

ACORN ENERGY, INC.  
Form 10-Q  
August 09, 2012  
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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, 2012

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)

4 West Rockland Road, Montchanin, Delaware 19710  
(Former address)

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

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

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

Class	Outstanding at August 2, 2012
Common Stock, \$0.01 par value per share	17,926,752 shares

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ACORN ENERGY, INC.  
 Quarterly Report on Form 10-Q  
 for the Quarterly Period Ended June 30, 2012

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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, 2011	As of June 30, 2012
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$34,280	\$14,753
Short-term deposits	18,000	18,015
Restricted deposit	2,223	1,888
Funds held in escrow	5,961	5,961
Accounts receivable	4,965	4,476
Unbilled revenue	3,778	3,997
Inventory	2,144	2,652
Other current assets	922	2,765
Total current assets	72,273	54,507
Property and equipment, net	635	842
Severance assets	2,620	2,716
Restricted deposit	271	269
Intangible assets, net	4,780	10,056
Goodwill	4,637	6,562
Deferred taxes	440	423
Other assets	149	99
Total assets	\$85,805	\$75,474
<b>LIABILITIES AND EQUITY</b>		
Current liabilities:		
Short-term bank credit and current maturities of long-term debt	\$677	\$149
Accounts payable	2,052	2,164
Accrued payroll, payroll taxes and social benefits	1,907	2,139
Deferred revenue	2,876	1,597
Other current liabilities	4,544	3,139
Total current liabilities	12,056	9,188
Long-term liabilities:		
Accrued severance	3,837	3,949
Long-term debt	141	75
Other long-term liabilities	204	210
Total long-term liabilities	4,182	4,234
Commitments and contingencies		
Equity:		
Acorn Energy, Inc. shareholders		
Common stock - \$0.01 par value per share:		



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Authorized – 30,000,000 shares; Issued –18,325,529 and 18,728,672 shares at December 31, 2011 and June 30, 2012, respectively	183	187	
Additional paid-in capital	84,614	84,244	
Warrants	427	55	
Accumulated deficit	(13,022	) (20,312	)
Treasury stock, at cost – 801,920 shares at December 31, 2011 and June 30, 2012	(3,036	) (3,036	)
Accumulated other comprehensive income	485	484	
Total Acorn Energy, Inc. shareholders' equity	69,651	61,622	
Non-controlling interests	(84	) 430	
Total equity	69,567	62,052	
Total liabilities and equity	\$85,805	\$75,474	

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 NET INCOME (LOSS) PER SHARE DATA)

	Six months ended June 30,		Three months ended June 30,	
	2011	2012	2011	2012
Revenues:				
Projects	\$4,857	\$7,618	\$2,509	\$4,582
Products	2,102	2,176	1,482	1,196
Services	243	341	116	122
Total revenues	7,202	10,135	4,107	5,900
Cost of sales:				
Projects	3,371	5,773	1,904	3,527
Products	1,115	1,322	758	668
Services	195	251	98	127
Total cost of sales	4,681	7,346	2,760	4,322
Gross profit	2,521	2,789	1,347	1,578
Operating expenses:				
Research and development expenses, net of credits	874	3,017	384	1,699
Selling, general and administrative expenses	5,467	8,619	2,724	4,390
Total operating expenses	6,341	11,636	3,108	6,089
Operating loss	(3,820 )	(8,847 )	(1,761 )	(4,511 )
Finance income (expense), net	(217 )	107	(100 )	130
Gain on sale of HangXing	492	—	—	—
Loss from continuing operations before taxes	(3,545 )	(8,740 )	(1,861 )	(4,381 )
Income tax benefit (expense)	(39 )	989	26	1,064
Net loss from continuing operations	(3,584 )	(7,751 )	(1,835 )	(3,317 )
Loss from discontinued operations, net of income taxes	(1,404 )	—	(568 )	—
Non-controlling interest share of loss from discontinued operations	389	—	157	—
Net loss	(4,599 )	(7,751 )	(2,246 )	(3,317 )
Net loss attributable to non-controlling interests	303	461	167	205
Net loss attributable to Acorn Energy, Inc. shareholders	\$(4,296 )	\$(7,290 )	\$(2,079 )	\$(3,112 )
Basic and diluted net loss per share attributable to Acorn Energy, Inc. shareholders:				
From continuing operations	\$(0.19 )	\$(0.41 )	\$(0.10 )	\$(0.17 )
From discontinued operations	\$(0.06 )	\$—	\$(0.02 )	\$—
Basic and diluted net loss per share attributable to Acorn Energy, Inc. shareholders	\$(0.25 )	\$(0.41 )	\$(0.12 )	\$(0.17 )
Weighted average number of shares outstanding attributable to Acorn Energy, Inc. shareholders – basic and diluted	17,410	17,796	17,489	17,912
Dividends declared per common share	\$—	\$0.070	\$—	\$0.035

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





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

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

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

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

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

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

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

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

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



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

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

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

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NOTE 1— BASIS OF PRESENTATION

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

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

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

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NOTE 2—RECENT AUTHORITATIVE GUIDANCE

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

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

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



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## NOTE 3—ACQUISITION OF OMNIMETRIX

On February 15, 2012, the Company entered into a definitive agreement pursuant to which it acquired, through its XYZ Holdings, Inc. wholly-owned Georgia subsidiary ("Holdings" which has been renamed OMX Holdings, Inc.), all of the issued and outstanding limited liability company membership interests (the "Interests") in OmniMetrix, LLC, a Georgia limited liability company ("OmniMetrix"). OmniMetrix is in the business of designing, manufacturing, marketing and selling (i) wireless remote systems that monitor standby power generation, backup power generators, remote powered equipment, cellular towers, emergency towered communications and remote tower sites (the "Power Generator Monitoring" segment - see Note 11), and (iii) cathodic protection products to monitor pipeline integrity (the "Cathodic Protection" segment - included in the Company's "Other" segment - see Note 11). Holdings purchased the Interests in OmniMetrix from its three individual holders (the "Sellers") in consideration for an aggregate cash payment of \$8,500. The Company incurred approximately \$300 of transaction costs in connection with the acquisition of OmniMetrix which are included in Selling, general and administrative expense in the Condensed Consolidated Statement of Operations. The acquisition of OmniMetrix adds to the Company's growing product lines of remote monitoring systems for aging energy infrastructure.

The transaction was accounted for as a purchase business combination. OmniMetrix's results from operations for the period from acquisition (February 15, 2012) to June 30, 2012 have been included in the Company's consolidated statement of comprehensive income. In the period since our acquisition, the Company recorded \$382 of revenues and a net loss of \$830 associated with OmniMetrix's activities. Pro forma information with respect to the acquisition of OmniMetrix are not included in these condensed financial statements as the information is not material.

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

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

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

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

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

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NOTE 4—US SEISMIC SYSTEMS, INC.

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

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

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

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## NOTE 5—NON-CONTROLLING INTERESTS

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

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

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NOTE 6—INVENTORY

The composition of inventory is as follows:

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

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## NOTE 7—GOODWILL AND INTANGIBLE ASSETS

## (a) Goodwill

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

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

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

## (b) Intangibles

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

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

\* Accumulated amortization

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

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

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

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

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

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



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## NOTE 8—EQUITY

## (a) Dividends

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

## (b) Acorn Stock Options

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

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

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

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

## (c) Stock-based Compensation Expense

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

## (d) Warrants

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



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

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

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## NOTE 9—WARRANTY PROVISION

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

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

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

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## NOTE 10—FAIR VALUE MEASUREMENTS

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

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

  

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

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

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NOTE 11—SEGMENT REPORTING

The Company currently operates in four operating segments:

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

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

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

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

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

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

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

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

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

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



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NOTE 12—SUBSEQUENT EVENTS

Additional Investment in USSI

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

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

Dividends

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

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ACORN ENERGY, INC.

ITEM 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, 2011.

## REVENUES BY COMPANY

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

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

## BACKLOG

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

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

## RECENT DEVELOPMENTS

## (1) Additional Investment in USSI

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



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

(2) Dividends

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

(3) BIRD Development Grant

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

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### OVERVIEW AND TREND INFORMATION

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

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

- **Energy & Security Sonar Solutions** . We provide sonar and acoustic related solutions for energy, defense and commercial markets with a focus on underwater site security for strategic energy installations and other advanced acoustic systems and real-time embedded hardware and software development and production through our DSIT Solutions Ltd. ("DSIT") subsidiary.
- **Smart Grid Distribution Automation**. These products and services are provided by our GridSense subsidiaries (GridSense Inc. in the United States and GridSense Pty Ltd. and CHK GridSense Pty Ltd. in Australia - collectively "GridSense") which develop, market and sell remote monitoring and control systems to electric utilities and industrial facilities worldwide.
- **Energy and Security Sensor Systems**. These products and services are provided by our US Seismic Systems, Inc. subsidiary ("USSI") which develops and produces "state of the art" fiber optic sensing systems for the energy, commercial security and defense markets worldwide.
- **Power Generation (PG) Monitoring**. These products and services are provided by our newly acquired OmniMetrix subsidiary. OmniMetrix's PG products and services deliver critical, real-time machine information to customers and provide remote diagnostics that give users real control over their equipment.

During 2012, each of the four abovementioned activities represented a reportable segment. In addition, our "Other" segment represents IT and consulting activities at our DSIT subsidiary as well as Cathodic Protection activities in our newly acquired OmniMetrix subsidiary. As OmniMetrix's activities were acquired in February 2012, there are no comparative results reported for these activities for the three and six month periods ended June 30, 2011.

The following analysis should be read together with the segment information provided in Note 11 to the interim unaudited condensed consolidated financial statements included in this quarterly report.

#### DSIT Solutions

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

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

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

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

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

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

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

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

## GridSense

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

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

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

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

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

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



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

## USSI

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

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

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

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

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

fiber-optic geophone systems

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

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

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

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

### OmniMetrix

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

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

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

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

### Corporate

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

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

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

#### Results of Operations

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

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

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

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

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

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

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

Gross profit. Gross profit in the first half of 2012 reflected an increase of \$0.3 million (11%) as compared to the first half of 2011 as gross profit increased from \$2.5 million to \$2.8 million. DSIT's first half 2012 gross profit increased by \$0.7 million

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

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

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

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

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

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

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

## Liquidity and Capital Resources

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



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

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

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

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

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

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

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

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

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

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

As at July 31, 2012, the Company's corporate operations (not including cash at any of our subsidiaries) had a total of approximately \$13.1 million in cash and cash equivalents, virtually unchanged from our balance as of June 30, 2012. During the month of July, we received \$4.0 million proceeds from a maturing CDAR. During the month, we also made an additional investment in USSI of \$2.5 million (see Recent Developments), \$0.5 million investment in OmniMetrix, advanced \$0.5 million to DSIT and incurred approximately \$0.5 million of corporate expenses. We believe that our current cash plus the cash generated from operations and borrowing from available lines of credit, if necessary, will provide more than sufficient liquidity to finance the operating activities of Acorn and the operations of its operating subsidiaries at their current level of operations for the foreseeable future and for the next 12 months in particular.

## Contractual Obligations and Commitments

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

## CASH PAYMENTS DUE TO CONTRACTUAL OBLIGATIONS

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

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

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

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

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

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

Foreign Currency Risk

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

### Concentrations of Credit Risk

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

### Fair Value of Financial Instruments

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

### Interest Rate Risk

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

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ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

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

Changes in Internal Control Over Financial Reporting

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

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PART II

PART II – OTHER INFORMATION

ITEM 1A. RISK FACTORS

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

RISKS RELATED TO OMNIMETRIX

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

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

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

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

OmniMetrix is dependent on the services of certain key personnel.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

OmniMetrix is currently dependent on a single subcontractor for the assembly of its products.

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

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

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ITEM 6. EXHIBITS.

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

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SIGNATURES

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

ACORN ENERGY, INC.

Dated: August 9, 2012

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