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

FORM 10-Q

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

For the quarterly period ended: **March 31, 2009**
or

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

For the transition period from: _____ to _____

AMBIENT CORPORATION

(Exact name of registrant as specified in its charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

0-23723
(Commission
File Number)

98-0166007
(I.R.S. Employer
Identification No.)

79 CHAPEL STREET, NEWTON, MASSACHUSETTS 02458
(Address of Principal Executive Office) (Zip Code)

617-332-0004
(Registrant's telephone number, including area code)

N/A
(Former name, former address and former fiscal year, if changed since last report)

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company.

Large accelerated filer
Non-accelerated filer

Accelerated filer
Smaller reporting company

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

As of May 15, 2009, there were 721,384,187 shares of the issuer's common stock, par value \$0.001 per share, outstanding.

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*The Balance Sheet at December 31, 2008 has been derived from audited financial statements at that date but does not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. All other financial statements are unaudited.

FORWARD LOOKING STATEMENTS

The following discussion should be read in conjunction with the financial statements and related notes contained elsewhere in this quarterly report on Form 10-Q. We make forward-looking statements in this report, in other materials we file with the Securities and Exchange Commission (the "SEC") or that we otherwise release to the public, and on our website. In addition, our senior management might make forward-looking statements orally to analysts, investors, the media, and others. Statements concerning our future operations, prospects, strategies, financial condition, future economic performance (including growth and earnings) and demand for our products and services, and other statements of our plans, beliefs, or expectations, including the statements contained in Item 2, "Management's Discussion and Analysis of financial condition," regarding our future plans, strategies and expectations are forward-looking statements. In some cases these statements are identifiable through the use of words such as "anticipate," "believe," "estimate," "predict," "expect," "intend," "plan," "project," "target," "continue," "can," "could," "may," "should," "will," "would," and similar expressions. You are cautioned not to place undue reliance on these forward-looking statements because these forward-looking statements we make are not guarantees of future performance and are subject to various assumptions, risks, and other factors that could cause actual results to differ materially from those suggested by these forward-looking statements. Thus, our ability to predict results or the actual effect of our future plans or strategies is inherently uncertain. Factors which could have a material adverse effect on our operations and future prospects include, but are not limited to, our inability to continue operations; our inability to obtain necessary financing; the effect of a going concern statement by our auditors; changes in: economic conditions generally and our specific market areas, changes in technology, legislative or regulatory changes that affect us, the availability of working capital, changes in costs and the availability of goods and services, the introduction of competing products, changes in our operating strategy or development plans, our ability to attract and retain qualified personnel, and changes in our acquisition and capital expenditure plans. These risks and uncertainties, together with the other risks described from time to time in reports and documents that we file with the SEC, should be considered in evaluating forward-looking statements and undue reliance should not be placed on such statements. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, performance or achievements. Indeed, it is likely that some of our assumptions will prove to be incorrect. Our actual results and financial position will vary from those projected or implied in the forward-looking statements and the variances may be material. Moreover, we do not assume the responsibility for the accuracy and completeness of these forward-looking statements. We expressly disclaim any obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise, except as required by law.

PART I - FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

**AMBIENT CORPORATION
CONSOLIDATED BALANCE SHEETS**

	March 31	December 31,
	2009	2008
	(Unaudited)	
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	\$ 7,262,489	\$ 8,011,764
Marketable securities	—	125,000
Accounts receivable	2,976	1,668,887
Inventory	412,411	98,044
Prepaid expenses and other current assets	129,320	174,425
	<hr/>	<hr/>
Total current assets	7,807,196	10,078,120
Property and equipment, net	494,863	543,904
	<hr/>	<hr/>
Total assets	\$ 8,302,059	\$ 10,622,024
	<hr/>	<hr/>
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES		
Accounts payable	\$ 1,077,848	\$ 1,333,778
Accrued expenses and other current liabilities	1,033,853	936,961
Deferred revenue	74,137	108,067
Capital lease obligations, current portion	11,798	11,462
	<hr/>	<hr/>
Total current liabilities	2,197,636	2,390,268
NON-CURRENT LIABILITIES		
Convertible debt, less current portion (net of discount of \$10,048,013 and \$11,745,542)	2,451,987	754,458
Capital lease obligations, less current portion	19,869	22,967
	<hr/>	<hr/>
Total liabilities	4,669,492	3,167,693
STOCKHOLDERS' EQUITY		
Common stock, \$.001 par value;		
2,000,000,000 shares authorized; 719,980,784 issued;		
718,980,784 outstanding	719,981	719,981
Additional paid-in capital	133,153,008	132,930,334
Accumulated deficit	(130,040,422)	(125,995,984)
Less: treasury stock; 1,000,000 shares at cost	(200,000)	(200,000)
	<hr/>	<hr/>
Total stockholders' equity	3,632,567	7,454,331
	<hr/>	<hr/>
Total liabilities and stockholders' equity	\$ 8,302,059	\$ 10,622,024
	<hr/>	<hr/>

See Notes to Consolidated Financial Statements.

AMBIENT CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS

	Three Months Ended March 31,	
	2009 (Unaudited)	2008 (Unaudited)
Revenues	\$ 826,593	\$ 63,642
Less: cost of goods sold	<u>731,236</u>	<u>342,870</u>
Gross profit (loss)	<u>95,357</u>	<u>(279,228)</u>
Expenses		
Research and development	1,001,709	859,245
Operating, general and administrative expenses	1,073,294	745,557
Stock based compensation - operating, general and administrative	<u>222,674</u>	<u>114,868</u>
Total expenses	<u>2,297,677</u>	<u>1,719,670</u>
Gain on sale of property and equipment	<u>460</u>	<u>—</u>
Operating loss	(2,201,860)	(1,998,898)
Interest and finance expenses	(1,864,293)	(530,297)
Interest income	<u>21,715</u>	<u>15,805</u>
Net loss	<u>\$ (4,044,438)</u>	<u>\$ (2,513,390)</u>
Basic and diluted loss per share:		
Net loss	<u>\$ (0.01)</u>	<u>\$ (0.01)</u>
Weighted average number of shares outstanding - basic and diluted	<u>719,980,784</u>	<u>254,615,704</u>

See Notes to Consolidated Financial Statements

AMBIENT CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Three Months Ended March 31,	
	2009	2008
	(Unaudited)	(Unaudited)
CASH FLOWS FROM OPERATING ACTIVITIES		
Net loss	\$ (4,044,438)	\$ (2,513,390)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	64,767	69,647
Amortization of note discount	—	263,729
Amortization of beneficial conversion feature of convertible debt	1,697,529	94,878
Financing, consulting and other expenses paid via the issuance of common stock and warrants	222,674	114,868
(Gain) on sale of property and equipment	(460)	—
Increase (decrease) in operating assets:		
Accounts receivable	1,665,911	118,773
Inventory	(314,367)	190,533
Prepaid expenses and other current assets	45,105	7,667
Prepaid licensing fees	—	19,200
Increase (decrease) in operating liabilities:		
Accounts payable	(255,930)	171,804
Accrued expenses and other current liabilities	96,892	40,046
Deferred revenue	(33,930)	—
Net cash used in operating activities	(856,247)	(1,422,245)
CASH FLOWS FROM INVESTING ACTIVITIES		
Redemption of marketable securities	125,000	—
Purchases of marketable securities	—	(525,000)
Additions to property and equipment	(15,726)	—
Proceeds from sale of property and equipment	460	(29,308)
Net cash provided by (used in) investing activities	109,734	(554,308)
CASH FLOWS FROM FINANCING ACTIVITIES		
Proceeds from issuance of notes payable	—	2,500,000
Finance costs relating to issuance of notes payable	—	(103,500)
Payments of capitalized lease obligations	(2,762)	—
Net cash (used in) provided by financing activities	(2,762)	2,396,500
(DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	(749,275)	419,947
CASH AND CASH EQUIVALENTS - BEGINNING OF PERIOD	8,011,764	546,125
CASH AND CASH EQUIVALENTS - END OF PERIOD	<u>\$ 7,262,489</u>	<u>\$ 966,072</u>
Supplemental disclosures of cash flow information:		
Cash paid during the period for:		
Interest	<u>\$ 185,510</u>	<u>\$ 11,283</u>

See Notes to Consolidated Financial Statements

AMBIENT CORPORATION

NOTES TO THE UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 - BASIS OF PRESENTATION

The accompanying unaudited consolidated financial statements of Ambient Corporation and its subsidiary (collectively the "Company") have been prepared in accordance with generally accepted accounting principles accepted in the United States of America ("GAAP") for interim financial information and with Article 8-03 of Regulation S-X. Accordingly, they do not include all of the information and notes required by GAAP for complete financial statements. In the opinion of management, all adjustments (consisting of normal recurring accruals) considered necessary for a fair presentation have been included. Operating results for the three months ended March 31, 2009 are not necessarily indicative of the results that may be expected for the year ending December 31, 2009. These unaudited consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto included in the Company's Form 10-K for the year ended December 31, 2008, as filed with the Securities and Exchange Commission.

The Company has sustained losses since its inception. These losses have produced operating cash flow deficiencies. The Company expects to incur additional losses in the future and may need to raise additional funds in order to realize its long-range commercial objectives.

Management believes that our current available cash resources, as well as anticipated revenues from proceeds, will be sufficient to meet our operating requirements for the balance of the 2009 fiscal year. However, we may need to raise funds in order to expand existing commercial deployments and/or satisfy any additional significant purchase order that we may receive. At the present time, we have no commitments for any additional funding that may be needed

NOTE 2 - RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

Effective January 1, 2009, the Company adopted Financial Accounting Standards Board's (FASB) Staff Position 157-2, "Effective Date of FASB Statement No. 157" ("FSP 157-2"). FSP 157-2 delayed the effective date of SFAS 157 for all non-financial assets and non-financial liabilities, except for items that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually), until the beginning of the first quarter of fiscal 2009. The adoption of SFAS 157 to non-financial assets and liabilities did not have a significant impact on the Company's consolidated financial statements.

In April 2009, the FASB issued FSP FAS 107-1 and Accounting Principles Board (APB) 28-1 "Interim Disclosures about Fair Value of Financial Instruments". The FSP amends SFAS No. 107 "Disclosures about Fair Value of Financial Instruments" to require an entity to provide disclosures about fair value of financial instruments in interim financial information. This FSP is to be applied prospectively and is effective for interim and annual periods ending after June 15, 2009 with early adoption permitted for periods ending after March 15, 2009. The Company will include the required disclosures in its quarter ending June 30, 2009.

NOTE 3 - NET LOSS PER SHARE

Basic earnings (loss) per share (EPS) is computed by dividing net income (loss) applicable to common shares by the weighted-average number of shares of common shares outstanding during the period. Diluted earnings (loss) per share adjusts basic earnings (loss) per share for the effects of convertible securities, stock options and other potentially dilutive instruments, only in the periods in which such effect is dilutive. The following securities have been excluded from the calculation of net loss per share, as their effect would be antidilutive.

	Shares of Common Stock Issuable upon Conversion/Exercise of as March 31,	
	2009	2008
Stock options	59,337,000	32,074,500
Warrants	129,216,664	468,742,855
Convertible debentures	833,333,333	357,142,857

NOTE 4 - SALES AND MAJOR CUSTOMERS

Revenues for the three months ended March 31, 2009 and 2008 were as follows:

	March 31, 2009	March 31, 2008
	(Unaudited)	(Unaudited)
Hardware	\$ 792,663	\$ 63,642
Software and services	33,930	—
	<u>\$ 826,593</u>	<u>\$ 63,642</u>

One customer accounted for 100% of the hardware revenue for the 2009 and 2008 periods.

NOTE 5 - INVENTORY

Inventory is valued at the lower of cost or market and is determined on first-in-first-out method. Inventory consists of the following:

	March 31, 2009	March 31, 2008
	(Unaudited)	(Unaudited)
Raw materials	\$ 286,033	\$ 30,057
Finished goods	126,378	67,987
	<u>\$ 412,411</u>	<u>\$ 98,044</u>

NOTE 6 - CONVERTIBLE DEBT

	March 31, 2009	December 31, 2008
	(Unaudited)	(Unaudited)
Secured Convertible Promissory note payable - interest at 8%, due July 31, 2010 (i)	\$ 7,500,000	\$ 7,500,000
Secured Convertible Promissory note payable - interest at 8%, due November 1, 2010 (ii)	2,500,000	2,500,000
Secured Convertible Promissory note payable - interest at 8%, due January 15, 2011 (iii)	2,500,000	2,500,000
Total	<u>12,500,000</u>	<u>12,500,000</u>
Less: Discount	<u>(10,048,013)</u>	<u>(11,745,542)</u>
Total	<u>\$ 2,451,987</u>	<u>\$ 754,458</u>

(i) On July 31, 2007, the Company entered into the Securities Purchase Agreement (the "July 07 Purchase Agreement") with an institutional investor, Vicis Capital Master Fund (the "Investor" or "Vicis"), pursuant to which the Investor purchased the Company's Secured Convertible Promissory Note in aggregate principal amount of \$7,500,000 (the "July 07 Note"). The July 07 Note has a term of three years and becomes due on July 31, 2010. The outstanding principal amount of the July 07 Note is convertible at the option of the holder, at any time and from time to time, into shares of the Company's common stock, par value \$0.001 per share (the "Common Stock") at a conversion price of \$0.015 per share, subject to certain adjustments. Amounts owing under the July 07 Note are secured by substantially all of the assets of the Company.

Pursuant to the July 07 Purchase Agreement, the Company issued Common Stock purchase warrants (the "July 07 Warrants") to the Investor, exercisable through July 31, 2012, to purchase up to 150,000,000 shares of Common Stock, at an exercise price of \$0.001 per share. All of these warrants were exercised on November 24, 2008.

In connection with this financing, the Company paid fees to a registered broker dealer of \$570,000 and issued warrants to purchase up to 17,350,000 shares of the Company's Common Stock at a per share exercise price of \$0.035 for 16.6 million shares and \$0.075 for 750,000 shares.

(ii) On November 1, 2007, the Company entered into a Securities Purchase Agreement (the "November 07 Purchase Agreement") with the Investor pursuant to which the Investor purchased the Company's Secured Convertible Promissory Note in the principal amount of \$2,500,000 (the "November 07 Note"). The November 07 Note has a term of three years and becomes due on November 1, 2010. The outstanding principal amount of the November 07 Note is convertible at the option of the holder at any time and from time to time into shares of Common Stock at a conversion price of \$0.015 per share. Amounts owing under the November 07 Note are secured by substantially all of the assets of the Company.

In connection with the issuance of the November 07 Note, the Company issued Common Stock purchase warrants (the "November 07 Warrants") to the Investor, exercisable through October 31, 2012, to purchase up to 83,333,334 shares of Common Stock, of which warrants for 27,777,778 shares at an exercise price of \$0.015. All of these warrants were exercised on November 24, 2008.

(iii) On January 15, 2008, the Company entered into a Securities Purchase Agreement (the "January 2008 Purchase Agreement") with the Investor pursuant to which the Investor purchased the Company's Secured Convertible Promissory Note in the principal amount of \$2,500,000 (the "January 08 Note"; together with the November 07 Note and the July 07 Note, the "Notes"). The January 08 Note has a term of three years and becomes due on January 15, 2011. The outstanding principal amount of the January 08 Note is convertible at the option of the holder at any time and from time to time into shares of Common Stock at a conversion price of \$0.015 per share. Amounts owing under the January 08 Note are secured by substantially all of the assets of the Company.

In connection with the issuance of the January 08 Note, the Company issued Common Stock purchase warrants (the "January 08 Warrants"; together with the November 07 Warrants and the July 07 Warrants, the "Investor Warrants") to the Investor, exercisable through January 15, 2013, to purchase up to 107,142,857 shares of Common Stock at an exercise price of \$0.001 per share. All of the January 08 Warrants were exercised on November 24, 2008.

In connection with the financing, the Company issued, as compensation to a registered broker dealer, warrants to purchase up to 14,999,999 shares of the Company's Common Stock at a per share exercise price of \$0.035.

Debt Modification

On November 21, 2008, the Company and the Investor entered into a Debenture Amendment Agreement (the "Debenture Amendment Agreement"), pursuant to which the Investor invested in the Company an additional \$8 million. In consideration of the investment, the Company reduced the conversion price on the Notes referred to above to \$0.015 per share. The parties also agreed that in the event that on the trading day immediately preceding June 1, 2009, the closing per share price of the Common Stock is less than \$0.10, then the per share conversion price with respect to any amount then outstanding under the Notes would automatically be further adjusted to \$0.01.

In addition, in consideration for the investment, the parties agreed under the Debenture Amendment Agreement to amend the terms of the Investor Warrants referred to above to remove all conversion caps from the Warrants, which were contractual provisions that prevented the Investor from exercising an amount of such warrants to the extent that the Investor would beneficially own (i) greater than 4.99% of the outstanding Common Stock, and (ii) greater than 9.99% of the outstanding Common Stock.

For financial reporting purposes, the Company recorded a discount in accordance with EITF No. 00-27 of \$12,500,000 to reflect the beneficial conversion feature related to the Debenture Modification Agreement. The discount is being amortized to the date of maturity of the various Convertible Promissory Notes unless converted earlier.

Interest incurred on convertible debt amounted to \$166,667 and \$171,461 for the three months ended March 31, 2009 and 2008, respectively, of which all relates to Vicis. Amortization of the discounts related to the convertible debentures and notes above totaled \$1,697,529 and \$310,423 for the three months ended March 31, 2009 and 2008.

NOTE 7 - STOCKHOLDERS' EQUITY

On January 13, 2009, the Company issued options to various employees from the Company's 2000 Equity Incentive Plan to purchase up to 20,700,000 shares of the Company's Common Stock at a share price of \$0.035. The options will be fully vested as of December 31, 2009.

On January 16, 2009, the Company issued options to various employees from the Company's 2000 Equity Incentive Plan to purchase up to 250,000 shares of the Company's Common Stock at a share price of \$0.05. The options will be fully vested as of December 31, 2009.

On January 13, 2009, the Company issued options to various directors from the Company's 2002 Non-employee Directors Plan to purchase up to 6,000,000 shares of the Company's Common Stock at a share price of \$0.035. The options will be fully vested as of December 31, 2009.

Warrant Exercises

On April 22, 2009, the Company issued 1,564,626 shares of Common Stock upon the cashless exercise of 6,666,667 Common Stock purchase warrants by a designee of the placement agent who originally received the warrants upon the consummation by the Company of a financing transaction in May 2006.

On April 23, 2009, the Company issued 838,777 shares of Common Stock upon the cashless exercise of 4,000,000 Common Stock purchase warrants by an investor.

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

THE FOLLOWING DISCUSSION SHOULD BE READ IN CONJUNCTION WITH OUR FINANCIAL STATEMENTS AND THE NOTES THERETO. SOME OF OUR DISCUSSION IS FORWARD-LOOKING AND INVOLVES RISKS AND UNCERTAINTIES. FOR INFORMATION REGARDING RISK FACTORS THAT COULD HAVE A MATERIAL ADVERSE EFFECT ON OUR BUSINESS, REFER TO THE RISK FACTORS CONTAINED HEREIN AND THE RISK FACTORS SECTION OF OUR ANNUAL REPORT FOR THE YEAR ENDED DECEMBER 31, 2008 ON FORM 10-K.

OVERVIEW

Ambient Corporation (“Ambient”, the “Company” “we or “us”) is a pioneering integrator of smart grid communications platforms, creating high-speed Internet Protocols (IP) based data communications networks over existing medium and low-voltage distribution grids, thereby enabling smart grid applications. The Ambient smart grid platform, known as Ambient Smart Grid™, facilitates a two-way, real-time communications network to serve the “last mile” backhaul necessary for utilities to implement smart grid applications such as Advanced Metering Infrastructures (AMI), real-time pricing, Demand Side Management (DSM), Distribution Monitoring and Automation, and direct load control and more. When combined, these applications can offer economic, operational and environmental benefits for utilities, and ultimately utility customers.

We are currently conducting deployments with major electric utilities, developing, demonstrating, and delivering Ambient Smart Grid™ utility applications. We continue to develop and extend our network design expertise, our hardware and software technology, and our deployment and network management capabilities, with the goal of generating revenues from all phases of Ambient Smart Grid™ communications network deployments. In 2008, Ambient received purchase orders from a major US investor owned utility to purchase its X2000 and X-3000 communications nodes, license its AmbientNMS™, and acquire engineering support in building out an intelligent grid/intelligent-metering platform. These purchase orders have generated revenues of approximately \$12.6 million for the year ended December 31, 2008 and \$826,593 for the three month period ended March 31, 2009.

We intend to actively seek new opportunities for commercial deployments and work to bring new and existing networks to full commercialization. In 2009, our principal target customers will continue to be electric utilities in North America that will be deploying smart grid technologies. We will work with our utility customers to drive the development of new utility and consumer applications that create the need for our Ambient Smart Grid™ platform.

We were incorporated under the laws of the state of Delaware in June 1996. To date, we have funded operations primarily through the sale of our securities. In addition, we may need to raise funds in order to expand existing commercial deployments and otherwise grow our operations to meet the demands associated with any additional significant purchase order, or from any substantial expansion of existing commercial deployments.

Ambient has played a principal role in driving industry standardization efforts through leadership roles in industry associations and standards setting organizations, and continues to expand strategic relationships with leading suppliers of critical smart grid technologies. Our goal is to be the leading designer, developer and systems integrator of turn-key Ambient Smart Grid™ communications networks, incorporating a wide array of communications protocols and smart grid applications such as advanced metering solutions to complement our internally developed energy sensing capabilities.

RESULTS OF OPERATIONS

COMPARISON OF THE THREE MONTHS ENDED MARCH 31, 2009 TO THE THREE MONTHS ENDED MARCH 31, 2008

REVENUE. Revenues for the three months ended March 31, 2009 were \$826,593 compared to \$63,642 for the corresponding period in 2008. Revenues for the 2009 period were attributable to the sales of equipment and software and related network design to Duke Energy. Revenue for the 2008 period were attributable to the sales of equipment. Revenues for the 2009 period and 2008 period related to the sales of equipment totaled \$792,663 and \$63,642.

COST OF GOODS SOLD. Cost of goods sold for the three months ended March 31, 2009 was \$731,236 compared to \$342,870 during the corresponding period in 2008. Cost of goods sold included all costs related to manufacturing and selling products and services and consisted primarily of direct material costs. Cost of goods sold for the 2008 period included expenses related to the write down of inventory to the lower of cost or market. The increase in cost of goods sold during the 2009 Period reflects the increase in production to fill orders placed by Duke Energy.

GROSS PROFIT. Gross profit for the 2009 period was \$95,357 compared to a loss of \$279,228 for the 2008 period.

RESEARCH AND DEVELOPMENT EXPENSES. Research and development expenses consisted of expenses incurred primarily in designing, developing and field testing our smart grid solutions. These expenses consisted primarily of salaries and related expenses for personnel, contract design and testing services, supplies used and consulting and license fees paid to third parties. Research and development expenses for the three months ended March 31, 2009 were \$1,001,709 compared to \$859,245 during the corresponding period in 2008.

GENERAL AND ADMINISTRATIVE EXPENSES. General and administrative expenses primarily consisted of salaries and other related costs for personnel in executive and other administrative functions. Other significant costs included professional fees for legal, accounting and other services. General and administrative expenses for the three months ended March 31, 2009 were \$1,073,294 compared to \$745,557 for the corresponding period in 2008. The increase in general and administrative expenses is due to the increase efforts to market and commercialize our Ambient Smart Grid™ communication platforms.

OTHER OPERATING EXPENSES. A portion of our operating expenses were attributable to non-cash charges associated with the compensation of consultants and employees through the issuance of stock options and stock grants. Stock-based compensation is a non-cash expense and will therefore have no impact on our cash flows or liquidity. For the three months ended March 31, 2009, we incurred non-cash stock-based compensation expense of \$222,674 compared to \$114,868 for the corresponding period in 2008.

INTEREST AND FINANCE EXPENSES. For the three months ended March 31, 2009, we incurred interest of \$166,764 compared to \$171,690 for the corresponding period in 2008. The interest related primarily to our Senior Secured 8% Convertible Debentures, which were issued in July 2007 through January 2008 and our 8% Convertible Debentures, which were issued in May 2006 and were retired in their entirety as of January 2, 2008. Additionally, for the 2009 Period and 2008 Period, we incurred non-cash interest of \$1,697,529 and \$358,607, respectively. This interest related to the amortization of the beneficial conversion features and deferred financing costs incurred in connection with the placement of our convertible debentures and notes. These costs are amortized to the date of maturity of the debt unless converted earlier.

LIQUIDITY AND CAPITAL RESOURCES

Cash balances totaled \$7,262,489 at March 31, 2009 and \$8,011,764 at December 31, 2008.

Net cash used in operating activities for the three months ended March 31, 2009 was \$856,247 and was used primarily to pay ongoing research and development and general and administrative expenses.

Net cash provided by investing activities totaled \$109,734 during the three months ended March 31, 2009 and was for the redemption of marketable securities of \$125,000, net of purchases of property and equipment of \$15,726.

Net cash used in financing activities totaled \$2,762 during the three months ended March 31, 2009 and represents the payments on capitalized lease obligations.

A discussion of our recent financings follows.

In July 2007, November 2007 and January 2008, the Company entered into Securities Purchase Agreements with an institutional investor, Vicis Capital Master Fund ("Vicis"), and raised gross proceeds of \$12.5 million. The notes (the "Vicis Notes") issued under the Securities Purchase Agreements have a term of three years are payable between July 2010 and January 2011. The outstanding principal amounts of the notes were convertible at the option of Vicis into shares of Common Stock at an original conversion price of \$0.035 per share,

subject to certain adjustments. As discussed below, in November 2008, the conversion rate was reduced to the current rate of \$0.015 per shares, subject to certain adjustments.

On April 23, 2008, we raised from Vicis \$3,000,000 from the issuance of warrants, exercisable through April 2013, to purchase up to 135,000,000 shares of our Common Stock at a per share exercise price of \$0.001. On November 21, 2008, we and Vicis entered into a Debenture Amendment Agreement (the "Debenture Amendment Agreement"), pursuant to which Vicis invested in the Company an additional \$8 million. In consideration of Vicis' investment, we reduced the conversion price on the Vicis Notes from \$0.035 per share to \$0.015 per share. The parties also agreed under the Debenture Amendment Agreement that, in the event that on the trading day immediately preceding June 1, 2009, the closing per share price of our common stock is less than \$0.10, then the per share conversion price with respect to any amount then outstanding under the Notes would automatically be further adjusted to \$0.01.

Management believes that cash on hand, plus anticipated short term revenues, will allow us to meet our operating requirements for the balance of the 2009 fiscal year. However, we may need to raise funds in order to expand existing commercial deployments and/or satisfy any additional significant purchase order that we may receive. At the present time, we have no commitments for any additional funding that may be needed.

ITEM 4T. CONTROLS AND PROCEDURES

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to management, including our President and Chief Executive Officer (who also serves as our principal executive officer and principal financial and accounting officer) to allow timely decisions regarding required disclosure based closely on the definition of "disclosure controls and procedures" in Rule 13a-15(e).

As of the end of the period covered by this report, we carried out an evaluation, under the supervision and with participation of management, including our President and Chief Executive Officer (who also serves as our principal executive officer and principal financial and accounting officer), of the effectiveness of the design and operation of our disclosure controls and procedures. Based on the foregoing, our President and Chief Executive Officer concluded that our disclosure controls and procedures were effective.

During the quarter ended March 31, 2009, there were no changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect our internal control over financial reporting.

PART II - OTHER INFORMATION

ITEM 6. EXHIBITS

None

Exhibit No.	Description
31	Certification of John J. Joyce, Chief Executive Officer (Principal Executive officer and Principle Financial and Accounting Officer, pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended.
32	Certification of John J. Joyce, Chief Executive Officer (Principal Executive officer and Principle Financial and Accounting Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes- Oxley Act of 2002.

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 the undersigned thereunto duly authorized.

AMBIENT CORPORATION

Dated: May 15, 2009

By: /s/ JOHN J. JOYCE
John J. Joyce
Chief Executive Officer (Principal Executive
Officer and Principal Financial and Accounting
Officer)

RULE 13a-14(a) / 15d-14(a) CERTIFICATION

I, John J. Joyce, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the quarter ended March 31, 2009 of Ambient Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

May 15, 2009

By: /s/ JOHN J. JOYCE
John J. Joyce
President and Chief Executive Officer
(Principal Executive Officer and Principal
Financial and Accounting Officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350 (AS ADOPTED
PURSUANT TO SECTION 906 OF THE
SARBANES-OXLEY ACT OF 2002)**

In connection with the Annual Report of Ambient Corporation (the "Company") on Form 10-Q for the quarter ended March 31, 2009 (the "Report") filed with the Securities and Exchange Commission, I, John J. Joyce, President and Chief Executive Officer (Principal Executive Officer and Principal Financial and Accounting Officer) of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and,
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods expressed in the Report.

Date: May 15, 2009

By: /s/ JOHN J. JOYCE
John J. Joyce
Chief Executive Officer (Principal Executive
Officer and Principal Financial and Accounting
Officer)

A certification furnished pursuant to this Item will not be deemed "filed" for purposes of section 18 of the Exchange Act (15 U.S.C. 78r), or otherwise subject to the liability of that section. Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act or the Exchange Act, except to the extent that the small business issuer specifically incorporates it by reference.