ROYAL BANK OF CANADA
Form 424B2
September 29, 2017

RBC Capital Markets®	Filed Pursuant to Rule 424(b)(2) Registration Statement No. 333-208507

Pricing Supplement

Dated September 27, 2017 To the Product Prospectus Supplement ERN-ES-1 Dated January 14, 2016, Prospectus Supplement Dated January 8, 2016, and Prospectus Dated January 8, 2016	$935,000 Direct Investment Notes Linked to the September 2017 RBC Capital Markets U.S. Equity Top Picks List due October 9, 2018 Royal Bank of Canada

Royal Bank of Canada is offering the Notes linked to the September 2017 RBC Capital Markets U.S. Equity Top Picks List (the "Notes"). The Notes are linked to an equally weighted Basket consisting of 14 common equity securities set forth below. The CUSIP number for the Notes is 78013GEV3.

The Notes may pay interest on December 29, 2017, March 29, 2018, June 29, 2018 and the maturity date. The amount of any interest to be paid on the Notes will not be fixed, and will depend upon the total dividends paid on the Reference Stocks during the preceding quarter, as described in more detail below.

On the maturity date, the amount that we will pay to you (the "Redemption Amount") will depend upon the performance of the Basket over the term of the Notes. As described in more detail below, the Redemption Amount will be less than the price to the public set forth below if the Percentage Amount of the Basket is not at least approximately 102.30%.

We describe in more detail below how the payments on the Notes will be determined.

Issue Date: September 29, 2017

Maturity Date: October 9, 2018

The Notes will not be listed on any securities exchange.

Non-U.S. holders will be subject to withholding on dividend equivalent payments under Section 871(m) of the U.S. Internal Revenue Code. Please see the section below, "Supplemental Discussion of U.S. Federal Income Tax Consequences," which applies to the Notes.

Investing in the Notes involves a number of risks. See "Risk Factors" beginning on page S-1 of the prospectus supplement dated January 8, 2016, "Risk Factors" beginning on page PS-4 of the product prospectus supplement dated January 14, 2016, and "Selected Risk Considerations" beginning on page P-8 of this pricing supplement.

The Notes will not constitute deposits insured by the Canada Deposit Insurance Corporation, the U.S. Federal Deposit Insurance Corporation or any other Canadian or U.S. government agency or instrumentality.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined that this pricing supplement is truthful or complete. Any representation to the contrary is a criminal offense.

	Per Note	Total
Price to public	100.00%	$935,000.00
Underwriting discounts and commissions	1.50%	$14,025.00

Proceeds to Royal Bank of Canada	98.50%	$920,975.00

The initial estimated value of the Notes as of the date of this pricing supplement is $977.50 per $1,000 in principal amount, which is less than the price to public. The actual value of the Notes at any time will reflect many factors, cannot be predicted with accuracy, and may be less than this amount. We describe our determination of the initial estimated value in more detail below.

RBC Capital Markets, LLC, which we refer to as RBCCM, acting as agent for Royal Bank of Canada, received a commission of $15.00 per $1,000 in principal amount of the Notes and used a portion of that commission to allow selling concessions to other dealers of up to $15.00 per $1,000 in principal amount of the Notes. The other dealers may forgo, in their sole discretion, some or all of their selling concessions. See "Supplemental Plan of Distribution (Conflicts of Interest)" on below.

We may use this pricing supplement in the initial sale of the Notes. In addition, RBCCM or another of our affiliates may use this pricing supplement in a market-making transaction in the Notes after their initial sale. Unless we or our agent informs the purchaser otherwise in the confirmation of sale, this pricing supplement is being used in a market-making transaction.

RBC Capital Markets, LLC

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SUMMARY

The information in this "Summary" section is qualified by the more detailed information set forth in this pricing supplement, the product prospectus supplement, the prospectus supplement, and the prospectus.

Issuer:	Royal Bank of Canada ("Royal Bank")
Issue:	Senior Global Medium-Term Notes, Series G
Underwriter:	RBC Capital Markets, LLC ("RBCCM")
Reference Asset:	The Notes are linked to the value of a basket (the "Basket") consisting of the common equity securities of 14 publicly traded companies indicated on page P-3 (each, a "Reference Stock," and collectively, the "Reference Stocks"). The Reference Stocks were derived from RBC Capital Markets' U.S. Equity Top Picks List as of September 5, 2017, as indicated on page P-3. A Top Pick-rated stock represents an RBC Capital Markets analyst's best idea in a sector. See the section below, "The Basket."
Currency:	U.S. Dollars
Minimum Investment:	$1,000 and minimum denominations of $1,000 in excess thereof
Pricing Date:	September 27, 2017
Issue Date:	September 29, 2017
Valuation Date:	October 4, 2018
Payment at Maturity (if held to maturity):	The amount that you will receive at maturity for each $1,000 in principal amount of the Notes will depend upon the performance of the Basket and the dividends paid on the Reference Stocks. The Redemption Amount will equal the product of (a) $977.50 and (b) the Percentage Amount. As discussed in more detail below, the Percentage Amount must exceed approximately 102.30% in order for you to receive a Redemption Amount per $1,000 in principal amount of the Notes that exceeds the principal amount. In addition, the Redemption Amount could be substantially less than the principal amount of the Notes.
Percentage Amount:	The Percentage Amount will equal an amount, expressed as a percentage and rounded to two decimal places, equal to: $\frac{\text{Final Basket Level - Initial Basket Level}}{\text{Initial Basket Level}}$
Initial Price:	The closing price per share of a Reference Stock on the Pricing Date, as determined by the Calculation Agent, as set forth in the table on the next page.
Final Price:	The closing price per share of a Reference Stock on the Valuation Date.

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Basket:	Reference Stock Issuer	Ticker	Initial Price	Number of Shares Initially in the Basket
	Air Lease Corporation	AL	$41.02	1.7413
	Amphenol Corporation	APH	$81.97	0.8714
	Broadcom Limited	AVGO	$240.58	0.2969
	Discover Financial Services	DFS	$64.06	1.1150
	Dollar Tree, Inc.	DLTR	$85.67	0.8338
	DowDuPont Inc.	DWDP	$68.80	1.0382
	Gartner, Inc.	IT	$123.37	0.5790
	Louisiana-Pacific Corporation	LPX	$28.55	2.5019
	Marathon Petroleum Corporation	MPC	$55.24	1.2931
	ServiceNow, Inc.	NOW	$115.50	0.6184
	Newell Brands Inc.	NWL	$41.58	1.7179
	The PNC Financial Services Group, Inc.	PNC	$134.32	0.5318
	Regency Centers Corporation	REG	$61.86	1.1547
	Whirlpool Corporation	WHR	$181.53	0.3935

Component Weights:	1/14 for each Reference Stock (subject to adjustment as provided below).
Initial Basket Level:	The initial level of the Basket shall be deemed to be $1,000.
Initial Composition of the Basket:	The Basket shall initially be deemed to consist of a number of shares of each Reference Stock calculated as follows: · Each Reference Stock shall initially constitute 1/14 of the Basket, with an aggregate value of $71.4286 ($1,000 divided by 14, rounded to four decimal places). · Accordingly, initially, the number of shares of each Reference Share in the Basket was calculated by dividing $71.4286 by the Initial Price, rounded to four decimal places. · The number of shares of each Reference Share initially included in the Basket was determined on the Pricing Date, and is set forth in the table above. For example, if the Initial Price of a hypothetical Reference Share is $25, the Basket will initially be deemed to include 2.8571 shares of that Reference Share ($71.4286 divided by $25, rounded to four decimal places).

Final Basket Level:	The value of the shares (and any other assets) in the Basket as of the close of trading on the Valuation Date, as determined by the Calculation Agent, using the Final Price of each Reference Stock.
Adjustments to the Composition of the Basket:	The Calculation Agent will adjust the number of shares of each Reference Stock in the Basket, as may be needed to reflect stock splits, reverse stock splits, stock dividends, and similar transactions, as discussed in the section of the product supplement, "General Terms of the Notes—Anti-Dilution Adjustments Relating to Equity Securities." See "Other Terms of Your Notes" on page P-11 of this document.
Interest Payment Dates:	December 29, 2017, March 29, 2018, June 29, 2018 and October 9, 2018 (the maturity date).
Interest Calculation Dates:	December 27, 2017, March 27, 2018, June 27, 2018 and October 4, 2018 (the Valuation Date).
Calculation of Interest Payments:	The amount of each interest payment, if any, will depend upon the amount of dividends paid on each Reference Stock during the Interest Calculation Period preceding each interest payment date, and will equal, for each $1,000 in principal amount, 97.75% of the sum of the Dividend Amounts for each of the Reference Stocks.
Interest Calculation Period:	The first Interest Calculation Period will commence on the trading day after the Pricing Date and end on the first Interest Calculation Date. Each subsequent Interest Calculation Period will begin on the trading day following an Interest Calculation Date and end on the next Interest Calculation Date. The final Interest Calculation Date will occur on the Valuation Date.
Dividend Amount:	For each Reference Stock, an amount in U.S. dollars equal to (a) $1,000 divided by the Initial Price of the applicable Reference Stock multiplied by (b) the applicable Component Weight multiplied by (c) 100% of the gross cash distributions (including ordinary and extraordinary dividends) per share of Reference Stock declared by the applicable Reference Stock Issuer where the date that the applicable Reference Stock has commenced trading ex-dividend on its primary U.S. securities exchange as to each relevant distribution occurs during the relevant Interest Calculation Period, as described in more detail below.
Maturity Date:	October 9, 2018, subject to extension for market and other disruptions, as described in the product prospectus supplement dated January 14, 2016.
Term:	Approximately 53 weeks.
Principal at Risk:	The Notes are NOT principal protected. You may lose all or a substantial portion of your principal amount at maturity if the value of the Basket decreases, or does not increase by at least 2.30%, from the Pricing Date to the Valuation Date.
Calculation Agent:	RBCCM
U.S. Tax Treatment:	By purchasing a Note, each holder agrees (in the absence of a change in law, an administrative determination or a judicial ruling to the contrary) to treat the Note as a pre-paid cash-settled

contingent income-bearing derivative contract linked to the Basket for U.S. federal income tax purposes. However, the U.S. federal income tax consequences of your investment in the Notes are uncertain and the Internal Revenue Service could assert that the Notes should be taxed in a manner that is different from that described in the preceding sentence. Please see the section below, "Supplemental Discussion of U.S. Federal Income Tax Consequences," which applies to the Notes.

Secondary Market:	RBCCM (or one of its affiliates), though not obligated to do so, plans to maintain a secondary market in the Notes after the Issue Date. The amount that you may receive upon sale of your Notes prior to maturity may be less than the principal amount of your Notes.
Listing:	The Notes will not be listed on any securities exchange.
Clearance and Settlement:	DTC global (including through its indirect participants Euroclear and Clearstream, Luxembourg as described under "Description of Debt Securities—Ownership and Book-Entry Issuance" in the prospectus dated January 8, 2016).
Events of Default:	In case an event of default with respect to the Notes will have occurred and be continuing, the amount declared due and payable on the Notes upon any acceleration will be determined by the Calculation Agent and will be an amount of cash equal to the amount payable as described above under the caption "—Payment at Maturity," calculated as if the date of acceleration were the Valuation Date. The Dividend Amount for each Reference Stock will only include dividends declared and paid through that date.

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ADDITIONAL TERMS OF YOUR NOTES

You should read this pricing supplement together with the prospectus dated January 8, 2016, as supplemented by the prospectus supplement dated January 8, 2016 and the product prospectus supplement dated January 14, 2016, relating to our Senior Global Medium-Term Notes, Series G, of which these Notes are a part. Capitalized terms used but not defined in this pricing supplement will have the meanings given to them in the product prospectus supplement. In the event of any conflict, this pricing supplement will control. The Notes vary from the terms described in the product prospectus supplement in several important ways. You should read this pricing supplement carefully.

This pricing supplement, together with the documents listed below, contains the terms of the Notes and supersedes all prior or contemporaneous oral statements as well as any other written materials including preliminary or indicative pricing terms, correspondence, trade ideas, structures for implementation, sample structures, brochures or other educational materials of ours. You should carefully consider, among other things, the matters set forth in "Risk Factors" in the prospectus supplement dated January 8, 2016 and "Risk Factors" in the product prospectus supplement dated January 14, 2016, as the Notes involve risks not associated with conventional debt securities. We urge you to consult your investment, legal, tax, accounting and other advisors before you invest in the Notes. You may access these documents on the Securities and Exchange Commission (the "SEC") website at www.sec.gov as follows (or if that address has changed, by reviewing our filings for the relevant date on the SEC website):

Prospectus dated January 8, 2016:
http://www.sec.gov/Archives/edgar/data/1000275/000121465916008810/j18160424b3.htm

Prospectus Supplement dated January 8, 2016:
http://www.sec.gov/Archives/edgar/data/1000275/000121465916008811/p14150424b3.htm

Product Prospectus Supplement ERN-ES-1 dated January 14, 2016:
https://www.sec.gov/Archives/edgar/data/1000275/000114036116047764/form424b5.htm

Our Central Index Key, or CIK, on the SEC website is 1000275. As used in this pricing supplement, "we," "us," or "our" refers to Royal Bank of Canada.

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HYPOTHETICAL RETURNS AT MATURITY

The following hypothetical examples are provided for illustration purposes only and are hypothetical; they do not purport to be representative of every possible scenario concerning increases or decreases in the value of the Basket and the related effect on the Redemption Amount. The following hypothetical examples illustrate the payment you would receive on the maturity date if you purchased $1,000 in principal amount of the Notes. Numbers appearing in the examples below have been rounded for ease of analysis. This table does not reflect any interest that may be paid on the Notes.

Percentage Amount	Redemption Amount per $1,000 in Principal Amount	Percentage Gain (or Loss) per $1,000 in Principal Amount
140.00%	$1,368.50	36.85%
130.00%	$1,270.75	27.08%
120.00%	$1,173.00	17.30%
110.00%	$1,075.25	7.53%
102.30%(1)	$1,000.00	0.00%
100.00%(2)	$977.50	-2.25%
90.00%	$879.75	-12.03%
80.00%	$782.00	-21.80%
70.00%	$684.25	-31.58%
60.00%	$586.50	-41.35%
50.00%	$488.75	-51.13%
40.00%	$391.00	-60.90%
30.00%	$293.25	-70.68%
20.00%	$195.50	-80.45%
10.00%	$97.75	-90.23%
0.00%	$0.00	-100.00%

(1) Due to the payment formula set forth above, for you to receive a Redemption Amount greater than the principal amount the Notes, the Percentage Amount must be greater than approximately 102.30%.

(2) If the Percentage Amount is not at least approximately 102.30%, you will lose some or all of the principal amount of the Notes.

Please see the sections below, “Selected Risk Considerations—Principal at Risk” and “—The Notes Will Not Reflect the Full Performance of the Reference Stocks, Which Will Negatively Impact Your Return on the Notes.”

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SELECTED RISK CONSIDERATIONS

An investment in the Notes involves significant risks. Investing in the Notes is not equivalent to investing directly in the Reference Stocks. These risks are explained in more detail in the section "Risk Factors" beginning on page PS-4 of the product prospectus supplement. In addition to the risks described in the prospectus supplement and the product prospectus supplement, you should consider the following:

- Principal at Risk – Investors in the Notes could lose all or a substantial portion of their principal amount if there is a decline in the value of the Basket. Investors will also lose a portion of their principal amount if the Percentage Amount is not at least approximately 102.30%.
- The Notes May Not Pay Interest and Your Return May Be Lower than the Return on a Conventional Debt Security of Comparable Maturity – There may be no periodic interest payments on the Notes, and any such payments may be less than there would be on a conventional fixed-rate or floating-rate debt security having the same maturity. The amount of each interest payment, if any, will depend upon the amount of dividends paid on each Reference Stock during the Interest Calculation Period preceding each interest payment date. The yield that you will receive on your Notes, which could be negative, may be less than the yield you could earn if you purchased a standard senior debt security of ours with the same maturity date. Your investment may not reflect the full opportunity cost to you when you take into account factors that affect the time value of money.
- The Notes Will Not Reflect the Full Performance of the Reference Stocks, Which Will Negatively Impact Your Return on the Notes – Because the calculation of the Redemption Amount for each $1,000 in principal amount reflects the product of the Percentage Amount and $977.50, the return, if any, on the Notes will not reflect the full performance of the Reference Stocks. Therefore, the yield to maturity based on the methodology for calculating the Redemption Amount will be less than the yield that would be produced if the Reference Stocks were purchased and held for a similar period. Similarly, the interest payments you receive on the Notes will be less than the applicable Dividend Amounts.
- Payments on the Notes Are Subject to Our Credit Risk, and Changes in Our Credit Ratings Are Expected to Affect the Market Value of the Notes – The Notes are Royal Bank's senior unsecured debt securities. As a result, your receipt of all required payments on the Notes will be dependent upon Royal Bank's ability to repay its obligations as of the applicable payment date. This will be the case even if the value of the Basket increases after the Pricing Date, or if substantial payments are made on the Reference Stocks. No assurance can be given as to what our financial condition will be at any time during the term of the Notes.
- There May Not Be an Active Trading Market for the Notes—Sales in the Secondary Market May Result in Significant Losses – There may be little or no secondary market for the Notes. The Notes will not be listed on any securities exchange. RBCCM and other affiliates of Royal Bank may make a market for the Notes; however, they are not required to do so. RBCCM or any other affiliate of Royal Bank may stop any market-making activities at any time. Even if a secondary market for the Notes develops, it may not provide significant liquidity or trade at prices advantageous to you. We expect that transaction costs in any secondary market would be high. As a result, the difference between bid and asked prices for your Notes in any secondary market could be substantial.
- You Will Not Have Any Rights to the Reference Stocks – As a holder of the Notes, you will not have voting rights or other rights that holders of the Reference Stocks would have. You will have no right to receive shares of the Reference Stocks.
- The Historical Performance of the Reference Stocks Should Not Be Taken as an Indication of Their Future Performance – The Final Prices of the Reference Stocks will determine the Redemption Amount. The historical performance of the Reference Stocks does not necessarily give an indication of their future performance. As a result, it is impossible to predict whether the prices of the Reference Stocks will rise or fall during the term of the Notes. The prices of the Reference Stocks will be influenced by complex and interrelated political, economic, financial and other factors.

- Holders of the Reference Stocks Are Only Entitled to Receive Those Dividends as Each Issuer's Board of Directors May Declare out of Funds Legally Available – Although dividends and distributions on one or more of the

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Reference Stocks may have historically been declared by the applicable board of directors, they are not required to do so and may reduce or eliminate those dividends in the future. The Dividend Amount of one or more of the Reference Stocks during the term of the Notes may be zero. If the dividends paid on the Reference Stocks are not significant, any interest payments that you receive on the Notes may not be sufficient to provide you with your desired return on the Notes.

- The Initial Estimated Value of the Notes Is Less than the Price to the Public – The initial estimated value set forth on the cover page of this pricing supplement does not represent a minimum price at which we, RBCCM or any of our affiliates would be willing to purchase the Notes in any secondary market (if any exists) at any time. If you attempt to sell the Notes prior to maturity, their market value may be lower than the price you paid for them and the initial estimated value. This is due to, among other things, changes in the value of the Basket, the borrowing rate we pay to issue securities of this kind, and the inclusion in the price to the public of the underwriting discount and the estimated costs relating to our hedging of the Notes. These factors, together with various credit, market and economic factors over the term of the Notes, are expected to reduce the price at which you may be able to sell the Notes in any secondary market and will affect the value of the Notes in complex and unpredictable ways. Assuming no change in market conditions or any other relevant factors, the price, if any, at which you may be able to sell your Notes prior to maturity may be less than your original purchase price, as any such sale price would not be expected to include the underwriting discount and the hedging costs relating to the Notes. In addition to bid-ask spreads, the value of the Notes determined for any secondary market price is expected to be based on the secondary rate rather than the internal funding rate used to price the Notes and determine the initial estimated value. As a result, the secondary price will be less than if the internal funding rate was used. The Notes are not designed to be short-term trading instruments. Accordingly, you should be able and willing to hold your Notes to maturity.
- The Initial Estimated Value of the Notes on the Cover Page Is an Estimate Only, Calculated as of the Time the Terms of the Notes Were Set – The initial estimated value of the Notes is based on the value of our obligation to make the payments on the Notes, together with the mid-market value of the derivative embedded in the terms of the Notes. See "Structuring the Notes" below. Our estimate is based on a variety of assumptions, including our credit spreads, expectations as to dividends, interest rates and volatility, and the expected term of the Notes. These assumptions are based on certain forecasts about future events, which may prove to be incorrect. Other entities may value the Notes or similar securities at a price that is significantly different than we do.

The value of the Notes at any time after the Pricing Date will vary based on many factors, including changes in market conditions, and cannot be predicted with accuracy. As a result, the actual value you would receive if you sold the Notes in any secondary market, if any, should be expected to differ materially from the initial estimated value of the Notes.

- Our Business Activities May Create Conflicts of Interest – We and our affiliates expect to engage in trading activities related to the Reference Stocks that are not for the account of holders of the Notes or on their behalf. These trading activities may present a conflict between the holders' interests in the Notes and the interests we and our affiliates will have in their proprietary accounts, in facilitating transactions, including options and other derivatives transactions, for their customers and in accounts under their management. These trading activities, if they influence the prices of the Reference Stocks, could be adverse to the interests of the holders of the Notes. We and one or more of our affiliates may, at present or in the future, engage in business with the issuers of the Reference Stocks, including making loans to or providing advisory services. These services could include investment banking and merger and acquisition advisory services. These activities may present a conflict between our or one or more of our affiliates' obligations and your interests as a holder of the Notes. Any of these activities by us or one or more of our affiliates may affect the value of the Reference Stocks, and, therefore, the market value of the Notes.
- You Must Rely on Your Own Evaluation of the Merits of an Investment Linked to the Reference Stocks – In the ordinary course of their business, RBCCM and our other affiliates have expressed views on the value of the Reference Stocks and/or expected movements in their prices, and may do so in the future. These views or reports

may be communicated to clients of our affiliates. However, these views are subject to change from time to time. Moreover, other professionals who transact business in markets relating to any Reference Stock may at any time have significantly different views from those of our affiliates. For these reasons, you are encouraged to derive information concerning the Reference Stocks from multiple sources, and you should not rely solely on views expressed by us or our affiliates.

- Some Reference Stocks Have Limited Historical Information – Because three of the Reference Stocks have limited trading history, your investment in the Notes may involve a greater risk than investing in securities linked to one or more equity securities with more established records of performance.
- The Inclusion of the Reference Stocks in the Basket Does Not Guarantee a Positive Return on the Notes – There can be no assurance that any Reference Stock, or the Basket in its entirety, will increase in value. The performance of the Reference Stocks may be less than the performance of the equities markets generally, and less than the performance of specific sectors of the equity markets, or other securities in which you may choose to invest. As of the date of this document, the Equity Research Department of RBCCM believes that the prices of the Reference Stocks have the potential to increase during the term of the Notes. However, there can be no assurance that they will in fact do so. Although RBCCM has expressed a positive view as to the Reference Stocks prior to the date of this pricing supplement, its views may change significantly during the term of the Notes. In addition, any positive views of RBCCM's research divisions are separate and apart from the offering of the Notes, and do not constitute investment advice. Our offering of the Notes does not constitute our recommendation or the recommendation of RBCCM or our other affiliates to invest in the Notes or in the Reference Stocks.
- An Investment in the Notes Is Subject to Risks Relating to Foreign Securities Markets – Three of the Reference Stocks are organized outside of the U.S. An investment linked to companies of this type involves particular risks. For example, the relevant foreign markets may be more volatile than the U.S. markets, and market developments may affect these markets differently from the U.S. or other securities markets. Direct or indirect government intervention to stabilize the securities markets outside the U.S., as well as cross-shareholdings in certain companies, may affect trading prices and trading volumes in those markets.
- As Calculation Agent, RBCCM Will Have the Authority to Make Determinations that Could Affect the Value of Your Notes and Your Payment at Maturity – As calculation agent for your Notes, RBCCM will have discretion in making various determinations that affect your Notes, including determining the Final Prices, the Percentage Amount, the Redemption Amount, the amounts of any interest payments on the Notes, and whether any market disruption events have occurred. The Calculation Agent also has discretion in making certain adjustments relating to mergers and certain other corporate transactions that an issuer of a Reference Stock may undertake. The exercise of this discretion by RBCCM could adversely affect the value of your Notes and may present RBCCM, which is our wholly owned subsidiary, with a conflict of interest.
- Market Disruption Events and Adjustments – The payments on the Notes are subject to adjustment as described in this pricing supplement and the product prospectus supplement. For a description of what constitutes a market disruption event as well as the consequences of that market disruption event, see "General Terms of the Notes—Market Disruption Events" in the product prospectus supplement.

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OTHER TERMS OF YOUR NOTES

Certain Reorganization Events

If an issuer of a Reference Stock undergoes a Reorganization Event, as described on PS-16 of the product prospectus supplement dated January 14, 2016 (for example, if it merges with another entity and is not the surviving company), that Reference Stock may be removed from the Basket by the Calculation Agent following the effective date of the Reorganization Event, with the Component Weights of the remaining Reference Stocks increasing proportionately to reflect the relevant weightings of those remaining Reference Stocks at the time of the Reorganization Event.

In order to accomplish the foregoing, the Calculation Agent will determine the value of the shares of the Reference Stock in the Basket that is subject to the Reorganization Event, and will add to the Basket a number of shares of each other Reference Stock that is proportionate to the relative weightings of the Reference Stocks at the time of the Reorganization Event.

In the event of a Reorganization Event, The Calculation Agent will have sole discretion in determining the distribution of shares. In order to determine the value of the Reference Stock that is subject to the Reorganization Event, the Calculation Agent may use its closing price on the last trading day on which it trades prior to the effective date of the relevant transaction, the terms of the transaction that is the subject of the Reorganization Event, or such other commercially reasonable method as it may determine to be appropriate at that time. The weightings of the remaining Reference Stocks at that time, and the number of shares of each to be added to the Basket, will be determined by the Calculation Agent based upon the percentage of the Basket value that they constitute, from their respective closing prices.

Additional Anti-Dilution Adjustments

The Calculation Agent will adjust the number of shares of each Reference Stock in the Basket, as it determines may be needed to reflect stock splits, reverse stock splits, stock dividends, and other corporate transactions, which are discussed in the section of the product supplement, “General Terms of the Notes—Anti-Dilution Adjustments Relating to Equity Securities.” For example, if a Reference Stock is subject to a 2-for-1 stock split, the Calculation Agent may determine that, upon the applicable effective date, each one share of that Reference Stock in the Basket shall be deemed to thereafter to represent two shares.

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INFORMATION REGARDING THE ISSUERS OF THE REFERENCE STOCKS

The issuer of each Reference Stock is registered under the Securities Exchange Act of 1934, as amended ("Exchange Act"). Companies with securities registered under the Exchange Act are required to periodically file financial and other information required by the Securities and Exchange Commission ("SEC"). This information is filed with the SEC and can be inspected and copied by you at the SEC's Public Reference Room located at 100 F Street, N.E., Washington, D.C. 20549 at prescribed rates. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. In addition, information filed by the issuers of the Reference Stocks with the SEC electronically is available to the public over the Internet at the SEC's website at http://www.sec.gov.

The Selection of the Basket

The Equity Research Department at RBCCM regularly publishes research. The Reference Stocks were selected from among the companies covered by the Equity Research Department and that are rated as "Top Picks." A "Top Pick" represents an RBCCM analyst's best idea in the sector, which is expected to provide significant absolute total return over 12 months with a favorable risk-reward ratio. However, we note that the selection of the Top Picks are only research views based on information available up to September 5, 2017. There is no assurance that any particular company will be successful, or that the investment thesis underlying these research views will come to pass. Moreover, the business, results of operations, and prospects of these companies and the growth and health of each issuer of the Reference Stocks are subject to conditions outside of the control of the Equity Research Department, such as general economic conditions.

Additional information regarding RBCCM research analyst ratings is available at https://www.rbccm.com/equityresearch/cid-203939.html. Information on that website is not included or incorporated by reference in this document. A rating is subject to downward revision at any time, and a broker-dealer may cease to cover a particular security at any time, including during the term of the Notes.

Neither we nor our affiliates makes any representation as to the future performance of any Reference Stock or the Basket.

Description of the Reference Stock Issuers

The following information regarding each issuer of the Reference Stocks is derived from publicly available information and we have not independently verified it.

- Air Lease Corporation is an aircraft leasing company. The company is principally engaged in purchasing commercial aircraft and leasing to airlines in regions that include Asia, the Pacific Rim, Latin America, the Middle East and Eastern Europe. Its common stock trades on the New York Stock Exchange (the "NYSE") under the symbol "AL."
- Amphenol Corporation designs, manufactures, and markets electrical, electronic and fiber optic connectors, interconnect systems, and coaxial and flat-ribbon cable. The company's products are used in a variety of industries, including telephone, wireless, and data communications systems, cable television systems, and commercial and military aerospace electronics. Its common stock trades on the NYSE under the symbol "APH."
- Broadcom Limited designs, develops, and supplies semiconductors and integrated circuits. The company offers products such as broadband carrier access, cables, switches, network processors, and wireless connectors. Its class A common stock trades on the NASDAQ Global Select Market under the symbol "AVGO."
- Discover Financial Services is a credit card issuer and electronic payment services company. The company issues credit cards and offers student and personal loans, as well as savings products such as certificates of deposit and money market accounts and operates an automated teller machine/debit network. Its common stock trades on the NYSE under the symbol "DFS."
- Dollar Tree, Inc. operates a discount variety store chain in the United States. The company sells an assortment of everyday general merchandise at the $1.00 price point. Its common stock trades on the NASDAQ Global Select Market under the symbol "DLTR."
-

DowDuPont Inc. is a diversified chemical company that provides chemical, plastic, and agricultural products and services to various essential consumer markets. The company serves customers in countries around the world in markets such as food, transportation, health and medicine, personal care, and construction. Its common stock trades on the NYSE under the symbol “DWDP.”

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- Gartner, Inc. provides research and analysis on the computer hardware, software, communications, and related information technology industries. The company's business segments include research, consulting, measurement, events and executive programs. Its common stock trades on the NYSE under the symbol “IT.”
- Louisiana-Pacific Corporation manufactures building materials and engineered wood products. The company's products are used by homebuilders and light commercial builders. The company’s products include oriented strand board sheathing, flooring, radiant barrier panels, siding and trim, I-joists, and laminated veneer lumber. Its common stock trades on the NYSE under the symbol “LPX.”
- Marathon Petroleum Corporation refines, transports, and markets petroleum products. The company sells its products to resellers and consumers in the mid-west, gulf coast, and southeast United States. Its common stock trades on the NYSE under the symbol “MPC.”
- ServiceNow, Inc. provides enterprise information technology (IT) management software. The company designs, develops, and produces prepackaged computer software, cloud services, and IT service management platform. Its common stock trades on the NYSE under the symbol “NOW.”
- Newell Brands Inc. manufactures and markets branded consumer products which are sold through a variety of retail and wholesale distribution channels. The company's products include housewares, juvenile products, home furnishings, office products, tools and hardware, and hair accessories. Its common stock trades on the NYSE under the symbol “NWL.”
- The PNC Financial Services Group, Inc. is a diversified financial services organization. The company provides regional banking, wholesale banking, and asset management services nationally and in the company's primary regional markets. Its common stock trades on the NYSE under the symbol “PNC.”
- Regency Centers Corporation is a self-administered and self-managed real estate investment trust that owns and operates grocery anchored neighborhood retail centers. The company currently owns and operates properties in various states located throughout the United States. Its common stock trades on the NYSE under the symbol “REG.”
- Whirlpool Corporation manufactures and markets major home appliances. The company's principal products include laundry appliances, refrigeration and room air conditioning equipment, cooking appliances, dishwashers, and mixers and other small household appliances. Its common stock trades on the NYSE under the symbol “WHR.”

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Additional Information

Please note that the selection of the Reference Stocks was based only on research views, based on information that was available through September 5, 2017. There is no assurance that any particular company will be successful, or that the investment thesis underlying these research views will come to pass. Moreover, the business, results of operations, and prospects of these companies and the growth and health of each issuer of the Reference Stocks are subject to conditions outside of the control of the Equity Research Department, such as general economic conditions. Additional information regarding RBCCM research analyst ratings is available at https://www.rbccm.com/equityresearch/cid-203939.html. Information on that website is not included or incorporated by reference in this document. A rating is subject to downward revision at any time, and a broker-dealer may cease to cover a particular security at any time, including during the term of the Notes.
Neither we nor our affiliates make any representation as to the future performance of any Reference Stock or the Basket.

Hypothetical Performance of the Basket
While actual historical information on the Basket did not exist before the Pricing Date, the following graph sets forth the hypothetical daily performance of the Basket from June 29, 2012 (the date on which the Reference Stock with the most limited trading history, ServiceNow, Inc., began trading) through September 27, 2017. The graph is based upon actual daily historical closing prices of the Reference Stocks and a hypothetical basket level of 100.00 as of June 29, 2012. This hypothetical data on the Basket is not necessarily indicative of the future performance of the Basket or what the value of the Notes may be. Any hypothetical upward or downward trend in the level of the Basket shown below is not an indication that the level of the Basket is more or less likely to increase or decrease at any time over the term of the Notes.

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Historical Information

The graphs below set forth the recent historical performance of each of the Reference Stocks. In addition, below each graph is a table setting forth the intra-day high, intra-day low and period-end Closing Prices of each Reference Stock. The information provided in each table is for the four calendar quarters of 2011, 2012, 2013, 2014, 2015 and 2016, the first and second quarters of 2017 and the period from July 1, 2017 to September 27, 2017.

We obtained the information regarding the historical performance of the Reference Stocks in the graphs and tables below from Bloomberg Financial Markets.

We have not independently verified the accuracy or completeness of the information obtained from Bloomberg Financial Markets. The historical performance of the Reference Stocks should not be taken as an indication of their future performance or what the value of the Notes may be, and no assurance can be given as to the price of any Reference Stock on the Valuation Date. We cannot give you assurance that the performance of any Reference Stock will not result in the loss of a portion of your investment.

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Period-Start Date	Period-End Date	High Intra-Day Price of the Reference Stock in ($)	Low Intra-Day Price of the Reference Stock in ($)	Period-End Closing Price of the Reference Stock in ($)
4/19/2011	6/30/2011	29.94	23.02	24.29
7/1/2011	9/30/2011	25.36	18.32	19.20
10/1/2011	12/31/2011	23.95	17.24	23.71
1/1/2012	3/31/2012	26.47	23.10	24.07
4/1/2012	6/30/2012	25.00	18.66	19.39
7/1/2012	9/30/2012	22.79	18.45	20.40
10/1/2012	12/31/2012	23.17	20.13	21.50
1/1/2013	3/31/2013	29.87	21.73	29.32
4/1/2013	6/30/2013	31.00	25.13	27.59
7/1/2013	9/30/2013	28.88	25.74	27.66
10/1/2013	12/31/2013	33.57	27.38	31.08
1/1/2014	3/31/2014	38.15	30.01	37.29
4/1/2014	6/30/2014	42.89	34.10	38.58
7/1/2014	9/30/2014	39.00	32.22	32.50
10/1/2014	12/31/2014	38.96	30.55	34.31
1/1/2015	3/31/2015	40.40	32.22	37.74
4/1/2015	6/30/2015	40.50	33.87	33.90
7/1/2015	9/30/2015	37.14	28.12	30.92
10/1/2015	12/31/2015	35.22	29.96	33.48
1/1/2016	3/31/2016	33.10	22.47	32.12
4/1/2016	6/30/2016	32.53	24.49	26.78
7/1/2016	9/30/2016	30.18	25.09	28.58
10/1/2016	12/31/2016	37.23	27.97	34.33
1/1/2017	3/30/2017	40.23	34.51	38.85
4/1/2017	6/30/2017	38.97	34.45	37.36
7/1/2017	9/27/2017	43.38	37.35	41.02

*Air Lease Corporation commenced trading on April 19, 2011 and therefore has a limited historical performance.

PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS.

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Period-Start Date	Period-End Date	High Intra-Day Price of the Reference Stock in ($)	Low Intra-Day Price of the Reference Stock in ($)	Period-End Closing Price of the Reference Stock in ($)
1/1/2011	3/31/2011	29.56	25.27	27.20
4/1/2011	6/30/2011	28.67	24.71	27.00
7/1/2011	9/30/2011	27.88	20.01	20.39
10/1/2011	12/31/2011	25.26	19.49	22.70
1/1/2012	3/31/2012	30.06	22.50	29.89
4/1/2012	6/30/2012	30.92	25.53	27.46
7/1/2012	9/30/2012	31.85	25.45	29.44
10/1/2012	12/31/2012	32.63	28.71	32.35
1/1/2013	3/31/2013	37.36	32.89	37.33
4/1/2013	6/30/2013	41.69	35.05	38.97
7/1/2013	9/30/2013	42.83	37.03	38.69
10/1/2013	12/31/2013	44.73	37.09	44.59
1/1/2014	3/31/2014	46.81	42.06	45.83
4/1/2014	6/30/2014	49.38	45.15	48.17
7/1/2014	9/30/2014	52.97	47.24	49.93
10/1/2014	12/31/2014	55.66	45.27	53.81
1/1/2015	3/31/2015	60.54	51.19	58.93
4/1/2015	6/30/2015	59.61	54.95	57.97
7/1/2015	9/30/2015	58.51	47.44	50.96
10/1/2015	12/31/2015	55.68	49.01	52.23
1/1/2016	3/31/2016	58.35	44.50	57.82
4/1/2016	6/30/2016	60.17	54.94	57.33
7/1/2016	9/30/2016	65.76	55.37	64.91
10/1/2016	12/31/2016	69.19	62.63	67.20
1/1/2017	3/30/2017	71.98	66.01	71.89
4/1/2017	6/30/2017	76.67	68.57	73.82
7/1/2017	9/27/2017	83.71	72.35	81.97

PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS.

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Period-Start Date	Period-End Date	High Intra-Day Price of the Reference Stock in ($)	Low Intra-Day Price of the Reference Stock in ($)	Period-End Closing Price of the Reference Stock in ($)
1/1/2011	3/31/2011	34.60	26.97	31.10
4/1/2011	6/30/2011	38.70	29.96	38.00
7/1/2011	9/30/2011	39.45	26.42	32.77
10/1/2011	12/31/2011	35.97	27.39	28.86
1/1/2012	3/31/2012	39.22	28.02	38.97
4/1/2012	6/30/2012	39.01	29.70	35.90
7/1/2012	9/30/2012	37.88	32.14	34.87
10/1/2012	12/31/2012	35.58	30.50	31.65
1/1/2013	3/31/2013	36.98	32.09	35.90
4/1/2013	6/30/2013	38.87	30.57	37.38
7/1/2013	9/30/2013	43.29	35.75	43.08
10/1/2013	12/31/2013	54.54	41.83	52.88
1/1/2014	3/31/2014	65.83	51.89	64.41
4/1/2014	6/30/2014	72.50	57.27	72.07
7/1/2014	9/30/2014	90.88	68.71	87.00
10/1/2014	12/31/2014	105.00	68.75	100.59
1/1/2015	3/31/2015	136.28	95.18	126.98
4/1/2015	6/30/2015	150.50	114.56	132.93
7/1/2015	9/30/2015	137.75	100.00	125.01
10/1/2015	12/31/2015	149.72	111.53	145.15
1/1/2016	3/31/2016	157.37	114.25	154.50
4/1/2016	6/30/2016	166.00	139.18	155.40
7/1/2016	9/30/2016	179.42	147.16	172.52
10/1/2016	12/31/2016	183.99	160.62	176.77
1/1/2017	3/30/2017	227.49	173.50	220.04
4/1/2017	6/30/2017	256.78	208.46	233.05
7/1/2017	9/27/2017	259.33	228.22	240.58

PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS.

Direct Investment Notes
Linked to the September 2017 RBC Capital Markets
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Period-Start Date	Period-End Date	High Intra-Day Price of the Reference Stock in ($)	Low Intra-Day Price of the Reference Stock in ($)	Period-End Closing Price of the Reference Stock in ($)
1/1/2011	3/31/2011	24.99	18.31	24.12
4/1/2011	6/30/2011	26.95	22.33	26.75
7/1/2011	9/30/2011	27.92	20.51	22.94
10/1/2011	12/31/2011	25.95	21.44	24.00
1/1/2012	3/31/2012	34.43	23.75	33.34
4/1/2012	6/30/2012	34.75	30.48	34.58
7/1/2012	9/30/2012	40.28	33.79	39.73
10/1/2012	12/31/2012	42.08	37.36	38.55
1/1/2013	3/31/2013	45.38	37.24	44.84
4/1/2013	6/30/2013	49.71	42.12	47.64
7/1/2013	9/30/2013	53.36	46.93	50.54
10/1/2013	12/31/2013	56.20	48.40	55.95
1/1/2014	3/31/2014	60.00	51.63	58.19
4/1/2014	6/30/2014	62.62	54.35	61.98
7/1/2014	9/30/2014	65.98	59.00	64.39
10/1/2014	12/31/2014	66.75	60.15	65.49
1/1/2015	3/31/2015	66.02	54.02	56.35
4/1/2015	6/30/2015	60.57	56.17	57.62
7/1/2015	9/30/2015	59.88	50.36	51.99
10/1/2015	12/31/2015	58.08	50.20	53.62
1/1/2016	3/31/2016	53.09	42.86	50.92
4/1/2016	6/30/2016	58.10	46.37	53.59
7/1/2016	9/30/2016	60.29	51.67	56.55
10/1/2016				

Cost of product	53.0	63.3
Cost of service	3.6	2.0
Total cost of revenues	56.6	65.3
Gross profit	43.4	34.7
Operating expenses:		
Product development	50.0	25.4
Sales and marketing	31.5	16.8
General and administrative	20.8	12.7

Total operating expenses	102.3	54.9
Loss from operations	(58.9)	(20.2)
Interest and other income, net	1.7	1.8
Interest expense on lease financing obligations	(2.3)	(0.8)
Loss before provision for income taxes	(59.5)	(19.2)
Provision for income taxes	(1.4)	0.0
Net loss	(58.1)%	(19.2)%

Revenues

Total revenues

	Three Months Ended		2009 over	2009 over
(Dollars in thousands)	**March 31, 2009**	**March 31, 2008**	**2008 $ Change**	**2008 % Change**
Total revenues	$ 18,183	$ 35,595	$ (17,412)	(48.9%)

The $17.4 million decrease in total revenues for the quarter ended March 31, 2009 as compared to the same period in 2008 was primarily the result of a $14.8 million decrease in NES revenues (see discussion below) and a $2.6 million decrease in LWI revenues (see discussion below).

NES revenues

	Three Months Ended		2009 over	2009 over
(Dollars in thousands)	**March 31, 2009**	**March 31, 2008**	**2008 $ Change**	**2008 % Change**
NES revenues	$ 5,739	$ 20,516	$ (14,777)	(72.0%)

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NES revenues generated during the quarters ended March 31, 2009 and 2008 were primarily related to large scale deployments of our NES system products. As of March 31, 2009 and 2008, approximately $5.0 million and $4.6 million, respectively, of NES revenue was deferred. Deferred revenues are generally recognized in future periods once all of the required criteria for revenue recognition have been met.

Our ability to recognize revenue on shipments of our NES products depends on several factors, including, but not limited to, delivery to the customer of all of the software called for in any given agreement, the impact on delivery dates of any modifications to existing shipment schedules included in the contracts that have been awarded to us thus far, and certain contractual provisions, such as customer acceptance. In addition, the complex revenue recognition rules relating to products such as our NES system will likely require us to defer some or all of the revenue associated with NES product shipments until certain conditions are met in a future period. For example, once all other revenue recognition criteria have been met, we recognize revenues for the meters (and related NES system software royalties) and data concentrators based on a constant ratio of meters to data concentrators, which is determined on a contract-by-contract basis. To the extent actual deliveries of either meters or data concentrators is disproportionate to the expected overall ratio for any given arrangement, revenue for the excess meters or data concentrators is deferred until such time as additional deliveries of meters or data concentrators has occurred. In some instances, the reasons for these deferrals may not be fully under our control, which could result in the actual timing of revenue being significantly different than we currently anticipate.

We also expect that some foreign utilities will require us to price our NES system in the respective utility s local currency, which will expose us to foreign currency risk. The portion of our NES revenue transactions conducted in currencies other than the U.S. dollar, principally the European Euro and the Australian dollar, was about $9,000, or 0.2% for the quarter ended March 31, 2009, and about $116,000, or 0.6% for the quarter ended March 31, 2008. To date, we have not hedged any of these foreign currency risks. In most cases, in the event of a significant contract award, we intend to hedge this foreign currency risk so long as we can secure forward currency contracts that are reasonably priced and that are consistent with the scheduled deliveries for that project. In addition, we will face foreign currency exposures from the time we submit our foreign currency denominated bid until the award of a contract by the utility (the bid to award term). This bid to award term can often exceed several months. If a utility awards us a contract that gives the utility the right to exercise options for additional supply in the future, we would also be exposed to foreign currency risk until such time as these options, if any, were exercised. We may decide that it is too expensive to hedge the foreign currency risks during the bid to award term or for any unexercised options. Any resulting adverse foreign currency fluctuations could significantly harm our revenues, results of operations, and financial condition.

LWI revenues

	Three Months Ended		2009 over	2009 over
(Dollars in thousands)	**March 31, 2009**	**March 31, 2008**	**2008 $ Change**	**2008 % Change**
LWI revenues	$ 11,155	$ 13,762	$ (2,607)	(18.9%)

Our LWI revenues are primarily comprised of sales of our hardware and software products, and to a lesser extent, revenues we generate from our customer support and training offerings. The $2.6 million decrease in LWI revenue for the quarter ended March 31, 2009 as compared to the same period in 2008 was primarily due to decreases in LWI revenues in the EMEA and Americas regions, and to a lesser extent by a reduction in sales in the APJ region. Within the LWI family of products, the $2.6 million decrease was primarily attributable to a decrease in our power line transceiver and other control and connectivity products, partially offset by an increase in sales of our i.Lon products.

Our future LWI revenues will continue to be subject to fluctuations in the exchange rates between the United States dollar and the foreign currencies in which we sell our LWI products and services. In general, if the dollar were to weaken against these currencies, our revenues from those foreign currency sales, when translated into United States dollars, would increase. Conversely, if the dollar were to strengthen against these currencies, our revenues from those foreign currency sales, when translated into United States dollars, would decrease. The extent of this exchange rate fluctuation increase or decrease will depend on the amount of sales conducted in these currencies and the magnitude of the exchange rate fluctuation from year to year. The portion of our LWI revenues conducted in currencies other than the U.S. dollar, principally the Japanese Yen, was about 7.2% for the quarter ended March 31, 2009 and 6.0% for the same period in 2008. To date, we have not hedged any of these foreign currency risks. We do not currently expect that, in the near future, the amount of our LWI revenues conducted in these foreign currencies will fluctuate significantly from prior year levels. Given the historical and expected future level of sales made in foreign currencies, we do not currently plan to hedge against these currency rate fluctuations. However, if the portion of our revenues conducted in foreign currencies were to grow significantly, we would re-evaluate these exposures and, if necessary, enter into hedging arrangements to help minimize these risks.

Enel project revenues

	Three Months Ended		**2009 over**	**2009 over**
(Dollars in thousands)	**March 31, 2009**	**March 31, 2008**	**2008 $ Change**	**2008 % Change**
Enel project revenues	$ 1,289	$ 1,316	$ (27)	(2.1%)

In October 2006, we entered into two new agreements with Enel, a development and supply agreement and a software enhancement agreement. Under the development and supply agreement, Enel is purchasing additional metering kit and data concentrator products from us. Under the software enhancement agreement, we are providing software enhancements to Enel for use in its Contatore Elettronico system. The $1.3 million of Enel project revenue recognized during both quarters ended March 31, 2009 and 2008, respectively, related primarily to shipments under the new development and supply agreement, and to a lesser extent, from revenues attributable to the software enhancement agreement. The development and supply agreement expires in December 2011, and the software enhancement agreement expires in December 2009, although delivery of products and services can extend beyond that date and the agreements may be extended under certain circumstances.

We sell our products to Enel and its designated manufacturers in U.S. dollars. Therefore, the associated revenues are not subject to foreign currency risks.

EBV revenues

	Three Months Ended		**2009 over**	**2009 over**
(Dollars in thousands)	**March 31, 2009**	**March 31, 2008**	**2008 $ Change**	**2008 % Change**
EBV revenues	$ 3,886	$ 5,376	$ (1,490)	(27.7%)

Sales to EBV, our largest distributor and the primary independent distributor of our products in Europe, accounted for 23.1% of our total revenues for the quarter ended March 31, 2009 and 15.2% of our total revenues for the same period in 2008. The primary factor contributing to the $1.5 million decrease between the two quarters was a decrease in sales of our power line transceiver and other control and connectivity products.

We currently sell our products to EBV in U.S. dollars. Therefore, the associated revenues are not subject to foreign currency exchange rate risks. However, EBV has the right, on notice to our company, to require that we sell our products to them in Euros.

Our contract with EBV, which has been in effect since 1997 and to date has been renewed annually thereafter, expires in December 2009. If our agreement with EBV is not renewed, or is renewed on terms that are less favorable to us, our revenues could decrease and our results of operations and financial condition could be harmed.

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Product revenues

(Dollars in thousands)	Three Months Ended March 31, 2009	March 31, 2008	2009 over 2008 $ Change	2009 over 2008 % Change
Product revenues	$ 17,389	$ 34,667	$ (17,278)	(49.8%)

The $17.3 million decrease in product revenues for the quarter ended March 31, 2009 as compared to the same period in 2008 was primarily the result of a $15.0 million decrease in NES product revenues, a $2.5 million decrease in LWI product revenues, partially offset by a $210,000 increase in Enel Project related revenues.

Service revenues

(Dollars in thousands)	Three Months Ended March 31, 2009	March 31, 2008	2009 over 2008 $ Change	2009 over 2008 % Change
Service revenues	$ 794	$ 928	$ (134)	(14.4%)

The $134,000 decrease in service revenues during the quarter ended March 31, 2009 as compared to the same period in 2008 was primarily due to a $236,000 decrease in custom software development revenues generated from the Enel Project, a $72,000 decrease in LWI training and customer support revenues, partially offset by a $174,000 increase in NES support revenues.

Gross Profit and Gross Margin

(Dollars in thousands)	Three Months Ended March 31, 2009	March 31, 2008	2009 over 2008 $ Change	2009 over 2008 % Change
Gross Profit	$ 7,895	$ 12,350	$ (4,455)	(36.1%)
Gross Margin	43.4%	34.7%		8.7

Gross profit is equal to revenues less cost of goods sold. Cost of goods sold for product revenues includes direct costs associated with the purchase of components, subassemblies, and finished goods, as well as indirect costs such as allocated labor and overhead; costs associated with the packaging, preparation, and shipment of products; and charges related to excess and obsolete inventory reserves, warranty costs, and purchase price variances. Cost of goods sold for service revenues consists of employee-related costs such as salaries and fringe benefits as well as other direct and indirect costs incurred in providing training, customer support, and custom software development services. Gross margin is equal to gross profit divided by revenues.

The 8.7 percentage point increase in gross margin during the first quarter of 2009 was due primarily to the mix of revenues reported. During the quarter ended March 31, 2009, approximately 31.6% of our revenues were attributable to sales of our NES system products, 61.3% of our revenues were attributable to sales of our LWI products and services, and the remaining 7.1% was attributable to the Enel project. During the quarter ended March 31, 2008, approximately 57.6% of our revenues were attributable to sales of our NES system products, 38.7% of our revenues were attributable to sales of our LWI products and services, and the remaining 3.7% was attributable to the Enel project. In general, gross margins generated from sales of our NES system products are lower than those generated from both sales of our LWI products and services as well as sales made under the Enel Project. As a result, when NES revenues comprise a lower percentage of overall revenues, as they were during the quarter ended March 31, 2009, overall gross margins will be higher. Conversely, when NES revenues are higher as a percentage of overall revenues, as they were during the quarter ended March 31, 2008, overall gross margins will be lower. Also contributing to the quarter-over-quarter improvement in gross margins was the impact of improved gross margins in our NES product line as well as one-time favorable overhead absorption variances.

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Partially offsetting the increase in gross margins during the first quarter of 2009 as compared to the same period in 2008 was the impact of reduced revenues on gross margins. As discussed above, a portion of our cost of goods sold relates to indirect costs. Some of these costs do not increase or decrease in conjunction with revenue levels, but rather remain relatively constant from quarter to quarter. As a result, when revenues decrease, as they did in the quarter ended March 31, 2009 as compared to the same period in 2008, gross margins are negatively impacted.

Our future gross margins will continue to be affected by several factors, including, but not limited to: overall revenue levels; changes in the mix of products sold; periodic charges related to excess and obsolete inventories, warranty expenses, and purchase price variances; introductions of cost reduced versions of our NES and LWI products; changes in the average selling prices of the products we sell; and fluctuations in the level of indirect overhead spending that is capitalized in inventory. In addition, the impact of foreign exchange rate fluctuations may affect our gross margins in the future. We currently outsource the manufacturing of most of our products requiring assembly to contract electronic manufacturers (CEMs) located primarily in China. To the extent the dollar were to weaken against the Chinese currency, or other currencies used by our CEMs, our costs for the products they manufacture could rise, which would negatively affect our gross margins. Lastly, many of our products, particularly our NES products, contain significant amounts of certain commodities, such as copper and cobalt. Recently, prices for these commodities have been volatile, which in turn have caused fluctuations in the prices we pay for the products in which they are incorporated.

Operating Expenses

Product Development

	Three Months Ended		2009 over	2009 over
(Dollars in thousands)	**March 31, 2009**	**March 31, 2008**	**2008 $ Change**	**2008 % Change**
Product Development	$ 9,091	$ 9,036	$ 55	0.6%

Product development expenses consist primarily of payroll and related expenses for development personnel, facility costs, expensed material, fees paid to third party service providers, depreciation and amortization, and other costs associated with the development of new technologies and products.

Sales and Marketing

	Three Months Ended		2009 over	2009 over
(Dollars in thousands)	**March 31, 2009**	**March 31, 2008**	**2008 $ Change**	**2008 % Change**
Sales and Marketing	$ 5,722	$ 6,005	$ (283)	(4.7%)

Sales and marketing expenses consist primarily of payroll and related expenses for sales and marketing personnel, including commissions to sales personnel, travel and entertainment, facilities costs, advertising and product promotion, and other costs associated with our sales and support offices.

The $283,000 decrease in sales and marketing expenses for the quarter ended March 31, 2009 as compared to the same period in 2008 was primarily due to reductions in fees paid to third parties related to sales and marketing activities and marketing expenses. Also contributing to the decrease was the impact of foreign currency exchange rate fluctuations between the U.S. dollar and the local currencies in several of the foreign countries in which we operate, including the Euro, the British Pound Sterling, and the Japanese Yen. Approximately $223,000 of the $283,000 quarter-over-quarter decrease was the result of these foreign currency exchange rate fluctuations.

Our future sales and marketing expenses will continue to be affected by fluctuations in exchange rates between the U.S. dollar and the foreign currencies where we operate. If the United States dollar were to weaken against these currencies, our sales and marketing expenses could increase. Conversely, if the dollar were to strengthen against these currencies, it would have a favorable impact on our sales and marketing expenses.

General and Administrative

	Three Months Ended		2009 over	2009 over
(Dollars in thousands)	**March 31, 2009**	**March 31, 2008**	**2008 $ Change**	**2008 % Change**
General and Administrative	$ 3,787	$ 4,515	$ (728)	(16.1%)

General and administrative expenses consist primarily of payroll and related expenses for executive, finance, and administrative personnel, professional fees for legal and accounting services rendered to the company, facility costs, insurance, and other general corporate expenses.

The $728,000 decrease in general and administrative expenses during the quarter ended March 31, 2009 as compared to the same period in 2008 was primarily attributable to a $398,000 decrease in non-cash equity compensation expense, and to a lesser extent, by decreases in fees paid to our independent accountants and other third party service providers.

Interest and Other Income, Net

	Three Months Ended		2009 over	2009 over
(Dollars in thousands)	**March 31, 2009**	**March 31, 2008**	**2008 $ Change**	**2008 % Change**
Interest and Other Income, Net	$ 310	$ 659	$ (349)	(53.0%)

Interest and other income, net primarily reflects interest earned by our company on cash and short-term investment balances as well as foreign exchange translation gains and losses related to short-term intercompany balances.

The $349,000 decrease in interest and other income, net during the quarter ended March 31, 2009 as compared to the same period in 2008 was primarily attributable to a $808,000 decrease in interest income between the two periods. The reduction in interest income is primarily the result of a reduction in our average invested cash balance between the periods coupled with reductions in the weighted average yield on our investment portfolio.

Partially offsetting the quarter-over-quarter decline in interest income was a $498,000 increase in foreign currency translation gains. In accordance with SFAS No. 52, *Foreign Currency Translation*, we account for foreign currency translation gains and losses associated with our short-term intercompany balances by reflecting these amounts as either other income or loss in our consolidated statements of operations. During periods when the U.S. dollar weakens in value against these foreign currencies, the associated translation losses negatively impact other income. Conversely, when the U.S. dollar strengthens, as it did during the first quarter of 2009, the resulting translation gains favorably impact other income.

Future interest and other income, net will continue to be affected by the average amount of our invested cash balance, the weighted average yield on our investment portfolio, and fluctuations in the exchange rates between the United States dollar and the currencies in which we maintain our short-term intercompany balances, principally the European Euro and the British Pound Sterling.

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Interest Expense on Lease Financing Obligations

(Dollars in thousands)	Three Months Ended March 31, 2009	March 31, 2008	2009 over 2008 $ Change	2009 over 2008 % Change
Interest Expense on Lease Financing Obligations	$ 425	$ 274	$ 151	55.1%

The monthly rent payments we make to our lessor under the lease agreements for our San Jose headquarters site are recorded in our financial statements partially as land lease expense, with the remainder being allocated to principal and interest on the financing liability. Interest expense on lease financing obligations reflects the portion of our monthly lease payments that is allocated to interest expense.

The $151,000 increase in interest expense on lease financing obligations during the quarter ended March 31, 2009 as compared to the same period in 2008 was a result of the June 2008 building lease extension. The extension had the effect of increasing the amount of our monthly payment attributable to interest expense. As with any amortizing fixed rate loan, payments made earlier in the term of the loan are comprised primarily of interest expense with little being allocated to principal repayment. Payments made later in the term of the loan, however, have an increasing proportion of principal repayment, with less being attributable to interest expense. Accordingly, as we continue to make payments in accordance with our lease obligation, we expect a higher proportion of these future payments will be allocated to principal repayment and less will be allocated to interest expense.

Income Tax (Benefit) Expense

(Dollars in thousands)	Three Months Ended March 31, 2009	March 31, 2008	2009 over 2008 $ Change	2009 over 2008 % Change
Income Tax (Benefit) Expense	$ (255)	$ 20	$ (275)	(1,375.0%)

The provision for income taxes for the quarters ended March 31, 2009 and 2008 was ($255,000) and $20,000, respectively. The difference between the statutory rate and our effective tax rate is primarily due to the impact of foreign taxes, changes in the valuation allowance on deferred tax assets, and changes in the accruals related to unrecognized tax benefits recorded in accordance with FASB Interpretation No. 48 (FIN 48), *Accounting for Uncertainty in Income Taxes an Interpretation of FASB Statement No. 109*. The income tax benefit recorded during the quarter ended March 31, 2009 was primarily due to the expiration of the statute of limitations in certain foreign jurisdictions.

Off-Balance-Sheet Arrangements and Other Contractual Obligations

Off-Balance-Sheet Arrangements. We have not entered into any transactions with unconsolidated entities whereby we have financial guarantees, subordinated retained interests, derivative instruments, or other contingent arrangements that expose our company to material continuing risks, contingent liabilities, or any other obligation under a variable interest in an unconsolidated entity that provides financing, liquidity, market risk, or credit risk support to us.

Lease Commitments. In December 1999, we entered into a lease agreement with a real estate developer for our existing corporate headquarters in San Jose, California. In October 2000, we entered into a second lease agreement with the same real estate developer for an additional building at our headquarters site. These leases were scheduled to expire in 2011 and 2013, respectively.

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Effective June 2008, the building leases were amended resulting in an extension of the lease term for both buildings through March 2020. The extended leases require minimum lease payments through March 2020 totaling approximately $48.9 million. Both leases permit us to exercise an option to extend the respective lease for two sequential five-year terms. In addition, the amended leases eliminated our requirement to provide the landlord with security deposits totaling $6.2 million, which we had previously satisfied by causing to have issued standby letters of credit (LOCs). As of June 30, 2008, the previously issued LOCs had been returned to the bank that issued them and were cancelled. The leases of our corporate headquarters facilities are accounted for under EITF 97-10 and SFAS 98.

In addition, we lease facilities under operating leases for our sales, marketing, and product development personnel located elsewhere within the United States and in ten foreign countries throughout Europe and Asia, including a land lease for accounting purposes associated with our corporate headquarters facilities. These operating leases expire on various dates through 2020, and in some instances are cancelable with advance notice. Lastly, we also lease certain equipment and, for some of our sales personnel, automobiles. These operating leases are generally less than five years in duration.

Purchase Commitments. We utilize several contract manufacturers who manufacture and test our products requiring assembly. These contract manufacturers acquire components and build product based on demand information supplied by us in the form of purchase orders and demand forecasts. These purchase orders and demand forecasts generally cover periods that range from one to six months, and in some cases, up to one year. We also obtain individual components for our products from a wide variety of individual suppliers. We generally acquire these components through the issuance of purchase orders, and in some cases through demand forecasts, both of which cover periods ranging from one to nine months.

We also utilize purchase orders when procuring capital equipment, supplies, and services necessary for our day-to-day operations. These purchase orders generally cover periods ranging up to twelve months, but in some instances cover a longer duration.

Indemnifications**.** In the normal course of business, we provide indemnifications of varying scope to customers against claims of intellectual property infringement made by third parties arising from the use of our products. Historically, costs related to these indemnification provisions have not been significant. However, we are unable to estimate the maximum potential impact of these indemnification provisions on our future results of operations.

As permitted under Delaware law, we have agreements whereby we indemnify our officers and directors for certain events or occurrences while the officer or director is, or was serving, at our request in such capacity. The indemnification period covers all pertinent events and occurrences during the officer s or director s lifetime. The maximum potential amount of future payments we could be required to make under these indemnification agreements is unlimited; however, we have director and officer insurance coverage that would enable us to recover a portion of any future amounts paid. We believe the estimated fair value of these indemnification agreements in excess of the applicable insurance coverage is minimal.

Royalties**.** We have certain royalty commitments associated with the shipment and licensing of certain products. Royalty expense is generally based on a U.S. dollar amount per unit shipped or a percentage of the underlying revenue. Royalty expense, which was recorded as cost of products revenue in our consolidated statements of income, was approximately $118,000 during the quarter ended March 31, 2009, and $133,000 for the same period in 2008.

We will continue to be obligated for royalty payments in the future associated with the shipment and licensing of certain of our products. While we are currently unable to estimate the maximum amount of these future royalties, such amounts will continue to be dependent on the number of units shipped or the amount of revenue generated from these products.

Taxes. We conduct our operations in many tax jurisdictions throughout the world. In many of these jurisdictions, non-income based taxes such as property taxes, sales and use taxes, and value-added taxes are assessed on Echelon s operations in that particular location. While we strive to ensure compliance with these various non-income based tax filing requirements, there have been instances where potential non-compliance exposures have been identified. In accordance with generally accepted accounting principles, we make a provision for these exposures when it is both probable that a liability has been incurred and the amount of the exposure can be reasonably estimated.

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To date, such provisions have been immaterial, and we believe that, as of March 31, 2009, we have adequately provided for such contingencies. However, it is possible that our results of operations, cash flows, and financial position could be harmed if one or more non-compliance tax exposures are asserted by any of the jurisdictions where we conduct our operations.

Legal Actions. We recently received notice that the receiver for two companies that filed for the Italian law equivalent of bankruptcy protection in May 2004, Finmek Manufacturing SpA and Finmek Access SpA (collectively, the Finmek Companies), has filed a lawsuit under an Italian claw back law in Padua, Italy against us, seeking the return of approximately $16.7 million in ordinary course of business payments received by us in payment for components we sold to the Finmek Companies prior to the bankruptcy filing. The Finmek Companies were among Enel s third party meters manufacturers, and from time to time through January 2004, we sold components to the Finmek Companies that were incorporated into the electricity meters that were manufactured by the Finmek Companies and sold to Enel SpA for the Enel Project. We believe that the Italian claw back law is not applicable to our transactions with the Finmek Companies, and the claims of the Finmek Companies receiver are without merit.

From time to time, in the ordinary course of business, we may be subject to other legal proceedings, claims, investigations, and other proceedings, including claims of alleged infringement of third-party patents and other intellectual property rights, and commercial, employment, and other matters. In accordance with generally accepted accounting principles, we make a provision for a liability when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. These provisions are reviewed at least quarterly and adjusted to reflect the impacts of negotiations, settlements, rulings, advice of legal counsel, and other information and events pertaining to a particular case. While we believe we have adequately provided for such contingencies as of March 31, 2009, it is possible that our results of operations, cash flows, and financial position could be harmed by the resolution of any such outstanding claims.

Liquidity and Capital Resources

Since our inception, we have financed our operations and met our capital expenditure requirements primarily from the sale of preferred stock and common stock, although during the years 2002 through 2004, we were also able to finance our operations through operating cash flow. From inception through March 31, 2009, we raised $292.2 million from the sale of preferred stock and common stock, including the exercise of stock options and warrants from our employees and directors.

In March and August 2004, March 2006, and February 2007, our board of directors approved a stock repurchase program, which authorized us to repurchase up to 3.0 million shares of our common stock, in accordance with Rule 10b-18 and other applicable laws, rules and regulations. Since inception, we have repurchased a total of 2,204,184 shares under the program at a cost of $16.1 million. The stock repurchase program expired in March 2008.

In April 2008, our board of directors approved a new stock repurchase program, which authorizes us to repurchase up to 3.0 million shares of our common stock, in accordance with Rule 10b-18 and other applicable laws, rules and regulations. There were no repurchases under the new stock repurchase program during the quarter ended March 31, 2009. Since inception, we have repurchased a total of 750,000 shares under the program at a cost of $8.9 million. As of March 31, 2009, 2,250,000 shares were available for repurchase. The stock repurchase program will expire in April 2011.

The following table presents selected financial information as of March 31, 2009, and for each of the last three fiscal years (dollars in thousands):

	March 31,		December 31,	
	2009	2008	2007	2006
Cash, cash equivalents, and short-term investments	$ 87,691	$ 87,316	$ 107,190	$ 124,157
Trade accounts receivable, net	13,016	23,480	33,469	13,918
Working capital	102,192	108,811	126,711	129,521
Stockholders equity	125,316	132,571	153,211	153,663

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As of March 31, 2009, we had $87.7 million in cash, cash equivalents, and short-term investments, an increase of $375,000 as compared to December 31, 2008. Historically, our primary source of cash, other than stock sales, has been receipts from revenue, and to a lesser extent, proceeds from the exercise of stock options and warrants by our employees and directors. Our primary uses of cash have been cost of product revenue, payroll (salaries, commissions, bonuses, and benefits), general operating expenses (costs associated with our offices such as rent, utilities, and maintenance; fees paid to third party service providers such as consultants, accountants, and attorneys; travel and entertainment; equipment and supplies; advertising; and other miscellaneous expenses), acquisitions, capital expenditures, and purchases under our stock repurchase program.

Cash flows from operating activities. Cash flows from operating activities have historically been driven by net income (loss) levels, adjustments for non-cash charges such as stock-based compensation, depreciation, amortization, and in-process research and development charges, as well as fluctuations in operating asset and liability balances. Net cash provided by operating activities was $863,000 for the quarter ended March 31, 2009, an increase of approximately $816,000 from the same period in 2008. During the quarter ended March 31, 2009, net cash provided by operating activities was primarily the result of changes in our operating assets and liabilities of $6.8 million, stock-based compensation expenses of $3.0 million, and depreciation and amortization expense of $1.6 million, partially offset by our net loss of $10.6 million. During the quarter ended March 31, 2008, net cash provided by operating activities was primarily the result of stock-based compensation expenses of $3.3 million, depreciation and amortization expense of $2.1 million, a reduction in our accrued investment income of $542,000, and changes in our operating assets and liabilities of $952,000, partially offset by our net loss of $6.8 million.

Cash flows from investing activities. Cash flows from investing activities have historically been driven by transactions involving our short-term investment portfolio, capital expenditures, changes in our long-term assets, and acquisitions. Net cash used in investing activities was $10.1 million for the quarter ended March 31, 2009, a $21.8 million increase from the same period in 2008. During the quarter ended March 31, 2009, net cash used in investing activities was primarily the result of purchases of available-for-sale short-term investments of $28.9 million and capital expenditures of $604,000, partially offset by proceeds from maturities and sales of available-for-sale short-term investments of $19.4 million. During the quarter ended March 31, 2008, net cash provided by investing activities was primarily the result of proceeds from maturities and sales of available-for-sale short-term investments of $23.1 million, partially offset by purchases of available-for-sale short-term investments of $10.6 million and capital expenditures of $824,000.

Cash flows from financing activities. Cash flows from financing activities have historically been driven by the proceeds from issuance of common and preferred stock offset by transactions under our stock repurchase programs and principal payments on our lease financing obligations. Net cash provided by financing activities was $373,000 for the quarter ended March 31, 2009, a $1.5 million increase over the same period in 2008. During the quarter ended March 31, 2009, net cash provided by financing activities was primarily the result of proceeds of $763,000 from the exercise of stock options by our employees, partially offset by $349,000 in principal payments on our building lease financing obligations and $41,000 worth of shares repurchased from employees for payment of employee taxes on vesting of performance shares and upon exercise of stock options. During the quarter ended March 31, 2008, net cash used in financing activities was primarily the result of $688,000 in principal payments on our building lease financing obligations and $521,000 worth of shares repurchased from employees for payment of employee taxes on vesting of performance shares and upon exercise of stock options, partially offset by proceeds of $102,000 from the exercise of stock options by our employees.

We use well-regarded investment managers to manage our invested cash. Our portfolio of investments managed by these investment managers is primarily composed of highly rated U.S. government securities, U.S. corporate obligations, and to a lesser extent, foreign corporate obligations and money market funds. All investments are made according to guidelines and within compliance of policies approved by the Audit Committee of our Board of Directors.

We maintain a $10.0 million line of credit with our primary bank. As of March 31, 2009, our primary bank has issued, against the line of credit, a standby letter of credit totaling $35,000. Other than causing to have issued standby letters of credit, we have never drawn against the line of credit, nor have amounts ever been drawn against the standby letters of credit issued by the bank.

We currently expect that our combined cash, cash equivalent, and short-term investment balance will decline during the remainder of 2009. We expect that cash requirements for our payroll and other operating costs will continue at about existing levels. We also expect that we will continue to acquire capital assets such as computer systems and related software, office and manufacturing equipment, furniture and fixtures, and leasehold improvements, as the need for these items arises. Furthermore, our cash reserves may be used to strategically acquire other companies, products, or technologies that are complementary to our business. In addition, any continued weakening of economic conditions, or changes in our planned cash outlay, could also negatively affect our existing cash, cash equivalents, and investment balances. However, based on our current business plan and revenue prospects, we believe that our existing cash and short-term investment balances will be sufficient to meet our projected working capital and other cash requirements for at least the next twelve months. Cash from operations could be affected by various risks and uncertainties, including, but not limited to, the risks detailed later in this discussion in the section titled *Factors That May Affect Future Results of Operations*. In the unlikely event that we would require additional financing within this period, such financing may not be available to us in the amounts or at the times that we require, or on acceptable terms. If we fail to obtain additional financing, when and if necessary, our business would be harmed.

Related Party Transactions

During the quarter ended March 31, 2009, and the years ended December 31, 2008, 2007, and 2006, the law firm of Wilson Sonsini Goodrich & Rosati, P.C. acted as principal outside counsel to our company. Mr. Sonsini, a director of our company, is a member of Wilson Sonsini Goodrich & Rosati, P.C.

From time to time, our Chairman and Chief Executive Officer, M. Kenneth Oshman, uses his private plane or charter aircraft for Company business for himself and any employees that accompany him. In August 2008, our Board of Directors approved a reimbursement arrangement whereby our company will reimburse Mr. Oshman for 50% of the costs incurred for his private plane or charter aircraft travel used while on company business. Such costs include flight charges (subject to any discounted rate that may apply), fuel, fuel surcharges, landing fees, crew costs and related expenses. During the quarter ended March 31, 2009, we recognized a total of approximately $51,000 in expenses pursuant to the reimbursement arrangement, all of which has been included in general and administrative expenses in the Condensed Consolidated Statements of Operations. The Audit Committee of the Company s Board of Directors regularly reviews these reimbursements.

In June 2000, we entered into a stock purchase agreement with Enel pursuant to which Enel purchased 3.0 million newly issued shares of our common stock for $130.7 million (see Note 11 to our accompanying condensed consolidated financial statements for additional information on our transactions with Enel). The closing of this stock purchase occurred on September 11, 2000. At the closing, Enel had agreed that it would not, except under limited circumstances, sell or otherwise transfer any of those shares for a specified time period. That time period expired September 11, 2003. To our knowledge, Enel has not disposed of any of its 3.0 million shares.

Under the terms of the stock purchase agreement, Enel has the right to nominate a member of our board of directors. As of April 30, 2009, a representative of Enel had not been appointed to our board.

At the time we entered into the stock purchase agreement with Enel, we also entered into a research and development agreement with an affiliate of Enel (the R&D Agreement). Under the terms of the R&D Agreement, we cooperated with Enel to integrate our LonWorks technology into Enel s remote metering management project in Italy, the Contatore Elettronico. We completed the sale of our components and products for the deployment phase of the Contatore Elettronico project during 2005. During 2006, we supplied Enel and its designated manufacturers with limited spare parts for the Contatore Elettronico system. In October 2006, we entered into a new development and supply agreement and a software enhancement agreement with Enel. Under the development and supply agreement, Enel and its contract manufacturers purchase additional electronic components and finished goods from us. Under the software enhancement agreement, we provide software enhancements to Enel for use in its Contatore Elettronico system. The development and supply agreement expires in December 2011, and the software enhancement agreement expires in December 2009, although delivery of products and services can extend beyond those dates and the agreements may be extended under certain circumstances.

During both the quarters ended March 31, 2009 and 2008, we recognized revenue from products and services sold to Enel and its designated manufacturers of approximately $1.3 million. As of March 31, 2009, and December 31, 2008, $2.3 million and $5.0 million, respectively, of our total accounts receivable balance related to amounts owed by Enel and its designated manufacturers.

RECENTLY ISSUED ACCOUNTING STANDARDS

See the section entitled *Recent Accounting Pronouncements* in Note 1 of Notes to Condensed Consolidated Financial Statements in Item 1 of Part I of this Quarterly Report on Form 10-Q, which is incorporated herein by reference, for a full description of recent accounting pronouncements or changes in accounting pronouncements during the three months ended March 31, 2009, as compared to the recent accounting pronouncements described in our Annual Report on Form 10-K for the year ended December 31, 2008.

FACTORS THAT MAY AFFECT FUTURE RESULTS OF OPERATIONS

Interested persons should carefully consider the risks described below in evaluating our company. Additional risks and uncertainties not presently known to us, or that we currently consider immaterial, may also impair our business operations. If any of the following risks actually occur, our business, financial condition or results of operations could be materially adversely affected. In that case, the trading price of our common stock would likely decline.

Adverse changes in general economic or political conditions in any of the major countries in which we do business could adversely affect our operating results.

Our business can be affected by a number of factors that are beyond our control, such as general geopolitical, economic, and business conditions. Recent turmoil in the worldwide financial markets, and the present economic slowdown and the uncertainty over its breadth, depth and duration will continue to put pressure on the global economy and have a negative effect on our business. Further, the recent worldwide financial and credit crisis has reduced the availability of liquidity and credit to fund the continuation and expansion of business operations worldwide. The shortage of liquidity and credit combined with recent substantial losses in worldwide equity markets are causing the current economic recession in the United States and around the world to continue.

While we currently do not depend on access to the credit markets to finance our operations, there can be no assurance that the deterioration in financial markets will not impair our ability to obtain financing in the future, including, but not limited to, our ability to draw on funds under our existing credit facilities or our ability to incur indebtedness if that became necessary. In addition, there could be a number of follow-on effects from the credit crisis on our business, including insolvency of certain of our key customers, which could impair our distribution channels, and result in the inability of our customers to obtain credit to finance purchases of our products. Also, the recently enacted U.S. economic stimulus legislation may also cause potential customers to delay their deployments until they can determine whether and when the economic incentives may become available to them under the legislation.

This uncertainty about future economic and political conditions makes it difficult for us to forecast operating results and to make decisions about future investments. If economic activity in the United States and other countries economies remains weak, many customers may delay, reduce, or even eliminate their purchases of networking technology products. This could result in reductions in sales of our products, longer sales cycles, slower adoption of our technologies, increased price competition, and increased exposure to excess and obsolete inventory. For example, distributors could decide to reduce inventories of our products. Also, the inability to obtain credit could cause a utility to postpone its decision to move forward with a large scale deployment of our NES system. If conditions in the global economy, U.S. economy or other key vertical or geographic markets we serve remain uncertain or weaken further, we would experience material negative impacts on our business, financial condition, results of operations, cash flow, capital resources, and liquidity.

Our NES revenues may not be predictable.

We and our partners sell our NES system to utilities. For several reasons, sales cycles with utility companies are generally extended and unpredictable. Utilities generally have complex budgeting, purchasing, and regulatory processes that govern their capital spending. In addition, in many instances, a utility may require one or more field

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trials of an automated meter infrastructure (AMI) system (such as one based on our NES system) before moving to a volume deployment. There is also generally an extended development and integration effort required in order to incorporate a new technology into a utility s existing infrastructure. In addition, in the U.S., utilities may delay deployments while they seek incentives under the U.S. economic stimulus legislation. A number of other factors may also need to be addressed before the utility decides to engage in a full-scale deployment of our NES system, including:

- regulatory factors that may affect the requirements of the AMI system or the timing of its deployment;
- the time it takes for utilities to evaluate multiple competing bids, negotiate terms, and award contracts for large scale metering system deployments;
- the deployment schedule for projects undertaken by our utility or systems integrator customers; and
- delays in installing, operating, and evaluating the results of an AMI field trial that is based on our NES system.

In addition, shipment of NES products to a particular jurisdiction or customer is generally dependent on either obtaining regulatory approval for the NES meter or other products from a third party for the relevant jurisdiction, or satisfying the customer s internal testing requirements, or both. This certification approval process is often referred to as homologation. Further, shipment of NES products into some jurisdictions requires our contract manufacturers to pass certain tests and meet various standards related to the production of our NES meters. Failure to receive any such approval on a timely basis or at all, or failure to maintain any such approval, would have a material adverse impact on our ability to ship our NES system products, and would therefore have an adverse affect on our results of operations and our financial condition.

Once a utility decides to move forward with a large-scale deployment of an AMI project that is based on our NES system, the timing of and our ability to recognize revenue on our NES system product shipments will depend on several factors. These factors, some of which may not be under our control, include shipment schedules that may be delayed or subject to modification, other contractual provisions, such as customer acceptance of all or any part of the AMI system, and our ability to manufacture and deliver quality products according to expected schedules. In addition, the complex revenue recognition rules relating to products such as our NES system may also require us to defer some or all of the revenue associated with NES product shipments until certain conditions, such as the acceptance of software deliverables, are met in a future period. As a consequence, our ability to predict the amount of NES revenues that we may expect to recognize in any given fiscal quarter is likely to be limited. As NES revenues account for an increasing percentage of our overall revenues, we and our investors may have increasing difficulty in projecting our financial results.

Sales of our NES system may fail to meet our financial targets.

We have invested and intend to continue to invest significant resources in the development and sales of our NES system. Our long-term financial goals include expectations for a reasonable return on these investments. However, to date the revenues generated from sales of our NES system products have not yielded gross margins in line with our long term goals for this product line, while our NES related operating expenses have increased significantly.

In order to achieve our financial targets, we must meet the following objectives:

- Increase market acceptance of our NES system products in order to increase revenues;
- Increase gross margin from our NES revenues by continuing to reduce the cost of manufacturing our NES system products, while at the same time managing manufacturing cost pressures associated with commodity prices and foreign exchange fluctuations;

Manage the manufacturing transition to reduced-cost NES products; and

Manage our operating expenses to a reasonable percentage of revenues.

We cannot assure you that we will meet any or all of these objectives to the extent necessary to achieve our financial goals.

We are exposed to credit risk and payment delinquencies on our accounts receivable, and this risk has been heightened during the current decline in economic conditions.

Almost none of our outstanding accounts receivables are covered by collateral or credit insurance. In addition, our standard terms and conditions permit payment within a specified number of days following shipment of product, or in some cases, after the customer s acceptance of our products. While we have procedures to monitor and limit exposure to credit risk on our receivables, there can be no assurance such procedures will effectively limit our credit risk and avoid losses. As economic conditions change and worsen, certain of our customers may face liquidity concerns and may be unable to timely satisfy their payment obligations to us, which could have a material adverse effect on our financial condition and results of operations.

We depend on a limited number of key suppliers.

Our future success will depend significantly on our ability to timely manufacture our products cost effectively, in sufficient volumes, and in accordance with quality standards. For most of our products requiring assembly, we rely on a limited number of contract electronic manufacturers (CEMs), principally Jabil and TYCO. These CEMs procure material and assemble, test, and inspect the final products to our specifications. This strategy involves certain risks, including reduced control over quality, costs, delivery schedules, availability of materials, components, finished products, and manufacturing yields. In addition, CEMs can experience turnover and instability, exposing us to additional risks as well as missed commitments to our customers.

We also maintain manufacturing agreements with a limited number of semiconductor manufacturers for the production of key products, including those used in our NES system. The Neuron Chip, which is an important component that we and our customers use in control network devices, is currently manufactured and distributed by two providers, Toshiba and Cypress Semiconductor. Toshiba has informed us that it does not intend to renew its Neuron Chip agreement with us when it expires in January 2010. However, we have agreed with Toshiba that Toshiba will continue to accept orders for Neuron Chips from its customers through September 2011 for deliveries through December 2012. In the meantime, we are working closely with Toshiba to provide a smooth migration path for Toshiba s customers using our new Neuron 5000 processor, which we intend to purchase from Open-Silicon. Another semiconductor supplier, STMicroelectronics, manufactures our power line smart transceiver products, for which we have no alternative source. In addition, we currently purchase several key products and components from sole or limited source suppliers with which we do not maintain signed agreements that would obligate them to supply to us on negotiated terms.

We are currently reviewing the impact the ongoing worldwide financial crisis is having on our suppliers. Some of these suppliers are large, well capitalized companies, while others are smaller and more highly leveraged. In order to mitigate these risks, we may take actions such as increasing our inventory levels and/or adding additional sources of supply. Such actions may increase our costs and increase the risk of excess and obsolete inventories. Even if we undertake such actions, there can be no assurance that we will be able to prevent any disruption in the supply of goods and services we receive from these suppliers.

We may also elect to change any of these key suppliers. For example, we are currently in the final stages of ending our relationship with a former CEM partner, Flextronics. As part of this transition, we have moved the production of products Flextronics built for us to alternative CEMs. We have also been required to purchase certain raw material and in-process inventory from Flextronics that Flextronics procured in anticipation of our production requirements. In addition, if any of our key suppliers were to stop manufacturing our products or supplying us with our key components, it could be expensive and time consuming to find a replacement. Also, as our NES business grows, we will be required to expand our business with our key suppliers or find additional sources of supply, as we have recently done with Jabil. There is no guarantee that we would be able to find acceptable alternative or additional sources. Additional risks that we face if we must transition between CEMs include:

- moving raw material, in-process inventory, and capital equipment between locations, some of which may be in different parts of the world;

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- reestablishing acceptable manufacturing processes with a new work force; and

- exposure to excess or obsolete inventory held by contract manufacturers for use in our products.

The failure of any key manufacturer to produce a sufficient number of products on time, at agreed quality levels, and fully compliant with our product, assembly and test specifications could adversely affect our revenues and gross profit, and could result in claims against us by our customers, which could harm our results of operations and financial position.

Our products use components or materials that may be subject to price fluctuations, shortages, or interruptions of supply.

We may be vulnerable to price increases for products, components, or materials, such as copper and cobalt. In addition, in the past we have occasionally experienced shortages or interruptions in supply for certain of these items, including products or components that have been or will be discontinued, which caused us to delay shipments beyond targeted or announced dates. To help address these issues, we may decide to purchase quantities of these items that are in excess of our estimated requirements. As a result, we could be forced to increase our excess and obsolete inventory reserves to provide for these excess quantities, which could harm our operating results.

If we experience any shortage of products or components of acceptable quality, or any interruption in the supply of these products or components, or if we are not able to procure them from alternate sources at acceptable prices and within a reasonable period of time, our revenues, gross profits or both could decrease. In addition, under the terms of some of our contracts with our customers, we may also be subject to penalties if we fail to deliver our products on time.

If we are not able to develop or enhance our products in a timely manner, our revenues will suffer.

Due to the nature of development efforts in general, we often experience delays in the introduction of new or improved products beyond our original projected shipping date for such products. Historically, when these delays have occurred, we experienced an increase in our development costs and a delay in our ability to generate revenues from these new products. We believe that similar new product introduction delays in the future, particularly with respect to the NES system, could also increase our costs and delay our revenues.

We may incur penalties and/or be liable for damages with respect to sales of our NES system products.

In the event of late deliveries, late or improper installations or operations, failure to meet product specifications or other product failures, failure to achieve performance specifications, indemnities or other compliance issues, the agreements governing the sales of the NES system may expose us to penalties, damages and other liabilities. Even in the absence of such contractual provisions, we may agree to assume certain liabilities for the benefit of our customers. Any such liabilities would have an adverse effect on our financial condition and operating results.

The markets for our products are highly competitive.

Competition in our markets is intense and involves rapidly changing technologies, evolving industry standards, frequent new product introductions, rapid changes in customer or regulatory requirements, and localized market requirements. In each of our markets, we compete with a wide array of manufacturers, vendors, strategic alliances, systems developers and other businesses.

The principal competitive factors that affect the markets for our products include the following:

- our ability to anticipate changes in customer or regulatory requirements and to develop or improve our products to meet these requirements in a timely manner;

- the price and features of our products such as adaptability, scalability, functionality, ease of use, and the ability to integrate with other products;

- our product reputation, quality, performance, and conformance with established industry standards;

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- our ability to meet a customer s required delivery schedules;
- our customer service and support;
- warranties, indemnities, and other contractual terms; and
- customer relationships and market awareness.

Competitors for our NES system products include Aclara, Elster, Enel, GE, IBM, Iskraemeco, Itron/Actaris, the Landis+Gyr group of companies, Siemens, and Silver Spring Networks, which directly or through IT integrators such as IBM or telecommunications companies such as Telenor, offer metering systems that compete with our NES system offering.

For our LWI products, our competitors include some of the largest companies in the electronics industry, operating either alone or together with trade associations and partners. Key company competitors include companies such as Siemens in the building industry; Allen-Bradley (a subsidiary of Rockwell Automation), Groupe Schneider and Siemens in the industrial automation industry; Siemens in the transportation industry; and Zensys in the home control market. Key industry standard and trade group competitors include BACnet, DALI, and Konnex in the buildings industry; DeviceNet, HART, and Profibus in the industrial control market; DLMS in the utility industry; Echonet, ZigBee and the Z-Wave alliance in the home control market; and the Train Control Network (TCN) in the rail transportation market. Each of these standards and/or alliances is backed by one or more competitors. For example, the ZigBee alliance includes over 300 member companies with promoter members such as Eaton, Ember, Freescale, Huawei Technologies, Itron, Landis+Gyr, Philips, Reliant Energy, Samsung, Schneider Electric, Siemens, STMicroelectronics, Tendril, and Texas Instruments.

Many of our competitors, alone or together with their trade associations and partners, have significantly greater financial, technical, marketing, service and other resources, significantly greater name recognition, and broader product offerings. In addition, the utility metering market is experiencing a trend towards consolidation. As a result, these competitors may be able to devote greater resources to the development, marketing, and sale of their products, and may be able to respond more quickly to changes in customer requirements or product technology. If we are unable to compete effectively in any of the markets we serve, our revenues, results of operations, and financial position would be harmed.

Liabilities resulting from defects in or misuse of our products, whether or not covered by insurance, may delay our revenues and increase our liabilities and expenses.

Our products may contain or may be alleged to contain undetected errors or failures when first introduced, as new versions are released, or as a result of the manufacturing or shipping process. In addition, our customers or their installation partners may improperly install or implement our products, which could delay completion of a deployment or hinder our ability to win a subsequent award. Furthermore, because of the low cost and interoperable nature of our products, LonWorks technology could be used in a manner for which it was not intended.

Even if we determine that an alleged error or failure in our products does not exist, we may incur expense and shipments and revenue may be delayed while we analyze the alleged error or failure. If errors or failures are found in our products, we may not be able to successfully correct them in a timely manner, or at all. Such errors or failures could delay our product shipments and divert our engineering resources while we attempt to correct them. In addition, we could decide to extend the warranty period, or incur other costs outside of our normal warranty coverage, to help address any known errors or failures in our products and mitigate the impact on our customers. This could delay our revenues and increase our expenses.

To address these issues, the agreements we maintain with our customers may contain provisions intended to limit our exposure to potential errors and omissions claims as well as any liabilities arising from them. In certain very limited instances, these agreements require that we be named as an additional insured on our customers insurance policies. However, our customer contracts and additional insured coverage may not effectively protect us against the liabilities and expenses associated with errors or failures attributable to our products.

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Defects in our products may also cause us to be liable for losses in the event of property damage, harm or death to persons, claims against our directors or officers, and the like. Such liabilities could harm our reputation, expose our company to liability, and adversely affect our operating results and financial position.

To help reduce our exposure to these types of liabilities, we currently maintain property, general commercial liability, errors and omissions, directors and officers, and other lines of insurance. However, it is possible that such insurance may not be available in the future or, if available, may be insufficient in amount to cover any particular claim, or we might not carry insurance that covers a specific claim. In addition, we believe that the premiums for the types of insurance we carry will continue to fluctuate from period to period. Significant cost increases could also result in increased premiums or reduced coverage limits. Consequently, if we elect to reduce our coverage, or if we do not carry insurance for a particular type of claim, we will face increased exposure to these types of claims.

We face financial and operational risks associated with international operations.

We have operations located in ten countries around the world. Revenues from international sales, which include both export sales and sales by international subsidiaries, accounted for about 77.4% of our total net revenues for the quarter ended March 31, 2009, and 85.5% of our total net revenues for the same period in 2008. We expect that international sales will continue to constitute a significant portion of our total net revenues.

Changes in the value of currencies in which we conduct our business relative to the U.S. dollar have caused and could continue to cause fluctuations in our reported financial results. The three primary areas where we are exposed to foreign currency fluctuations are revenues, cost of goods sold, and operating expenses.

In general, we sell our products to foreign customers primarily in U.S. dollars. As such, fluctuations in exchange rates have had in the past and could continue to have an impact on revenues. As the value of the dollar rises, our products will become more expensive to our foreign customers, which could result in their decision to postpone or cancel a planned purchase.

With respect to the relatively minimal amount of our revenues generated in foreign currencies, our historical foreign currency exposure has been related primarily to the Japanese Yen and has not been material to our consolidated results of operations. However, in the future, we expect that some foreign utilities may require us to price our NES system in the utility s local currency, which will increase our exposure to foreign currency risk. In addition, we have agreed with EBV, our European distributor, that upon notice from EBV, we will sell our products to EBV in European Euros rather than U.S. dollars. If EBV were to exercise this right, our revenue exposure to foreign currency fluctuations would increase.

For our cost of goods sold, our products are generally assembled by CEMs in China. Although our transactions with these vendors have historically been denominated in U.S. dollars, in the future they may require us to pay in their local currency, or demand a U.S. dollar price adjustment or other payment to address a change in exchange rates, which would increase our cost to procure our products. This is particularly a risk in China, where any future revaluations of the Chinese currency against the U.S. dollar could result in significant cost increases. In addition, any future increase in labor costs in the markets where our products are manufactured could also result in higher costs to procure our products.

We use the local currency to pay for our operating expenses in the various countries where we have operations. If the value of the U.S. dollar declines as compared to the local currency where the expenses are incurred, our expenses, when translated back into U.S. dollars, will increase.

To date, we have not hedged any of our foreign currency exposures and currently do not maintain any hedges to mitigate our foreign currency risks. Consequently, any resulting adverse foreign currency fluctuations could significantly harm our revenues, cost of goods sold, or operating expenses.

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Additional risks inherent in our international business activities include the following:

- timing of and costs associated with localizing products for foreign countries and lack of acceptance of non-local products in foreign countries;
- inherent challenges in managing international operations;
- the burdens of complying with a wide variety of foreign laws, the applicability of foreign laws that could affect our business or revenues, such as laws that purport to require that we return payments that we received from insolvent customers in certain circumstances; and unexpected changes in regulatory requirements, tariffs, and other trade barriers;
- economic and political conditions in the countries where we do business;
- differing vacation and holiday patterns in other countries, particularly in Europe;
- labor actions generally affecting individual countries, regions, or any of our customers, which could result in reduced demand for, or could delay delivery or acceptance of, our products;
- international terrorism and anti-American sentiment; and
- potentially adverse tax consequences, including restrictions on repatriation of earnings.

Any of these factors could have a material adverse effect on our revenues, results of operations, and our financial condition.

If we do not maintain adequate distribution channels, our revenues will be harmed.

We market our NES system products directly, as well as through selected VARs and integration partners. We believe that a significant portion of our NES system sales will be made through our VARs and integration partners, rather than directly by our company. To date, our VARs and integration partners have greater experience in overseeing projects for utilities. As a result, if our relationships with our VARs and integration partners are not successful, or if we are not able to create similar distribution channels for our NES system products with other companies in various geographic areas, revenues from sales of our NES system products may not meet our financial targets, which will harm our operating results and financial condition.

Currently, significant portions of our LWI revenues are derived from sales to distributors, including EBV, the primary independent distributor of our products to OEMs in Europe. Historically, sales to EBV, as well as sales to our other distributor partners, have accounted for a substantial portion of our total LWI revenues. Agreements with our distributor partners are generally renewed on an annual basis. If any of these agreements are not renewed, we would be required to locate another distributor or add our own distribution capability to meet the needs of our end-use customers. Any replacement distribution channel could prove less effective than our current arrangements. In addition, if any of our distributor partners fail to dedicate sufficient resources to market and sell our products, our revenues would suffer. Furthermore, if they significantly reduce their inventory levels for our products, service levels to our end-use customers could decrease.

Our executive officers and technical personnel are critical to our business.

Our company s success depends substantially on the performance of our executive officers and key employees. Due to the specialized technical nature of our business, we are particularly dependent on our Chief Executive Officer and our technical personnel. In May 2008, our President and Chief Operating Officer, Beatrice Yormark, passed away unexpectedly. Her duties have been assumed by our Chief Executive Officer. Our future success will depend on our ability to attract, integrate, motivate and retain qualified technical, sales, operations, and managerial personnel, as well as our ability to successfully implement a plan for management succession.

Competition for qualified personnel in our business areas is intense, and we may not be able to continue to attract and retain qualified executive officers and key personnel. Our product development and marketing functions are largely based in Silicon Valley, which is a highly competitive marketplace. It may be particularly difficult to

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recruit, relocate and retain qualified personnel in this geographic area. Moreover, the cost of living, including the cost of housing, in Silicon Valley is known to be high. Because we are legally prohibited from making loans to executive officers, we will not be able to assist potential key personnel as they acquire housing or incur other costs that might be associated with joining our company. In addition, if we lose the services of any of our key personnel and are not able to find suitable replacements in a timely manner, our business could be disrupted, other key personnel may decide to leave, and we may incur increased operating expenses in finding and compensating their replacements.

The sales cycle for our LWI products is lengthy and unpredictable.

The sales cycle between initial LWI customer contact and execution of a contract or license agreement with a customer or purchaser of our products, can vary widely. Initially, we must educate our customers about the potential applications of and cost savings associated with our products. If we are successful in this effort, OEMs typically conduct extensive and lengthy product evaluations before making a decision to design our products into their offerings. Once the OEM decides to incorporate our products, volume purchases of our products are generally delayed until the OEM s product development, system integration, and product introduction periods have been completed. In addition, changes in our customer s budgets, or the priority they assign to control network development, could also affect the sales cycle.

We generally have little or no control over these factors, any of which could prevent or substantially delay our ability to complete a transaction and could adversely affect the timing of our revenues and results of operations.

If we sell our NES system products directly to a utility, we will face additional risks.

If we sell our NES system products to a utility directly, we may be required to assume responsibility for installing the NES system in the utility s territory, integrating the NES system into the utility s operating and billing system, overseeing management of the combined system, and undertaking other activities. To date, we do not have any significant experience with providing these types of services. As a result, if we sell directly to a utility, it may be necessary for us to contract with third parties to satisfy these obligations. We cannot assure you that we would find appropriate third parties to provide these services on reasonable terms, or at all. Assuming responsibility for these or other services would add to the costs and risks associated with NES system installations, and could also negatively affect the timing of our revenues and cash flows related to these transactions.

Fluctuations in our operating results may cause our stock price to decline.

Our quarterly and annual results have varied significantly from period to period, and we have sometimes failed to meet securities analysts expectations. Moreover, we have a history of losses and cannot assure you that we will achieve sustained profitability in the future. Our future operating results will depend on many factors, many of which are outside of our control, including the following:

- the mix of products and services that we sell may change to a less profitable mix;
- shipment, payment schedules, and product acceptance may be delayed;
- we may be required to modify or add to our NES product offerings to meet a utility s requirements, which could delay delivery and/or acceptance of our products;
- the complex revenue recognition rules relating to products such as our NES system could require us to defer some or all of the revenue associated with NES product shipments until certain conditions, such as delivery and acceptance criteria for our software and/or hardware products, are met in a future period;
- our contract electronic manufacturers may not be able to provide quality products on a timely basis, especially during periods where capacity in the CEM market is limited;

our products may not be manufactured in accordance with specifications or our established quality standards, or may not perform as designed;

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- our products may not be accepted by utilities, OEMs, systems integrators, service providers and end-users at the levels we project;

- downturns in any customer s or potential customer s business, or declines in general economic conditions, could cause significant reductions in capital spending, thereby reducing the levels of orders from our customers;

- recording of expense relating to equity compensation as required under SFAS No. 123R, *Share-Based Payment*, will decrease our earnings;

- we may incur costs associated with any future business acquisitions; and

- results of impairment tests for goodwill and other intangible assets in accordance with SFAS No. 142, *Goodwill and Other Intangible Assets*, and impairment charges required under SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*, may negatively affect our earnings and financial condition.

Any of the above factors could, individually or in the aggregate, have a material adverse effect on our results of operations and our financial condition, which could cause our stock price to decline.

We may be unable to promote and expand acceptance of our open, interoperable control systems over competing protocols, standards, or technologies.

LonWorks technology is open, meaning that many of our technology patents are broadly licensed without royalties or license fees. As a result, our customers are able to develop hardware and software solutions that compete with some of our products. Because some of our customers are OEMs that develop and market their own control systems, these customers in particular could develop competing products based on our open technology. For instance, we have published all of the network management commands required to develop software that competes with our LNS software.

In addition, many of our competitors are dedicated to promoting closed or proprietary systems, technologies, software and network protocols or product standards that differ from or are incompatible with ours. We also face strong competition from large trade associations that promote alternative technologies and standards for particular vertical applications or for use in specific countries. These include BACnet, DALI, and KNX in the buildings market; DeviceNet, HART, and ProfiBus in the industrial controls market; TCN in the rail transportation market; DLMS in the metering market; and Echonet, ZigBee, and Z-Wave in the home control market.

Our technologies, protocols, or standards may not be successful or we may not be able to compete with new or enhanced products or standards introduced by our competitors, which would have a material adverse affect on our revenues, results of operations, and financial condition.

Our business may suffer if it is alleged or found that our products infringe the intellectual property rights of others.

We may be contractually obligated to indemnify our customers or other third parties that use our products in the event our products are alleged to infringe a third party s intellectual property rights. From time to time, we may also receive notice that a third party believes that our products may be infringing patents or other intellectual property rights of that third party. Responding to those claims, regardless of their merit, can be time consuming, result in costly litigation, divert management s attention and resources, and cause us to incur significant expenses.

As the result of such a claim, we may elect or be required to redesign our products, some of our product offerings could be delayed, or we could be required to cease distributing some of our products. In the alternative, we could seek a license to the third party s intellectual property. Even if our products do not infringe, we may elect to take a license or settle to avoid incurring litigation costs. However, it is possible that we would not be able to obtain such a license or settle on reasonable terms, or at all.

Lastly, our customers may not purchase our products if they are concerned our products may infringe third party intellectual property rights. This could reduce the market opportunity for the sale of our products and services.

Any of the foregoing risks could have a material adverse affect on our revenues, results of operations, and financial condition.

We have limited ability to protect our intellectual property rights.

Our success depends significantly upon our intellectual property rights. We rely on a combination of patent, copyright, trademark and trade secret laws, non-disclosure agreements and other contractual provisions to establish, maintain and protect these intellectual property rights, all of which afford only limited protection. If any of our patents fail to protect our technology, or if we do not obtain patents in certain countries, our competitors may find it easier to offer equivalent or superior technology.

We have also registered or applied for registration for certain trademarks, and will continue to evaluate the registration of additional trademarks as appropriate. If we fail to properly register or maintain our trademarks or to otherwise take all necessary steps to protect our trademarks, the value associated with the trademarks may diminish. In addition, if we fail to protect our trade secrets or other intellectual property rights, we may not be able to compete as effectively in our markets.

Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy aspects of our products or services or use information that we regard as proprietary, or it may not be economically feasible to enforce them. Any of our patents, trademarks, copyrights or intellectual property rights could be challenged, invalidated or circumvented. In addition, we cannot assure you that we have taken or will take all necessary steps to protect our intellectual property rights. Third parties may also independently develop similar technology without breach of our trade secrets or other proprietary rights. In addition, the laws of some foreign countries, including several in which we operate or sell our products, do not protect proprietary rights to as great an extent as do the laws of the United States and it may take longer to receive a remedy from a court outside of the United States. Also, some of our products are licensed under shrink-wrap license agreements that are not signed by licensees and therefore may not be binding under the laws of certain jurisdictions.

From time to time, litigation may be necessary to defend and enforce our proprietary rights. As a result, we could incur substantial costs and divert management resources, which could harm our business, regardless of the final outcome. Despite our efforts to safeguard and maintain our proprietary rights both in the United States and abroad, we may be unsuccessful in doing so. Also, the steps that we take to safeguard and maintain our proprietary rights may be inadequate to deter third parties from infringing, misusing, misappropriating, or independently developing our technology or intellectual property rights, or to prevent an unauthorized third party from misappropriating our products or technology.

The trading price of our stock has been volatile, and may fluctuate due to factors beyond our control.

The trading price of our common stock is subject to significant fluctuations in response to numerous factors, including the following:

- significant stockholders may sell some or all of their holdings of our stock;
- investors may be concerned about our ability to develop additional customers for our products and services; and
- volatility in our stock price may be unrelated or disproportionate to our operating performance.

Any of these factors could have a negative impact on the market price of our stock.

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Voluntary standards and governmental regulatory actions in our markets could limit our ability to sell our products.

Standards bodies, which are formal and informal associations that attempt to set voluntary, non-governmental product standards, are influential in many of our target markets. We participate in many voluntary standards organizations around the world in order to both help prevent the adoption of exclusionary standards and to promote voluntary standards for our products. However, we do not have the resources to participate in all voluntary standards processes that may affect our markets.

In addition, many of our products and the industries in which they are used are subject to U.S. and foreign regulation. For example, the power line medium, which is the communications medium used by some of our products, is subject to special regulations in North America, Europe and Japan. In general, these regulations limit the ability of companies to use power lines as a communication medium. In addition, some of our competitors have attempted to use regulatory actions to reduce the market opportunity for our products or to increase the market opportunity for their own products.

The adoption of voluntary standards or the passage of governmental regulations that are incompatible with our products or technology could limit the market opportunity for our products, which could harm our revenues, results of operations, and financial condition.

Our existing stockholders control a significant percentage of our stock, which will limit other stockholders ability to influence corporate matters.

As of April 30, 2009, our directors and executive officers, together with certain entities affiliated with them (including, for this purpose, Enel, which has the right to nominate a director to our board of directors), beneficially owned 28.6% of our outstanding stock.

When we sold 3.0 million newly issued shares of our common stock to Enel on September 11, 2000, we granted Enel the right to nominate a director to our board of directors, although a nominee of Enel does not currently sit on our board. In connection with the stock sale, our directors and our Chief Financial Officer agreed to enter into a voting agreement with Enel in which each of them agreed to vote in favor of Enel s nominee to our board of directors. In addition, Enel agreed to vote for our board s recommendations for the election of directors, approval of accountants, approval of Echelon s equity compensation plans, and certain other matters. As a result, our directors and executive officers, together with certain entities affiliated with them, may be able to control substantially all matters requiring approval by our stockholders, including the election of all directors and approval of certain other corporate matters.

Natural disasters, power outages, and other factors outside of our control such as widespread pandemics could disrupt our business.

We must protect our business and our network infrastructure against damage from earthquake, flood, hurricane and similar events, as well as from power outages. A natural disaster, power outage, or other unanticipated problem could also adversely affect our business by, among other things, harming our primary data center or other internal operations, limiting our ability to communicate with our customers, and limiting our ability to sell our products. We do not insure against several natural disasters, including earthquakes.

Any outbreak of a widespread communicable disease pandemic, such as the recent outbreak of the H1N1 influenza virus or the SARS epidemic of 2003, could similarly impact our operations. Such impact could include, among other things, the inability for our sales and operations personnel located in affected regions to travel and conduct business freely, the impact any such disease may have on one or more of the distributors for our products in those regions, and increased supply chain costs. Additionally, any future health-related disruptions at our third-party contract manufacturers or other key suppliers could affect our ability to supply our customers with products in a timely manner, which would harm our results of operations.

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ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISKS

We have not experienced any material change in our exposure to interest rate and foreign currency risks since the date of our Annual Report on Form 10-K for the year ended December 31, 2008.

Market Risk Disclosures. The following discussion about our market risk disclosures involves forward-looking statements. Actual results could differ materially from those projected in the forward-looking statements. We are exposed to market risk related to changes in interest rates and foreign currency exchange rates. We do not use derivative financial instruments to hedge these exposures.

Interest Rate Sensitivity. We maintain a short-term investment portfolio consisting mainly of fixed income securities with a weighted average maturity of less than one year. These available-for-sale securities are subject to interest rate risk and will fall in value if market interest rates increase. If market rates were to increase immediately and uniformly by 10% from levels at March 31, 2009 and December 31, 2008, the fair value of the portfolio would decline by an immaterial amount. We currently intend to hold our fixed income investments until maturity, and therefore we would not expect our operating results or cash flows to be affected to any significant degree by a sudden change in market interest rates. If necessary, we may sell short-term investments prior to maturity to meet the liquidity needs of the company.

Foreign Currency Exchange Risk. We have international subsidiaries and operations and are, therefore, subject to foreign currency rate exposure. To date, our exposure to exchange rate volatility has not been significant. If foreign exchange rates were to fluctuate by 10% from rates at March 31, 2009, and December 31, 2008, our financial position and results of operations would not be materially affected. However, we could experience a material impact in the future.

In addition, for our cost of goods sold, our products are generally assembled by CEMs in China, although our transactions with these vendors have historically been denominated in U.S. dollars. These vendors may require us to pay in their local currency, or demand a U.S. dollar price adjustment or other payment to address a change in exchange rates, which would increase our cost to procure our products. This is particularly a risk in China, where any future revaluations of the Chinese currency against the U.S. dollar could result in significant cost increases.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Effectiveness of Disclosure Controls and Procedures

We have designed our disclosure controls and procedures to ensure that information we are required to disclose in reports that we file or submit under the Securities and Exchange Act of 1934 is accumulated and communicated to our management, including our principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure, and that such information is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms. As of the end of the period covered by this Quarterly Report on Form 10-Q, under the supervision of our Chief Executive Officer and our Chief Financial Officer, we evaluated the effectiveness of our disclosure controls and procedures, as such terms are defined in Rule 13a-15(e) and Rule 15d-15(e) under the Securities and Exchange Act of 1934. Based on this evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded that our disclosure controls and procedures were effective as of March 31, 2009.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal controls over financial reporting (as defined in Rule 13a-15(e) of the Exchange Act) that occurred during the quarter ended March 31, 2009, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

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PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

For a discussion regarding our legal proceedings and matters, please refer to the Legal Actions section of Note 6, Commitments and Contingencies, to our condensed consolidated financial statements included under Item 1 of Part I, Financial Information, which information is incorporated herein by reference.

ITEM 1A. RISK FACTORS

A restated description of the risk factors associated with our business is included under Factors That May Affect Future Results of Operations in Management s Discussion and Analysis of Financial Condition and Results of Operations, contained in Item 2 of Part I of this report. This description includes any material changes to and supersedes the description of the risk factors associated with our business previously disclosed in Item 1A of our 2008 Annual Report on Form 10-K and is incorporated herein by reference.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

In April 2008, our board of directors approved a new stock repurchase program, which authorizes us to repurchase up to 3.0 million shares of our common stock, in accordance with Rule 10b-18 and other applicable laws, rules and regulations. There were no repurchases under the new stock repurchase program during the quarter ended March 31, 2009. Since inception, we have repurchased a total of 750,000 shares under the program at a cost of $8.9 million. As of March 31, 2009, 2,250,000 shares were available for repurchase. The new stock repurchase program will expire in April 2011.

The following table provides information about the repurchase of our common stock during the quarter ended March 31, 2009:

Period	Total Number of Shares Purchased (1)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs (1)
January 1-January 31	17,481	$ 7.91		2,250,000
February 1-February 28	1,056	$ 6.42		2,250,000
March 1-March 31	95,710	$ 6.58		2,250,000
Total	114,247	$ 6.79		2,250,000

(1) Shares purchased that were not part of our publicly announced repurchase program represent those shares surrendered to us by employees in order to satisfy stock-for-stock option exercises and/or withholding tax obligations related to stock-based compensation. These purchases do not reduce the number of shares that may yet be purchased under our publicly announced repurchase program.

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ITEM 6. EXHIBITS

Exhibit No.	Description of Document
31.1	Certificate of Echelon Corporation Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certificate of Echelon Corporation Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32	Certification by the Chief Executive Officer and the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, furnished herewith.

SIGNATURE

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.

ECHELON CORPORATION

Date: May 8, 2009

By: /s/ Oliver R. Stanfield
Oliver R. Stanfield,
Executive Vice President and Chief Financial Officer

(Duly Authorized Officer and Principal Financial and Accounting Officer)

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