash on hand of approximately \$0.1 million.

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"),

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of which \$2.00 million has been funded through July 31, 2013. The OmniMetrix Commitment will be funded in increments as we deem necessary during the balance of 2013.

As of July 31, 2013, OmniMetrix had cash on hand of approximately \$0.1 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.

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. USSI has begun discussions with the bank to expand this line of credit. 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 June 30, 2013, USSI was in compliance with its financial covenants. As of July 31, 2013, USSI was not utilizing any of this line-of-credit.

We have no assurance that USSI will not need additional financing from time-to-time to finance its working capital needs 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, all of which has been funded.

As of July 31, 2013, USSI had cash on hand of approximately \$0.25 million. 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 July 31, 2013, the Company's corporate operations (not including cash at any of our subsidiaries) had a total of approximately \$9.7 million in cash and cash equivalents (\$6.0 million in U.S. banks and \$3.7 million in Israeli banks (all of which can be repatriated without any tax consequence)) representing a decrease of \$1.6 million from our balance as of June 30, 2013. During the month of July we invested \$800,000 in DSIT, \$213,000 in GridSense, \$250,000 in OmniMetrix. The balance of the decrease was for corporate expenses. Acorn anticipates receipt of its Federal income tax refund of approximately \$1.7 million during the fourth quarter of 2013.

We believe that our current cash plus the cash expected to be generated from operations and borrowing from available lines of credit, if necessary, will provide sufficient liquidity to finance the operating activities of Acorn and the operations of its operating subsidiaries for at least the next 12 months. In order to position ourselves to take advantage of potential market expansion or complementary 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 prior to the end of 2013, the amount and terms of which cannot be determined at this time.

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## Contractual Obligations and Commitments

The table below provides information concerning obligations under certain categories of our contractual obligations as of June 30, 2013.

## CASH PAYMENTS DUE TO CONTRACTUAL OBLIGATIONS

	Years Ending June 30, (in thousands)				
	Total	2014	2015 - 2016	2017 - 2018	2019 and thereafter
Bank and other debt, utilized lines-of-credit and capital leases	\$246	\$246	\$—	\$—	\$—
Operating leases	2,961	817	1,586	360	198
Potential severance obligations (1)	4,759	354	1,142	—	3,263
Minimum royalty payments (2) (3)	450	50	100	100	200
Purchase commitments (4)	1,051	1,051	—	—	—
Total contractual cash obligations	\$9,467	\$2,518	\$2,828	\$460	\$3,661

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

(1) Under Israeli law and labor agreements, DSIT is required to make severance payments to dismissed employees and to employees leaving employment under certain other circumstances. The obligation for severance pay benefits, as determined by the Israeli Severance Pay Law, is based upon length of service and last salary. These obligations are substantially covered by regular deposits with recognized severance pay and pension funds and by the purchase of insurance policies. As of June 30, 2013, we accrued a total of \$4.8 million for potential severance obligations to our Israeli employees of which approximately \$3.4 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) Two of the employees of GridSense are entitled to a combined royalty of 6% of the sales of a particular product in excess of cumulative product sales of \$4.0 million provided that the product remained substantially the same from the original date of the royalty agreement. The above table does not include any royalties that may be paid under this arrangement.

(4) 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 reflects the amount outstanding under an open purchase order.

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ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

Foreign Currency Risk

Our non-US dollar monetary assets and liabilities (net assets of less than \$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 \$0.4 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 (\$5.4 million) is in money markets of two major financial institutions while an additional \$1.1 million is in a checking account at one of those major financial institutions. We do not believe there is significant risk of non-performance by these counterparties. The counterparty to our restricted deposits (\$0.6 million) and approximately \$6.5 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 33% (\$1.1 million) of the trade accounts receivable at June 30, 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 67% of the balance in unbilled revenue at June 30, 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 June 30, 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 (2.75% at June 30, 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 June 30, 2013).





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ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

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

Changes in Internal Control Over Financial Reporting

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

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PART II

ITEM 6. EXHIBITS.

- #10.1 Separation Agreement and Release - Lindon Shiao
- #10.2\* GridSense Employment Agreement with Joseph Musanti
- #10.3\* Secondment of Joseph Musanti to US Seismic Systems, Inc.
- #10.4\* Amendment to Employment Agreement - Benny Sela
- #10.5\* 2006 DSIT Key Employee Option Plan - As Amended
- #10.6\* Form of Stock Option Agreement to employees under the DSIT 2006 Key Employee Share Option 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 June 30, 2013, filed on August 7, 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.

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SIGNATURES

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

ACORN ENERGY, INC.

Dated: August 7, 2013

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